



VEER BUILDERS LIMITED

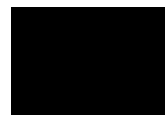
Kidland House  
Kidlandlee  
Harbottle  
Morpeth  
NE65 7DA

Tel: [REDACTED]

## Percolation Test Report

LOCATION	Proposed development at Kidlandlee, Harbottle, Morpeth, NE65 7DA
ISSUE DATE	25 June 2021

Prepared by:



Matthew G Stock  
BSc (Hons) Econ

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## 1) Introduction

In accordance with the requirement of Northumberland National Park planning department Veer Builders Ltd carried out percolation testing at the above location on 25<sup>th</sup> June 2021.

## 2) Scope of Investigation

Two (2) hand excavated trial pits, TP1 and TP2, were each dug to depths of 1 metre to carry out percolation testing at the locations shown on the site plan included.

Both trial pits remained stable and dry following excavation.

Topsoil was encountered to a depth of 0.3m in each trial pit. The topsoil consisted of rocky / broken shale mixed with soil in both pits.

Both trial pits were free of ground or other roots and the soils encountered in the trial pits are concluded to be representative of ground conditions found throughout Kidlandlee based on earlier pits in other locations and recent foundation trenches dug for other recent building works at the site (Barns extension, Kidland House extension and The Hemmel)

### 2.1) Percolation Testing

Percolation testing was carried out at both trial pits (TP1 and TP2 respectively) according to the method described in BRE Digest 365 (though in smaller hand excavated pits though in smaller, hand excavated pits to avoid excessive water consumption or compromising of site surface stability). The pits measured approximately 300mm x 300mm x 1000mm deep (TP1 and TP2).

The pits were cleared of any loose debris (including stone and clumps of soil) and water was filled to depth of 300mm and left overnight and allowed to seep away overnight.

The following day the pits were refilled to a depth of 300mm and observations were made to determine how quickly the water seeped away.

When the water level dropped to 225mm (3/4 full) timing was started and stopped when water has reduced to a height of 75mm (1/4 full), i.e. the time taken to fall 150 mm was recorded. This test was carried out in TP1 and TP2 and repeated 3 times at different times of the day (10am, 2pm and 6pm). Thereafter the average Percolation was calculated using the following formula;

Time taken in minutes x 60 seconds / 150mm = Vp (Percolation rate)

### 2.2) Percolation test results

TP1; average time taken = 62minutes

TP2; average time taken = 66 minutes

Vp (TP1) = 62 x 60 / 150 = 24.8

Vp (TP2) = 66 x 60 / 150 = 26.4

## Conclusion

Trial pits TP1 & TP2 recorded an average time 62 and 66 minutes respectively which resulted in percolation rates of 24.8 and 26.4 respectively .

The average percolation rate between TP1 and TP2, is therefore 25.6 which is considered suitable as a location for the proposed treatment plant soakaway as the soil's percolation rate is quick enough to allow any run off from the treatment plant to adequately disburse into the ground.

# KIDLANDLEE SITE PLAN

LOCATION OF TRIAL PITS = \*

