

# PERCOLATION REPORT

**LOCATION:**

Thornley Hall Farm

**CLIENT:**

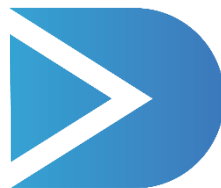
Mr and Mrs Airey

**DOCUMENT REF:**

23336-PR-001

**DATE:**

20.06.23



**DART**  
**ENGINEERS LTD**  
CIVIL AND STRUCTURAL  
ENGINEERING

# CONTENTS & AMENDMENT HISTORY

---

1.0 TESTING REPORT..... 3

Revision	Description	Date	Author	Checked
A	First Issue	20.06.23	R Thacker	A Dyson

# TESTING REPORT

---

## 1.0 TESTING REPORT

The Percolation Testing was carried out on site on 20th June 2023 to establish if infiltration methods were going to be a suitable solution for draining the site.

2 Trial Holes were formed on site where the attenuation is proposed to be located with the following dimensions;

Test Pit 1      1600mm x 300mm x 1500mm deep

Test Pit 2      1500mm x 300mm x 1500mm deep

The water level drop was monitored and recorded (see test sheets attached).

### TEST PIT 1:

For Test 1 (Test Pit 1), water was filled to a depth of 800mm, the water level dropped 20mm after 1 hours 30 minutes of testing.

For Test 1 (Test Pit 2), groundwater was found at the base as can be seen in the pictures, under BRE 365 groundwater cannot be within 1m of the base of the soakaway, due to the levels and storage required the base of the soakaway would sit within this range, as a result of this it is deemed soakaways would not be viable at this location

## APPENDICES

### Appendix A – Percolation Test Sheet METHOD (from BRE Digest 365)

- Excavate a soakage trail pit to the required depth (typically 1.0m - 2.0m deep) using minimum width (0.3m) and length (1.0m). Carefully trim sides and bottom.
- Carefully measure size of pit and note sizes below.
- Fill soakage hole briskly with water (from bowser) to at least three quarters full. Being careful not to wash away the sides. (Note: a 0.3m wide, 1m long, 1.5m deep trench needs at least 350 litres (80 gallons) of water)
- Place straight edge over top of soakage pit and measure (dip) to the top of the water.
- Record time versus dips in table below. Dip every 5 minutes for the first hour and every hour until pit is one quarter full. Repeat test 3 times in total on the same or consecutive days.

### DETAILS

<b>Site Location</b>	<b>Thornley Hall Farm</b>
<b>Date of Test</b>	<b>20.06.23</b>
<b>Weather Conditions</b>	<b>Dry – Spring</b>
<b>Engineer Name</b>	<b>Rob Thacker</b>

### SIZE OF PIT 1

<b>Length</b>	<b>Width</b>	<b>Depth</b>
1600	300	1500

### Test 1 RESULTS

<b>Time (mins)</b>	<b>Dip (mm)</b>	<b>Time (mins)</b>	<b>Dip (mm)</b>
0	800	70	780
5	795	75	780
10	795	80	780
15	795	85	780
20	795	90	780
25	790		
30	790		
35	790		
40	790		
45	785		
50	785		
55	785		
60	785		
65	785		

## Test Plan



**Test 1 Photo**



**Test 2 Photo**

