



MasterDrain
HY 11.0

Calculated data:-

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By TDS	Checked	Reviewed

Project **Elmfield House, Petersfinger Road, Salisbury, SP5 3BZ**

Title **IoH 124 (Qbar(urban))Runoff calcs for SALISBURY**

Mean Annual Peak Flow $Q_{BAR(urban)} = 2.37 \text{ l/s}$

Values for $Q_{BAR(urban)}$

Ret. per.	m ³ /hr	l/s	l/s/ha	Ret. per.	m ³ /hr	l/s	l/s/ha
1yr	7.245	2.013	1.917	100yr+20%	32.219	8.950	8.527
2yr	7.501	2.084	1.985	100yr+30%	34.904	9.696	9.237
5yr	10.910	3.031	2.887	100yr+40%	37.589	10.441	9.948
10yr	13.808	3.836	3.654	200yr	31.537	8.760	8.346
30yr	19.008	5.280	5.030	200yr + 30%	40.999	11.388	10.850
50yr	22.332	6.203	5.910	500yr	38.271	10.631	10.128
100yr	26.849	7.458	7.106	1000yr	43.982	12.217	11.640

Growth factors -

1yr	2yr	5yr	10yr	30yr	50yr	100yr	200yr	500yr	1000yr
0.85	0.88	1.28	1.62	2.23	2.62	3.15	3.70	4.49	5.16

The above is based on the Institute of Hydrology Report 124 to which you are referred for further details (see Sect 7). Note that the 200 year growth curve was taken from W5-074/A.

For WRAP type 1 soils, CIND can become negative for lower values of SAAR. In this case the CIND value is multiplied by -1 to return a positive value (CIND is very small at this point).