

Soakaway Design

Job No.:

7 Webb**Close**

Job Name:

Pagham**Half roof per soakaway**Area **57** m2Run off Coeff **1** m2**57** m2**100 year return period + 40% CC**

Storm duration (Min.)

T

N

r

R5 **0.03242** m 5 0.083333333 0.1 0.023154R10 **0.04017** m 10 0.166666667 0.1 0.028694R15 **0.04546** m 15 0.25 0.1 0.032473R30 **0.05603** m 30 0.5 0.1 0.040022R60 **0.06888** m 60 1 0.1 0.0492R120 **0.08450** m 120 2 0.1 0.060356R240 **0.10348** m 240 4 0.1 0.073917R360 **0.11643** m 360 6 0.1 0.083168R600 **0.13500** m 600 10 0.1 0.096432R1440 **0.17376** m 1440 24 0.1 0.124113

Inflow to attenuation system

I5 1.848 m3

I10 2.290 m3

I15 2.591 m3

I30 3.194 m3

I60 3.926 m3

I120 4.816 m3

I240 5.899 m3

I360 6.637 m3

I600 7.695 m3

I1440 9.904 m3

Soil infiltration rate from on site percolation testing

300x300 pit, 9.33 mins to drop 150mm

Vp **3.732**f **8.93E-05**

Outflow from Tank

f **8.93E-05 m3/s**

(Estimated to be confirmed by site investigation report)

Soakaway dims:

L **2** mW **3** mDepth **0.4** m (below invert depth of inlet pipe)

As50 8 (50% effective depth + base area as BRE365)

Void ratio **95** %

Outflow from Tank:

O5 0.21 m3

O10 0.43 m3

O15 0.64 m3

O30 1.29 m3

O60 2.57 m3

O120 5.14 m3

O240 10.29 m3

O360 15.43 m3

O600 25.72 m3

O1440 61.74 m3

Storage required:

Time to drain:

S5 1.63 m3 ts50 0.32 hours

S10 1.86 m3 ts50 0.36 hours

S15 1.95 m3 ts50 0.38 hours

S30 1.91 m3 ts50 0.37 hours

S60 1.35 m3 ts50 0.26 hours

S120 -0.33 m3 ts50 -0.06 hours

S240 -4.39 m3 ts50 -0.85 hours

S360 -8.80 m3 ts50 -1.71 hours

S600 -18.03 m3 ts50 -3.50 hours

S1440 -51.83 m3 ts50 -10.07 hours

Storage provided **2.3** m3Critical storm = **S15**Storage required = **1.95**Time to discharge= **0.38** Hours (Should be less than 24 hours)**Soakaway size proposed is satisfactory**