Appendix E

blueprint architectural services

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FAO Sharon Holman
WCBC
Planning Department,
First Floor,
16 Lord Street,
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LL11 1LG

Our Ref: S093/002
28th June 2021

Dear Sharon:

Re: Barns adj to Moss Bank Farm, Borras Road, Wrexham.

Please see below results from percolation tests undertaken on site.

2 separate test holes were provided on site to the following dimensions: 300mm x 300mm x 300mm deep. Three separate tests where undertaken. Those test results are recorded below.



Picture for illustration purposes only

Test 1:

The water level took 1hr & 5 minutes to fall between markers set at 75% full and 25% full. Converted into seconds for the purposes of the calculation we are left with the figure of 3900.

The VP is then calculated by dividing the time by 150 in test 1 case 3900/150.

A VP of 26 is calculated.

Test 2:

The water level took 1hr & 36 minutes to fall between markers set at 75% full and 25% full. Converted into seconds for the purposes of the calculation we are left with the figure of 5760.

5760/150.

A VP of 38.4 is calculated.

Test 3:

The water level took 1hr & 51 minutes to fall between markers set at 75% full and 25% full. Converted into seconds for the purposes of the calculation we are left with the figure of 6660.

6660/150

Vp = 44.4 (percolation value)

Calculating and average over the 3 test results adding all VP's together and dividing by 3.

26 + 38.4 + 44.4 = 149.6

108.8 / 3 = 36.26 = Average VP

The above information provides evidence that a drainage field will disperse the clear water outfall from the bio disc effectively.

Size of drainage field has been calculated using the following formula: At = p x Vp x 0.25 p being the maximum number of persons residing in the property.

12 x 36.26 x 0.25 = 108.78m²

108.78m² Is the drainage field area required to serve the property based on the results as noted above.

Should you have any queries regarding the proposal please do not hesitate to contact the office at your convenience.

Yours faithfully

[redacted]

Dafydd Edwards ACIOB
Senior Architectural Technician
for blueprint architectural services