Powys Drainage Field Siting and Percolation Test Calculation Form

NB – Development proposing the use of non-mains drainage schemes will only be considered where connection to the mains sewer is not feasible

Guidance Notes:

The following table provides details of siting distances contained in Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

Siting of septic tanks, treatment plants and soakaways			
Distance from	**Dwelling**	**Watercourse**	Borehole/well
Drainage field	**15m**	**10m**	50m
Septic Tank	**7m**	**10m**	50m
Treatment plant	7m	10m	50m

Conducting the main percolation test

The percolation test should be carried out in accordance with Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

1. These tests should be carried out within and be representative of, the proposed soakaway area.
2. Excavate at least 2 percolation holes 300mm square to a depth of 300mm below the proposed invert level of the effluent distribution pipe. Where deep holes are necessary, the hole should conform to this shape at the bottom but may be enlarged above the 300mm level to enable safe excavation to be carried out.
3. Fill the 300mm square section of the holes to a depth of at least 300mm with water and allow it to seep away overnight.
4. Next day, refill the test sections with water to a depth of at least 300mm and observe the time (T) in seconds, for the water to seep away from 75% to 25% full level. (ie a depth of 150mm)
5. Extreme weather conditions should be avoided when testing.

 # please complete the below diagram and form overleaf and return to appointed planning officer and ensure that the porosity test holes are left open for inspection.

Drainage scheme siting diagram

See drawing Sk 05

I, (*name*) Oliver Evans on behalf of (*applicant*) Mr & Mrs Pownall
Have carried out percolation tests in accordance with the guidance provided with this form on (*date*) 21/2/2024 in respect of premises at:
Land Adj. Laburnum House, Llanymynech, Powys. SY22 6QQ

Description of ground strata:
150mm topsoil, clay to rest - See images

The overall depth of the test holes dug were: (*state in metres/millimetres*)

Test Hole 1	Test Hole 2
780 mm	780 mm

I confirm that the water table did not rise to within 1 metre of the invert of the proposed land Irrigation scheme.

The weather conditions on the day were: Dry
The results of the percolation tests were:

	Test Hole 1 Time in Seconds		Test Hole 1 V_p	Test Hole 2 Time in Seconds		Test Hole 2 V_p
Test 1	4049	÷150	26.99	4470	÷150	29.8
Test 2	4249	÷150	28.3	4548	÷150	30.32
Test 3	4040	÷150	26.93	4310	÷150	28.73
Trial Hole 1 – Average V_p			27.4	**Trial Hole 1 – Average Vp**		29.6

Average V_p of Test Holes 1 & 2 28.5

Use this averaged V_p figure in the following formula P x V_p x 0.25 = A

Calculating the drainage field area

P	X	V_p	X	0.25	=	A	
6	X	28.5	X	0.25	=	42.75	m

Calculating the linear drainage field length

A	÷	TW	=	L	
42.75	÷	0.6	=	71.25	m

Key

P = no of people served by the tank
A = floor area of the drainage field (in square metres)
V_P= Percolation Value
TW= Trench width in metres L = length of the drainage field (in metres)

Signed: [redacted] 23/2/24 Tel No: [redacted]

Address: Morris Marshall and Poole, 10 Broad St., Newtown. SY16 2LZ