

Soakaway Design

Job No.: **19041**

Job Name: **2-4 Orchard Rd, Havant**

Area **90** m2
Run off Coeff **1** m2
90 m2

10 year return period

		Storm duration (Min.)
R5	0.0087 mm	5
R10	0.0124 mm	10
R15	0.0153 mm	15
R30	0.0196 mm	30
R60	0.0248 mm	60
R120	0.0303 mm	120
R240	0.0363 mm	240
R360	0.0409 mm	360
R600	0.0466 mm	600
R1440	0.0578 mm	1440

Inflow to soakaway system

I5	0.783 m3
I10	1.116 m3
I15	1.377 m3
I30	1.764 m3
I60	2.232 m3
I120	2.727 m3
I240	3.267 m3
I360	3.681 m3
I600	4.194 m3
I1440	5.202 m3

Outflow from Soakaway

f **1.42E-06** m3/s

Soakaway dims:

L **5.5** m
W **2.5** m
Depth **1** m

Ap50 **21.75** (Half sides + base)

Void ratio **95** %

Outflow from Soakaway:

O5	0.01 m3
O10	0.02 m3
O15	0.03 m3
O30	0.06 m3
O60	0.11 m3
O120	0.22 m3
O240	0.44 m3
O360	0.67 m3
O600	1.11 m3
O1440	2.67 m3

Storage required:

		Time to drain:	
S5	0.77 m3	ts50	3.48 hours
S10	1.10 m3	ts50	4.94 hours
S15	1.35 m3	ts50	6.07 hours
S30	1.71 m3	ts50	7.68 hours
S60	2.12 m3	ts50	9.54 hours
S120	2.50 m3	ts50	11.26 hours
S240	2.82 m3	ts50	12.69 hours
S360	3.01 m3	ts50	13.55 hours
S600	3.08 m3	ts50	13.86 hours
S1440	2.53 m3	ts50	11.39 hours

Storage provided **13.1** m3

Critical storm = **S600**
Storage required = **3.08**
Time to discharge= **13.86** Hours (Should be less than 24 hours)

Soakaway size proposed is satisfactory