

Eastwood & Partners				Page 1	
St Andrew's House 23 Kingfield Road Sheffield S11 9AS		Newett Homes Thurlstone HSA1 -370m2			
Date April 19 File HSA1.srcx		Designed by CH Checked by			
Micro Drainage		Source Control 2016.1			
<u>Summary of Results for 100 year Return Period (+30%)</u>					
Half Drain Time : 12 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	229.193	1.443	5.3	5.7	O K
30 min Summer	229.377	1.627	6.0	6.5	O K
60 min Summer	229.372	1.622	6.0	6.4	O K
120 min Summer	229.168	1.418	5.2	5.6	O K
180 min Summer	228.982	1.232	4.5	4.9	O K
240 min Summer	228.838	1.088	4.0	4.3	O K
360 min Summer	228.635	0.885	3.2	3.5	O K
480 min Summer	228.503	0.753	2.8	3.0	O K
600 min Summer	228.408	0.658	2.4	2.6	O K
720 min Summer	228.336	0.586	2.2	2.3	O K
960 min Summer	228.234	0.484	1.8	1.9	O K
1440 min Summer	228.116	0.366	1.3	1.5	O K
2160 min Summer	228.021	0.271	1.0	1.1	O K
2880 min Summer	227.968	0.218	0.8	0.9	O K
4320 min Summer	227.908	0.158	0.6	0.6	O K
5760 min Summer	227.876	0.126	0.5	0.5	O K
7200 min Summer	227.855	0.105	0.4	0.4	O K
8640 min Summer	227.841	0.091	0.3	0.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	117.331	0.0	14		
30 min Summer	78.355	0.0	22		
60 min Summer	49.937	0.0	38		
120 min Summer	30.753	0.0	70		
180 min Summer	22.834	0.0	102		
240 min Summer	18.364	0.0	132		
360 min Summer	13.448	0.0	192		
480 min Summer	10.781	0.0	254		
600 min Summer	9.076	0.0	314		
720 min Summer	7.880	0.0	374		
960 min Summer	6.301	0.0	492		
1440 min Summer	4.589	0.0	736		
2160 min Summer	3.335	0.0	1100		
2880 min Summer	2.656	0.0	1468		
4320 min Summer	1.924	0.0	2200		
5760 min Summer	1.529	0.0	2936		
7200 min Summer	1.278	0.0	3672		
8640 min Summer	1.104	0.0	4400		
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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
10080 min Summer	227.830	0.080	0.3	0.3	O K
15 min Winter	229.362	1.612	5.9	6.4	O K
30 min Winter	229.520	1.770	6.5	7.0	O K
60 min Winter	229.428	1.678	6.2	6.7	O K
120 min Winter	229.115	1.365	5.0	5.4	O K
180 min Winter	228.879	1.129	4.1	4.5	O K
240 min Winter	228.711	0.961	3.5	3.8	O K
360 min Winter	228.493	0.743	2.7	2.9	O K
480 min Winter	228.361	0.611	2.2	2.4	O K
600 min Winter	228.272	0.522	1.9	2.1	O K
720 min Winter	228.207	0.457	1.7	1.8	O K
960 min Winter	228.119	0.369	1.4	1.5	O K
1440 min Winter	228.021	0.271	1.0	1.1	O K
2160 min Winter	227.948	0.198	0.7	0.8	O K
2880 min Winter	227.908	0.158	0.6	0.6	O K
4320 min Winter	227.864	0.114	0.4	0.5	O K
5760 min Winter	227.841	0.091	0.3	0.4	O K
7200 min Winter	227.826	0.076	0.3	0.3	O K
8640 min Winter	227.816	0.066	0.2	0.3	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
10080 min Summer	0.976	0.0	5136		
15 min Winter	117.331	0.0	14		
30 min Winter	78.355	0.0	23		
60 min Winter	49.937	0.0	40		
120 min Winter	30.753	0.0	74		
180 min Winter	22.834	0.0	104		
240 min Winter	18.364	0.0	136		
360 min Winter	13.448	0.0	196		
480 min Winter	10.781	0.0	256		
600 min Winter	9.076	0.0	318		
720 min Winter	7.880	0.0	376		
960 min Winter	6.301	0.0	500		
1440 min Winter	4.589	0.0	736		
2160 min Winter	3.335	0.0	1100		
2880 min Winter	2.656	0.0	1468		
4320 min Winter	1.924	0.0	2204		
5760 min Winter	1.529	0.0	2896		
7200 min Winter	1.278	0.0	3672		
8640 min Winter	1.104	0.0	4376		
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<u>Model Details</u> Storage is Online Cover Level (m) 230.100 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.80</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>2.44800</td> <td>Pit Multiplier</td> <td>1.5</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Number Required</td> <td>1</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>227.750</td> <td>Cap Infiltration Depth (m)</td> <td>0.000</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80	Infiltration Coefficient Side (m/hr)	2.44800	Pit Multiplier	1.5	Safety Factor	2.0	Number Required	1	Porosity	0.30	Cap Volume Depth (m)	0.000	Invert Level (m)	227.750	Cap Infiltration Depth (m)	0.000
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