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1 The Grove Felpham West Sussex PO22 7EY	34-44 CARLTON ROAD BOGNOR REGIS W SUSSEX																																																																																																																																																																																																																			
Date 01/07/2021 12:54 File FC2891 SWD 100YR40CC BL...	Designed by MH Checked by																																																																																																																																																																																																																			
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Summary of Results for 30 year Return Period (+40%) Half Drain Time : 881 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>49.443</td><td>0.103</td><td>1.2</td><td>42.2</td><td>O K</td></tr><tr><td>30 min Summer</td><td>49.476</td><td>0.136</td><td>1.2</td><td>55.7</td><td>O K</td></tr><tr><td>60 min Summer</td><td>49.511</td><td>0.171</td><td>1.2</td><td>69.9</td><td>O K</td></tr><tr><td>120 min Summer</td><td>49.545</td><td>0.205</td><td>1.2</td><td>84.1</td><td>O K</td></tr><tr><td>180 min Summer</td><td>49.564</td><td>0.224</td><td>1.2</td><td>91.8</td><td>O K</td></tr><tr><td>240 min Summer</td><td>49.576</td><td>0.236</td><td>1.2</td><td>96.5</td><td>O K</td></tr><tr><td>360 min Summer</td><td>49.589</td><td>0.249</td><td>1.2</td><td>101.9</td><td>O K</td></tr><tr><td>480 min Summer</td><td>49.595</td><td>0.255</td><td>1.2</td><td>104.5</td><td>O K</td></tr><tr><td>600 min Summer</td><td>49.598</td><td>0.258</td><td>1.2</td><td>105.5</td><td>O K</td></tr><tr><td>720 min Summer</td><td>49.597</td><td>0.257</td><td>1.2</td><td>105.4</td><td>O K</td></tr><tr><td>960 min Summer</td><td>49.596</td><td>0.256</td><td>1.2</td><td>104.7</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>49.589</td><td>0.249</td><td>1.2</td><td>101.9</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>49.574</td><td>0.234</td><td>1.2</td><td>96.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>49.558</td><td>0.218</td><td>1.2</td><td>89.5</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>49.527</td><td>0.187</td><td>1.2</td><td>76.5</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>49.498</td><td>0.158</td><td>1.2</td><td>64.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>49.472</td><td>0.132</td><td>1.2</td><td>53.9</td><td>O K</td></tr><tr><td>8640 min 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Summer	49.476	0.136	1.2	55.7	O K	60 min Summer	49.511	0.171	1.2	69.9	O K	120 min Summer	49.545	0.205	1.2	84.1	O K	180 min Summer	49.564	0.224	1.2	91.8	O K	240 min Summer	49.576	0.236	1.2	96.5	O K	360 min Summer	49.589	0.249	1.2	101.9	O K	480 min Summer	49.595	0.255	1.2	104.5	O K	600 min Summer	49.598	0.258	1.2	105.5	O K	720 min Summer	49.597	0.257	1.2	105.4	O K	960 min Summer	49.596	0.256	1.2	104.7	O K	1440 min Summer	49.589	0.249	1.2	101.9	O K	2160 min Summer	49.574	0.234	1.2	96.0	O K	2880 min Summer	49.558	0.218	1.2	89.5	O K	4320 min Summer	49.527	0.187	1.2	76.5	O K	5760 min Summer	49.498	0.158	1.2	64.6	O K	7200 min Summer	49.472	0.132	1.2	53.9	O K	8640 min Summer	49.449	0.109	1.2	44.8	O K	10080 min Summer	49.431	0.091	1.2	37.2	O K	15 min Winter	49.455	0.115	1.2	47.3	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	96.371	0.0	19	30 min Summer	64.160	0.0	34	60 min Summer	40.933	0.0	64	120 min Summer	25.357	0.0	122	180 min Summer	18.948	0.0	182	240 min Summer	15.333	0.0	242	360 min Summer	11.348	0.0	362	480 min Summer	9.161	0.0	480	600 min Summer	7.755	0.0	600	720 min Summer	6.765	0.0	684	960 min Summer	5.449	0.0	790	1440 min Summer	4.013	0.0	1040	2160 min Summer	2.951	0.0	1452	2880 min Summer	2.370	0.0	1848	4320 min Summer	1.739	0.0	2676	5760 min Summer	1.394	0.0	3456	7200 min Summer	1.175	0.0	4176	8640 min Summer	1.021	0.0	4848	10080 min Summer	0.908	0.0	5552	15 min Winter	96.371	0.0	19
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ABMH

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1 The Grove

Felpham

West Sussex PO22 7EY

34-44 CARLTON ROAD

BOGNOR REGIS

W SUSSEX

Date 01/07/2021 12:54

File FC2891 SWD 100YR40CC BL...

Designed by MH

Checked by

Micro Drainage

Source Control 2019.1

Summary of Results for 30 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	49.493	0.153	1.2	62.5	O K
60 min Winter	49.532	0.192	1.2	78.6	O K
120 min Winter	49.572	0.232	1.2	94.9	O K
180 min Winter	49.594	0.254	1.2	103.8	O K
240 min Winter	49.607	0.267	1.2	109.4	O K
360 min Winter	49.624	0.284	1.2	116.2	O K
480 min Winter	49.633	0.293	1.2	120.0	O K
600 min Winter	49.638	0.298	1.2	121.8	O K
720 min Winter	49.639	0.299	1.2	122.5	O K
960 min Winter	49.637	0.297	1.2	121.7	O K
1440 min Winter	49.626	0.286	1.2	117.2	O K
2160 min Winter	49.605	0.265	1.2	108.6	O K
2880 min Winter	49.581	0.241	1.2	98.6	O K
4320 min Winter	49.531	0.191	1.2	78.4	O K
5760 min Winter	49.486	0.146	1.2	59.9	O K
7200 min Winter	49.448	0.108	1.2	44.0	O K
8640 min Winter	49.417	0.077	1.2	31.5	O K
10080 min Winter	49.396	0.056	1.2	23.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	64.160	0.0	33
60 min Winter	40.933	0.0	62
120 min Winter	25.357	0.0	122
180 min Winter	18.948	0.0	180
240 min Winter	15.333	0.0	238
360 min Winter	11.348	0.0	354
480 min Winter	9.161	0.0	468
600 min Winter	7.755	0.0	580
720 min Winter	6.765	0.0	692
960 min Winter	5.449	0.0	902
1440 min Winter	4.013	0.0	1124
2160 min Winter	2.951	0.0	1580
2880 min Winter	2.370	0.0	2020
4320 min Winter	1.739	0.0	2856
5760 min Winter	1.394	0.0	3640
7200 min Winter	1.175	0.0	4328
8640 min Winter	1.021	0.0	5008
10080 min Winter	0.908	0.0	5456

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1 The Grove Felpham West Sussex PO22 7EY	34-44 CARLTON ROAD BOGNOR REGIS W SUSSEX	
Date 01/07/2021 12:54 File FC2891 SWD 100YR40CC BL...	Designed by MH Checked by	
Micro Drainage Source Control 2019.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	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) 0.238

Time (mins)		Area
From:	To:	(ha)
0	4	0.238

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Date 01/07/2021 12:54 File FC2891 SWD 100YR40CC BL...	Designed by MH Checked by																	
Micro Drainage Source Control 2019.1																		
<u>Model Details</u> Storage is Online Cover Level (m) 50.000 <u>Infiltration Blanket Structure</u> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.01800</td> <td>Diameter/Width (m)</td> <td>11.7</td> </tr> <tr> <td>Safety Factor</td> <td>5.0</td> <td>Length (m)</td> <td>100.0</td> </tr> <tr> <td>Porosity</td> <td>0.35</td> <td>Cap Volume Depth (m)</td> <td>0.450</td> </tr> <tr> <td>Invert Level (m)</td> <td>49.340</td> <td></td> <td></td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.01800	Diameter/Width (m)	11.7	Safety Factor	5.0	Length (m)	100.0	Porosity	0.35	Cap Volume Depth (m)	0.450	Invert Level (m)	49.340		
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