

Ref: C3267

Victoria and Peter Newman

04th November 2025**Re: Church Farm House, Yapton– Soakaway Testing – Infiltration Test Result Summary**

The following investigation was carried out at the above location in accordance with our quotation.

1. Site Works

The purpose of the investigation was to supply soakaway test data in general accordance with BRE document 365 (Soakaway Design) at location which would be located infiltration device to serve proposed residential dwelling.

The appended drawing illustrates the position of the test pit. The BRE365 pit was excavated to a depth of 0.6m in line with the approximate depth of the proposed infiltration basin.

The testing commenced on 26th October 2025 with three test being undertaken in accordance with BRE 365.

2. BRE 365 Soakaway Test Findings

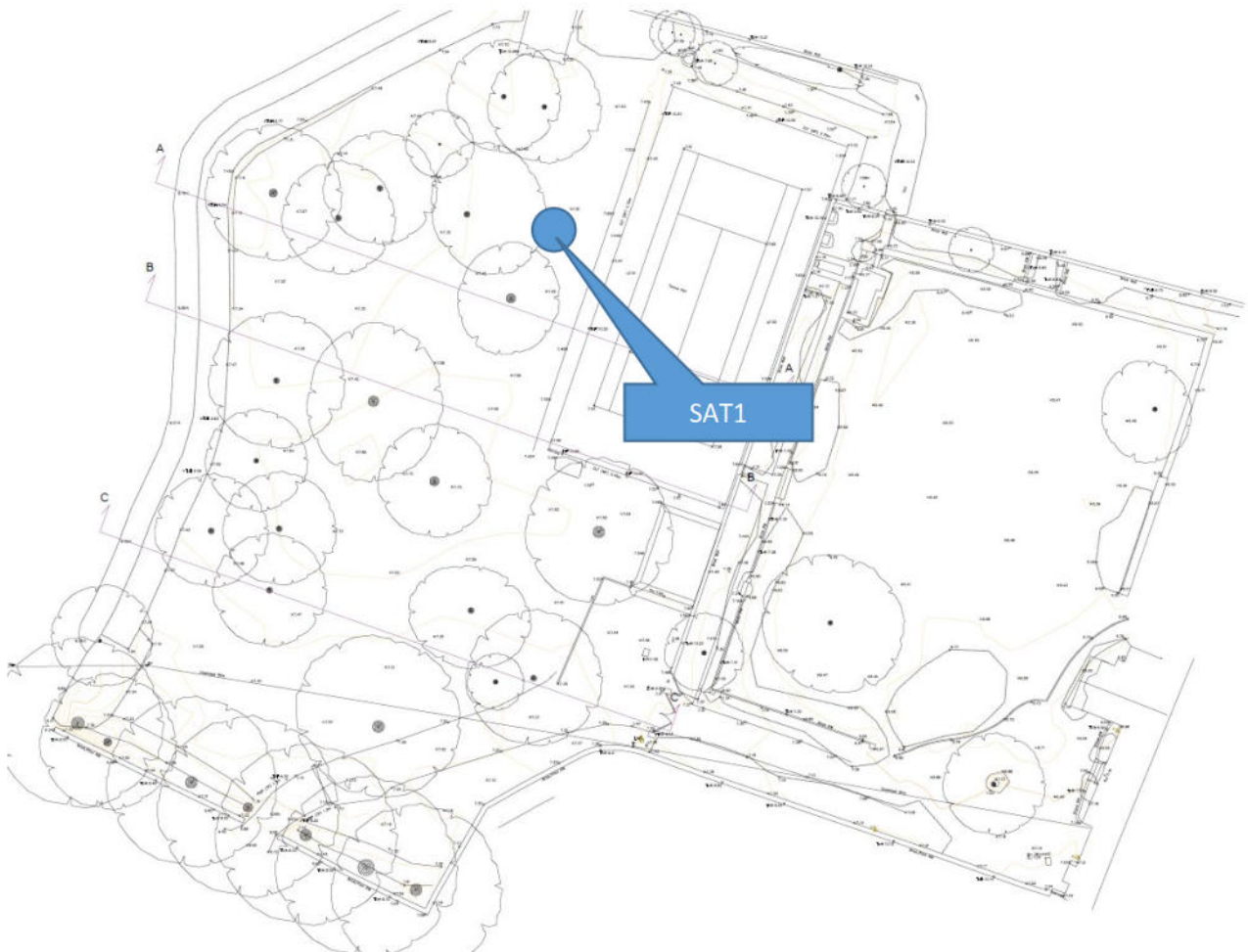
(SAT1) Testing of the sub soils which was noted as dark loam soils produced a BRE 365 design infiltration rate of **2.19x10⁻⁵m/s**. This rate was the slowest taken from all three tests. This is considered a good rate and will likely be suitable for most infiltration devices.

The third infiltration test result has been adopted for detention basin.

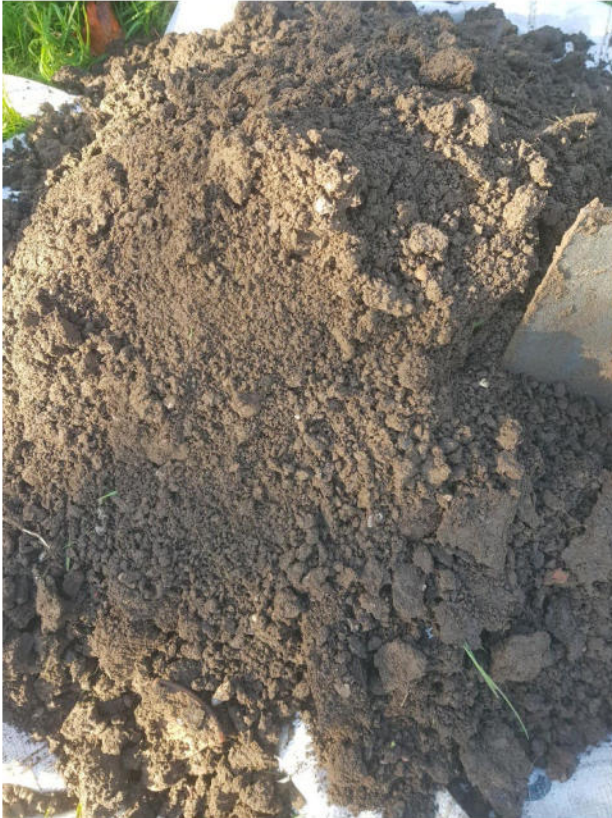
3. BRE 365 Soakaway Test Results

Test Pit No	Infiltration Rate (1-3 Tests)			Depth of Test	Soil Type
SAT1	2.60x10 ⁻⁵ m/s	2.28x10 ⁻⁵ m/s	2.19x10⁻⁵m/s	0.6m	Dark loam soils

Appendix A – Soakaway Test Location Plan



Appendix B – Site Photographs





Consulting Civil Engineers

Appendix C – Soakaway Test Results

Job: Church Farm House, Yapton - Test 1

Infiltration Calculator

$$f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$$

V_{p75-25} = Effective storage volume between 75% and 25% effective depth

a_{p50} = Internal surface area of the trial pit up to 50% effective depth and including the base area

t_{p75-25} = The time for the water level to fall from 75% to 25% effective depth

f = Infiltration rate

Trial pit width	=	0.3
Trial pit depth	=	0.6
Trial pit length	=	1

a_{p50} =

1.08

 m/squared

t_{p75-25} =

3200

 seconds

V_{p75-25} =

0.09

 m/cubed

F =

2.6E-05

Job: Church Farm House, Yapton - Test 2

Infiltration Calculator

$$f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$$

V_{p75-25} = Effective storage volume between 75% and 25% effective depth

a_{p50} = Internal surface area of the trial pit up to 50% effective depth and including the base area

t_{p75-25} = The time for the water level to fall from 75% to 25% effective depth

f = Infiltration rate

Trial pit width	=	0.3
Trial pit depth	=	0.6
Trial pit length	=	1

a_{p50} =

1.08

 m/squared

t_{p75-25} =

3650

 seconds

V_{p75-25} =

0.09

 m/cubed

F =

2.28E-05

Job: Church Farm House, Yapton - Test 3

Infiltration Calculator

$$f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$$

V_{p75-25} = Effective storage volume between 75% and 25% effective depth

a_{p50} = Internal surface area of the trial pit up to 50% effective depth and including the base area

t_{p75-25} = The time for the water level to fall from 75% to 25% effective depth

f = Infiltration rate

Trial pit width	=	0.3
Trial pit depth	=	0.6
Trial pit length	=	1

a_{p50} =

1.08

 m/squared

t_{p75-25} =

3800

 seconds

V_{p75-25} =

0.09

 m/cubed

F =

2.19E-05