

*Michael Ward*  
*Highway and Drainage Consultant*

**5-7 Lancaster Grove NW3 4HE**

**Storage Calculations  
Using Wallingford Procedure**

Proposed Impermeable Area = 0.052 ha

0.033

Allowable Run Off = 5 l/s

Storm Frequency 1 in 100 Years + 30%

M5-60 = 20mm r = 0.4 Z2 = 2.03

<b>Duration Min</b>	<b>Z1</b>	<b>Rainfall Intensity mm/hr</b>	<b>Impermeable area ha</b>	<b>Inflow l/s</b>	<b>Outflow l/s</b>	<b>Difference l/s</b>	<b>Storage Cu m</b>
5	0.36	206.70	0.052	29.9	5	24.9	7.5
10	0.51	152.75	0.052	22.1	5	17.1	10.2
15	0.62	125.71	0.052	18.2	5	13.2	11.9
30	0.79	81.77	0.052	11.8	5	6.8	12.3
60	1.00	52.78	0.052	7.6	5	2.6	9.5
120	1.22	31.85	0.052	4.6	5	-0.4	-2.8
240	1.53	19.63	0.052	2.8	5	-2.2	-31.1
360	1.67	14.04	0.052	2.0	5	-3.0	-64.2
600	1.90	9.10	0.052	1.3	5	-3.7	-132.6
1440	2.42	4.68	0.052	0.7	5	-4.3	-373.5

**Total Storage Required = 12.3 cu m**