

13th March 2020

MSP/RML 7184

Malcolm Hollis LLP
Basepoint
1 Winnall Valley Road
Winchester
Hants
SO23 0LD

For the attention of Chris Baker

Dear Sirs,

**SOAKAWAY TEST AT DEVELOPMENT SITE, LINESIDE INDUSTRIAL ESTATE, ELDON WAY,
WICK, LITTLEHAMPTON, BN17 7HD**

Further to your e-mailed instruction to proceed dated 25th October 2019, we confirm having attended the above noted site on Wednesday 11th March 2020 in order carry out the required work and complete the groundwater monitoring visits.

We now have pleasure in enclosing the following factual information.

1. *Figure 1 Trial Pit Record (TP1)*
2. *Soil Percolation Test Result Sheets (SA1)*
3. *Groundwater Monitoring Results Sheet*
4. *Drawing No. RML 7184/1 - Sketch Fieldwork Location Plan*

The Soil Percolation Test (SA1) was undertaken at the location as indicated on the appended Drawing No. RML 7184/1, generally in accordance with the methods described in BRE Digest 365 "Soakaway Design" and B.S. 5930:2015.

Soil Percolation Test

Trial Pit TP1 was mechanically excavated to a depth of 2.60m below existing ground level. The trial pit was then filled from a lorry mounted water bowser and the depth to water measured regularly. Water was slow to soak away and, therefore, only one filling was undertaken in the day. In addition, the fall of water was interpolated over its last 200mm for the test owing to the slow soakage rate

The interpolated time taken for the test was then used to calculate the following Soil Infiltration Test Rate (f);

$$\text{SA1 (TP1)} \quad f = 4.77 \times 10^{-6} \text{ m/s}$$

The above value is based on the first filling. A “rule of thumb” which we have used previously is that the third filling takes up to 1.5 times the first filling.

Based on this a revised Soil Infiltration Rate $f = 3.18 \times 10^{-6} \text{ m/s}$ can be calculated and we would recommend that this value for f is used in future soakaway calculations for this site.

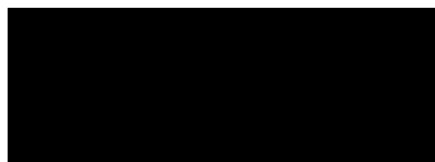
Groundwater Monitoring

The final monitoring visit recorded a depth to groundwater of 4.15m below existing ground level.

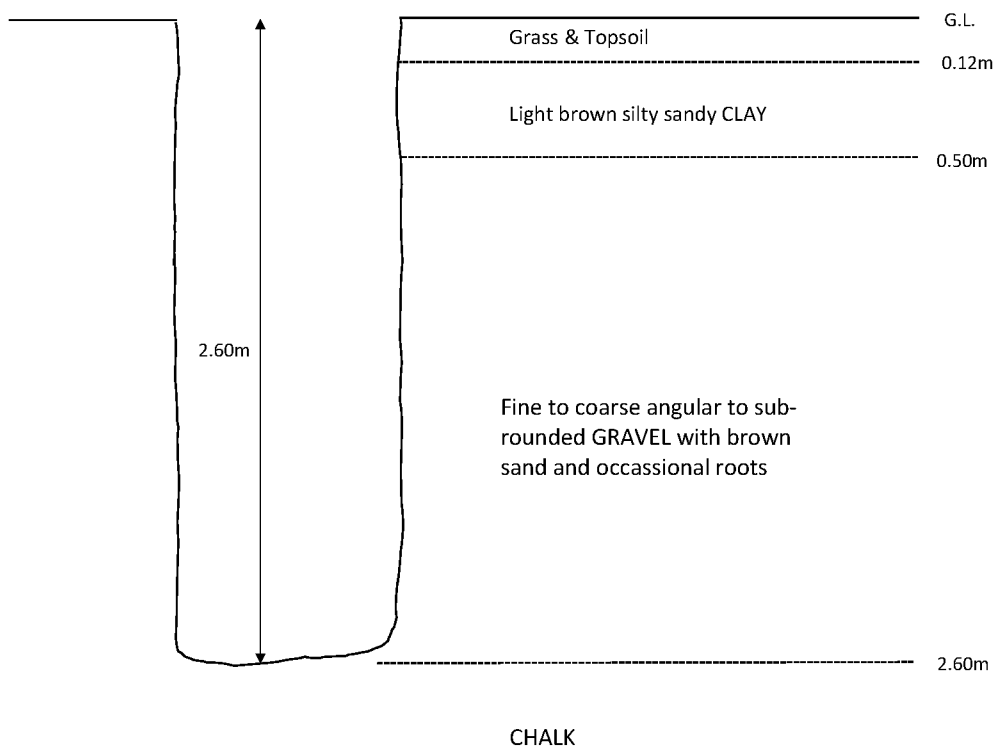
The groundwater levels recorded at each of the monitoring visits are shown on the appended results sheet.

We trust that you will find the enclosed self-explanatory, however, should you have any queries please do not hesitate to contact the writer at the above noted address.

yours faithfully,
for RISK MANAGEMENT LIMITED



Richard Price B.Sc. (Hons), F.G.S., M.I.Env.Sc.
Project Engineer



Risk Management

Title : **TRIAL PIT TP1 (SA1)**

Project Location : Lineside Industrial Estate, Eldon Way,
Wick, Littlehampton, BN17 7HE

**RECORD OF EXCAVATED
TRIAL PIT**

Job No : RML 7184

Scale : Not To Scale

Figure No. **1**

Date : 11th March 2020



BRE DIGEST 365 SOIL INFILTRATION TEST (SA1)

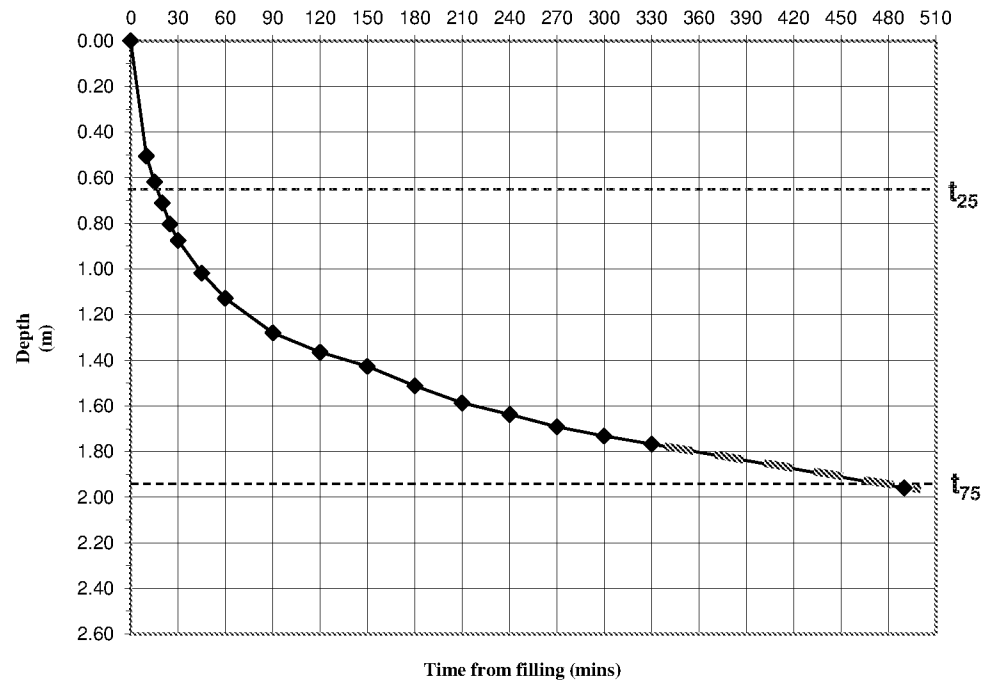
Risk Management Limited
Tel : 01883 343572

Project Name : Lineside Industrial Estate, Eldon Way, Wick,
Littlehampton, BN17 7HE

One Filling

Job No. RML 7184
Date : March 2020

Test Depth (m)		Test Depth (m)		Test Depth (m)	
2.60					
Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)
0.000	0				
0.505	10				
0.618	15				
0.710	20				
0.803	25				
0.875	30				
1.017	45				
1.128	60				
1.280	90				
1.364	120				
1.426	150				
1.512	180				
1.587	210				
1.638	240				
1.692	270				
1.732	300				
1.768	330				
1.960	490				



TIME TAKEN TO FALL BETWEEN 25% and 75% approx 473 mins

* Denotes extrapolated value

SOIL PERCOLATION TEST SA1

Project Name : Lineside Industrial Estate, Eldon Way, Wick, Littlehampton, BN17 7HE

Project No: RML 7184

Date : March 2020

Trial Pit No.	TP1
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Depth of pit (m)	2.60
Width of pit (m)	0.35
Length of pit (m)	2.20
Depth of water in pit (m)	2.60

Volume of 75% to 25% (V_{p75})	1.00
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Mean surface area through which flow occurs (a_{p50})	7.40
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Time for outflow (minutes) 75% to 25% (t_{p75-25})	473
Time for outflow (seconds) 75% to 25% (t_{p75-25})	28380

Soil Infiltration Rate (f) m/s =	4.77E-06
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SOIL PERCOLATION TEST SA1 ASSUMED THIRD FILLING

Project Name : Lineside Industrial Estate, Eldon Way, Wick, Littlehampton, BN17 7HE

Project No: RML 7184

Date : March 2020

Trial Pit No.	TP1
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Depth of pit (m)	2.60
Width of pit (m)	0.35
Length of pit (m)	2.20
Depth of water in pit (m)	2.60

Volume of 75% to 25% (V_{p75})	1.00
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Mean surface area through which flow occurs (a_{p50})	7.40
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Time for outflow (minutes) 75% to 25% (t_{p75-25})	709.5
Time for outflow (seconds) 75% to 25% (t_{p75-25})	42570

Soil Infiltration Rate (f) m/s =	3.18E-06
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GROUNDWATER MONITORING RESULTS

ARUN DISTRICT COUNCIL LU/274/20/DOC

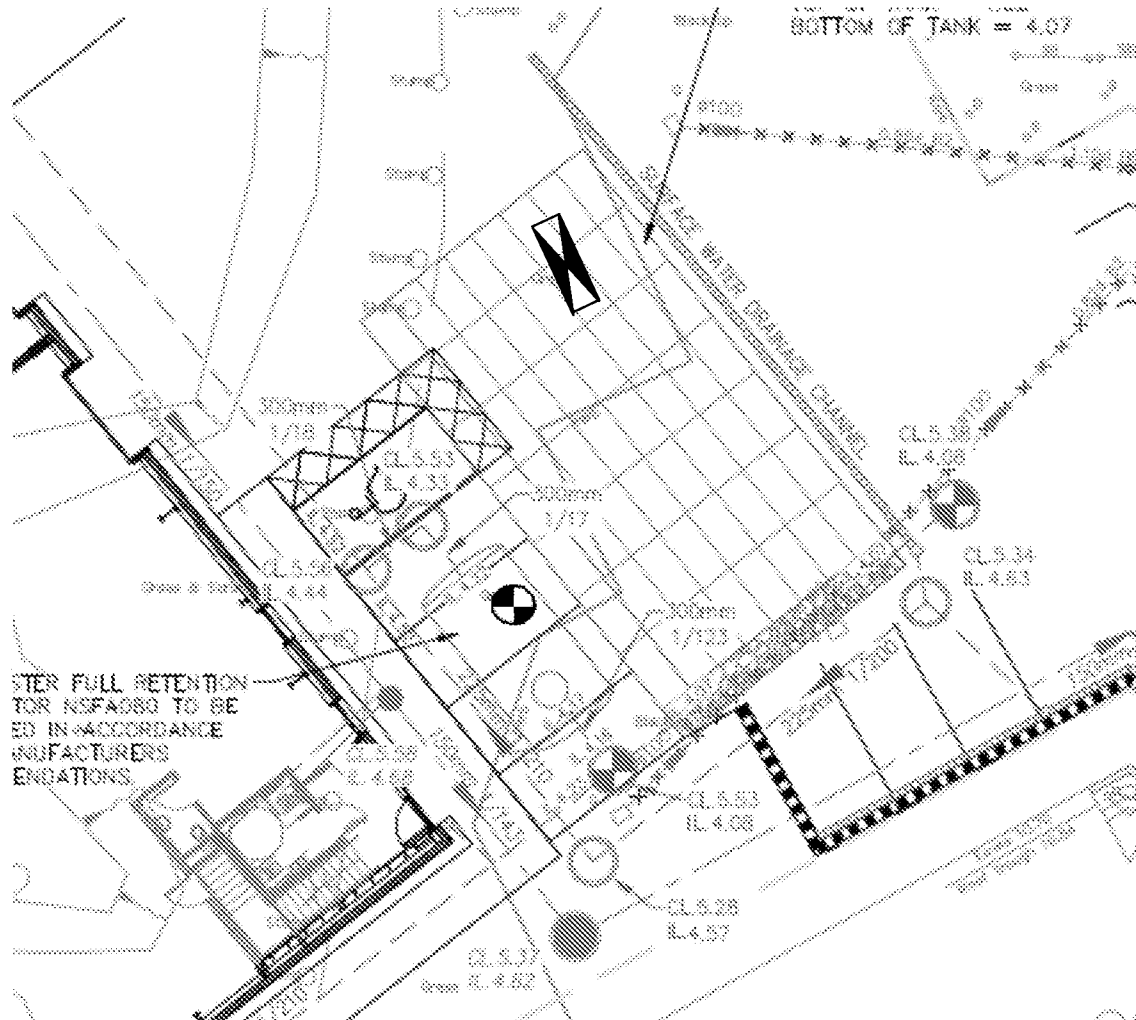
KEY



Monitoring Borehole Location



Trial Pit Location for BRE soakaway test



Risk Management

Title :

SKETCH FIELDWORK LOCATION PLAN

RISK MANAGEMENT LIMITED
Unit 10 Coopers Place, Combe Lane,
Godalming, Surrey GU8 5SZ
Tel : 01883 343572

Project Location : Lineside Industrial Estate, Eldon Way, Wick,
Littlehampton, BN17 7HE

Report Date : March 2020

Scale : NTS

Drawn By : MSP

Drg. No. RML 7184/1