MAT LAB LIMITED

LABORATORY REPORT

Client's Name: Pouralli

Address: 22 Oakmont Drive,
Waterlooville,
Hampshire,
PO8 8TH

Report Date: 10-Aug-10
Job No.: **45484** (If _R suffix appears after Job No., this indicates Revision Number)
Insurance Co.: The Site Investigation Company
Claim Ref. No.:

Project Engineer: E. Larkin
From: Riley Larkin Limited,
Engineers Ref.: N100336

Contents: Moisture Content
Atterberg Limits
Suction Tests

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09 MAY 2011
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Address: Mat Lab Ltd
The Dell
Bickenhill Lane
Catherine-De-Barnes
Solihull B92 0DE
E-mail: post@mat-lab.com

Phone No.: 0121 704 3339 **Fax No.:** 0121 704 4675

Authorised By:
AB - Reports Technician
Date Authorised: 10/08/2010

Notes relating to Soils Report

Date Soil Samples Received in Laboratory: 29-Jul-10
Date Testing Requirements Approved: N/A

This Soils Report contains results for 1 borehole(s) on 1 page(s)

General

Soils were prepared in accordance with BS1377:Part 1:1990 Section 7

Laboratory soil sample descriptions in general accordance with BS5930:1999

Where samples are not tested on same date for a particular test type, Test Date quoted refers to the day of testing of final sample

All samples will be disposed of within 1 month of presentation of this report unless otherwise advised

Natural Moisture Content

Test Date: 30-Jul-10

Tested in accordance to BS1377:Part 2:1990 Section 3.2

A sample quantity of 100g is used for fine-grained soils, where available

Where sample quantity is critical, a minimum of 50g may be used, in accordance with BS1377:Part 2:1990

A sample quantity of 300g to 350g is used for medium-grained soils, 3kg is used for coarse-grained soils.

Atterberg Limits

Test Date: 06-Aug-10

Tested in accordance to BS1377:Part 2:1990; Section 4.4 for the Liquid Limit, Section 5 for the determination of the Plastic Limit and Plasticity Index

Suction Tests

Test Date: 07-Aug-10 (Q)*

Suction Test carried out in accordance to the accredited In-house Procedure MTLB001 with reference to the BRE paper IP4/93 (Corrected) 'A Method of Determining the State of Desiccation in Clay Soils' (Unless otherwise stated the filter paper moisture content was determined after 5 to 10 days contact and the test was prepared from a remoulded disturbed sample in accordance with in-house procedures)

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* *Where denoted by '(Q)' following Test Date above, the test has been performed using 2 soil discs and quartered filter papers. The filter paper tests are conducted in a controlled environment within a temperature range of 16oC to 24oC. Average Suction values (in kPa) calculated using the BRE paper IP4/93 calibration are quoted with the maximum and minimum suction obtained, as indicated by error bars either side of plotted point. Where possible, suction values should be compared with remote borehole values, to determine relative desiccation.*

Each new batch of filter papers used for testing is checked for its consistency against the standard BRE calibration curve using a pressure membrane extractor. The current filter paper batch, J113976969, shows good consistency against the BRE curve, more information is available upon request. Studies on In-house calibrations using a pressure membrane extractor continue.

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UKAS TESTING
2093

Address: **22 Oakmont Drive, Waterlooville, Hampshire, PO8 8TH** | Job No. **45484**

SOILS LABORATORY RESULTS.

MAT LAB LTD. 0121 704 3339

Opinions and interpolations expressed herein are outside the scope of UKAS accreditation.

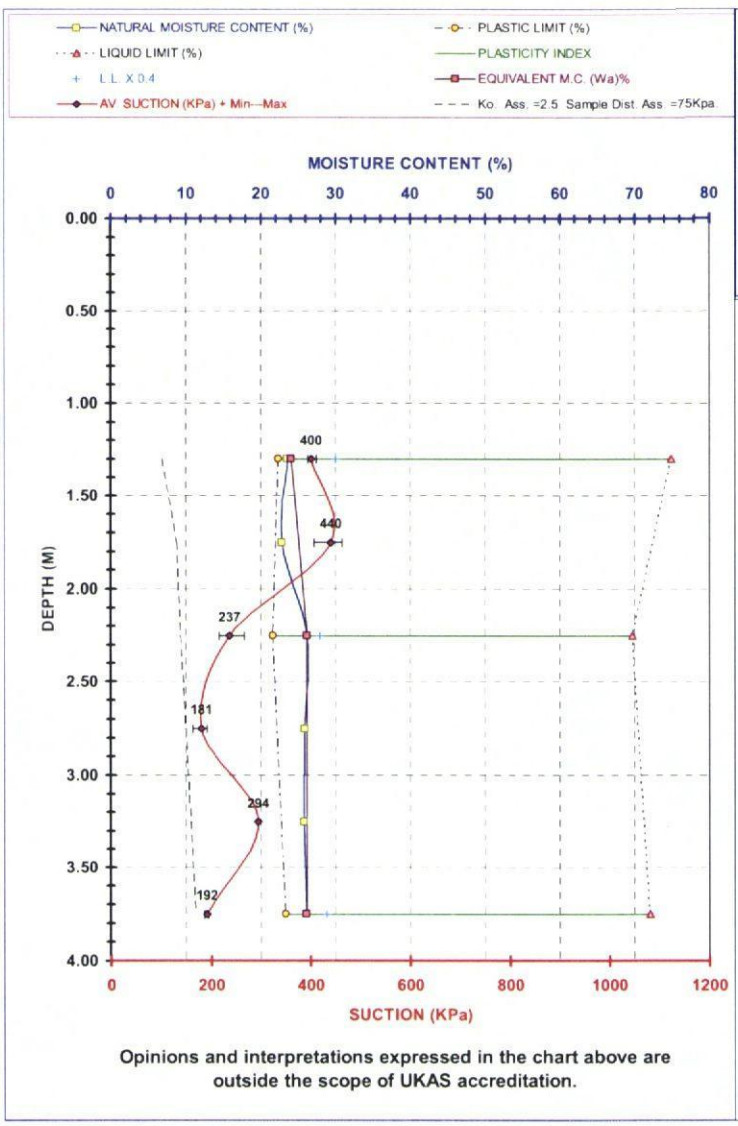
JOB No.:-	45484	INSURANCE COMPANY	The Site Investigation Company REF:-
DATE SAMPLES REC'D:-	29 Jul 10	ENGINEER:-	E. Larkin REF:-N100336
CLIENT/INSURED NAME:-	Pouralli	FROM :-	Riley Larkin Limited,
ADDRESS:-	22 Oakmont Drive,	B.H. No. :-	1
	Waterlooville,	LOCATION:-	N/A
	Hampshire,	REPORT DATE:-	10 Aug 10
	PO8 8TH		

UKAS TESTING 2093

NOTE :- Column "dh" below is outside of UKAS accreditation and is an inference based on the heave analysis [dh (Blue) extrapolated]. "N.P." in the plastic limit column ="Non-Plastic"

DEPTH. M.	M.C. (%)	ATTERBERG LIMITS. L.L. (%)	P.L. (%)	P.I. (%)	425um (%)	AV. Filter Paper M.C.(%) & No.	dh (mm)	BRIEF SOIL DESCRIPTION
1.30	24	75	22	53	100	35.9746 (3)	9.5	Stiff brown CLAY with occasional grey bandings, rare sand & fine gravel.
1.75	23	-	-	-	-	35.3253 (3)	6.6	Stiff brown CLAY with occasional grey bandings, rare sand & fine gravel.
2.25	26	70	22	48	99	39.6477 (3)	5.0	Firm/stiff brown CLAY with occasional grey bandings, rare sand & fine gravel.
2.75	26	-	-	-	-	41.5424 (3)	2.1	Firm/stiff brown CLAY with occasional grey bandings, rare sand & fine gravel.
3.25	26	-	-	-	-	38.1214 (3)	2.4	Firm/stiff brown CLAY with rare sand & fine gravel.
3.75	26	72	23	49	100	41.1106 (3)	2.2	Firm/stiff brown CLAY with occasional light grey veinings, rare sand & fine gravel.

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Opinions and interpretations expressed in the chart above are outside the scope of UKAS accreditation.

The interpretations below are outside of UKAS accreditation.

Heave Potential Analysis :-

Total of Column dh (potential heave increment per layer)

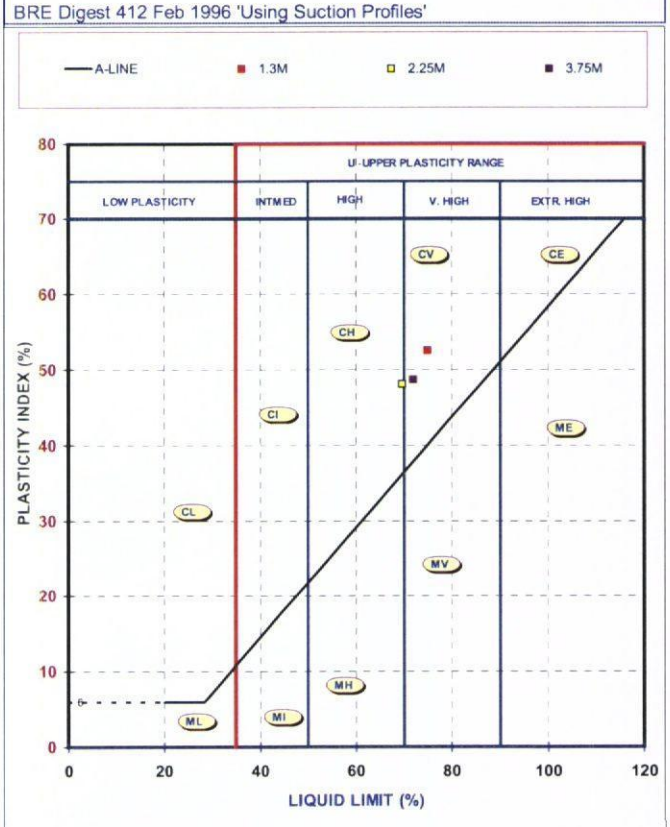
Is Approx. : **28 mm.**

Therefore the Total Surface Heave Potential over the B/H depth is about :-

1cm. to 4cm.

The Above Heave Analysis is based upon :-

BRE Digest 412 Feb 1996 'Using Suction Profiles'



Authorised by :-