



Geotechnical Survey Report

FSI Ref: 25382
Issue Date: December 2022

Risk Address: School Bugalow
Erskine Road
Vigo
Gravesend
DA13 0RL

Engineer: Robert Kelso

Company: GHG
Claim Ref: L/2022/73144/S

Managing Director: Martin Rush MSc FGS
Finance Director: Louise Banks BSc (Hons)

Geotechnical Compliance & Logistics Supervisor: Perry Martin MCIHT

Laboratory Manager: Jade McLellan

Senior Geologist: Scott Parker BSc (Hons) FGS
Assistant Geologist: Sarah Brand
Geotechnical Assistant: Bradley Webb

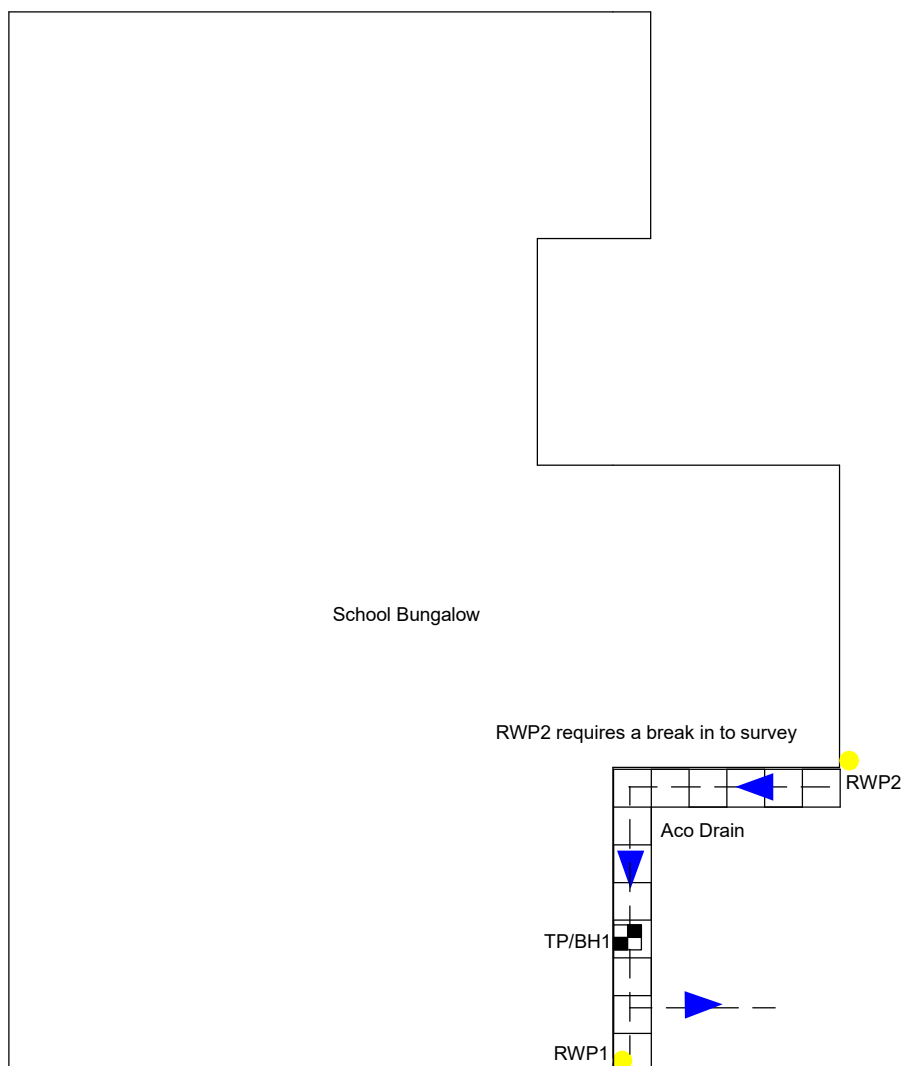
SITE PLAN

Property Address: School Bungalow, Erskine Road, Vigo, Gravesend, DA13 0RL

Client Claim Ref: L/2022/73144/S

Survey date: 02/12/2022

Operative: SE3



Front

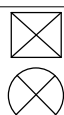


Unable to lift MH lid to survey

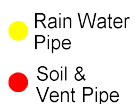
Scale:
 NTS

Drawn by:
 SB

Key:



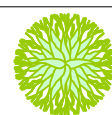
Manholes



Shrub



Tree
 (Conifer)



Tree
 (Deciduous)

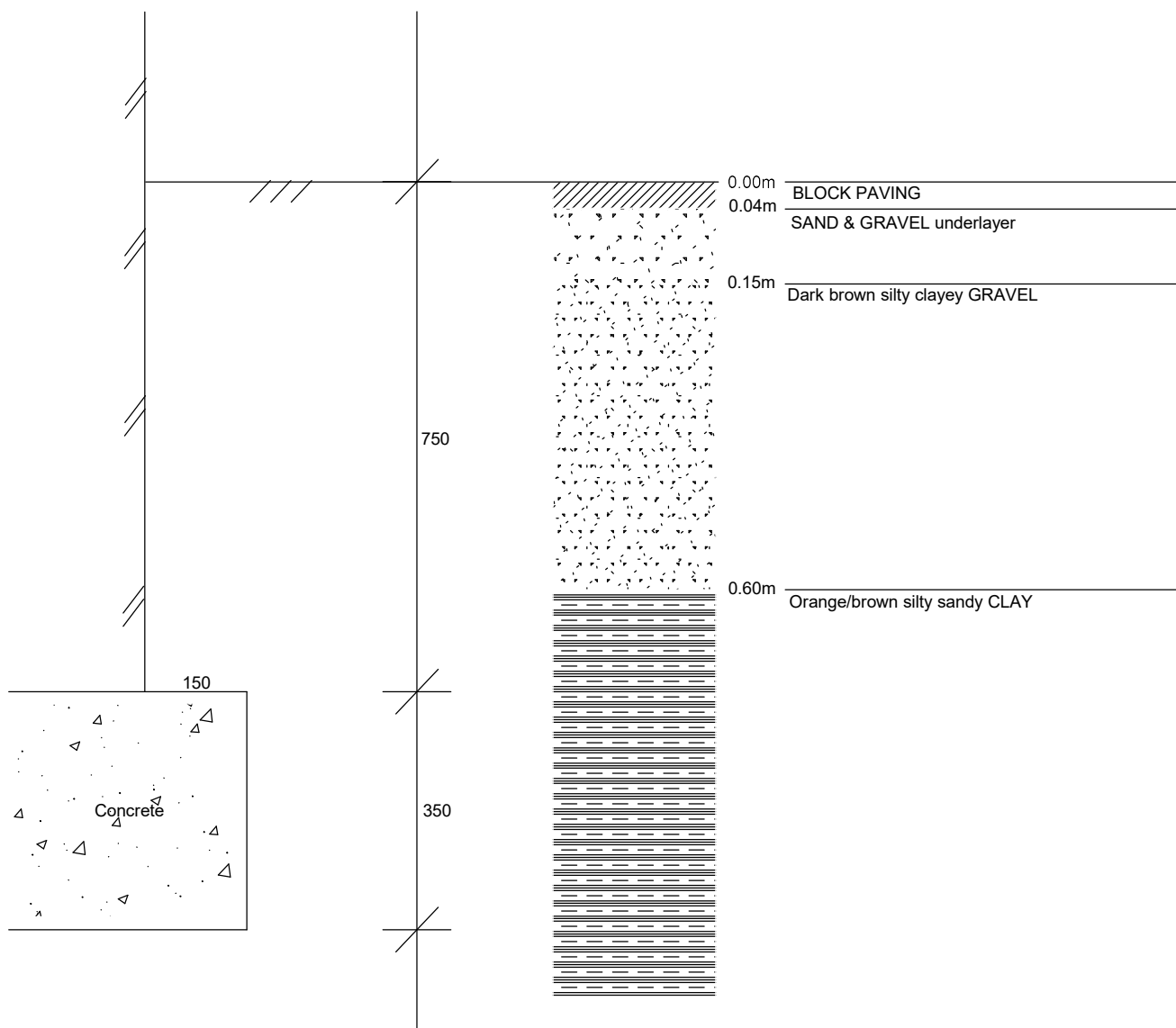
TRIAL PIT 1

Property Address: School Bungalow, Erskine Road, Vigo, Gravesend, DA13 0RL

Client Claim Ref: L/2022/73144/S

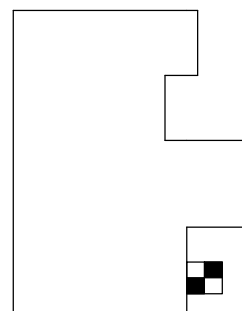
Survey date: 02/12/2022

Operative: SE3



D1 @ F.L. (1.10m)
V = 88-90kPa
Founding strata: Orange/brown silty sandy CLAY

Trial Pit Location:



Drawn by:

SB

Scale:

1:10

D= small disturbed sample, B= large bulk sample, U= undisturbed sample,
MP= mackintosh probe blow counts, V= shear vane reading (kPa)

		Fastrack Site Investigations Ltd Unit 9, Tyndales Farm Southend Road Maldon CM9 6TQ		Borehole Log		Borehole No. BH1 Sheet 1 of 1		
Project Name: L/2022/73144/S			Project No. 25382		Site Date: 02/12/2022		Hole Type BH	
Location:		School Bungalow, Erskine Road, Vigo, Gravesend, DA13 ORL					Scale 1:17	
Client:		GHG					Logged By SE3	

Water Strikes	Sample and In Situ Testing			Depth (m)	Legend	Stratum Description	
	Depth (m)	Type	Results				
				0.04		BLOCK PAVING	
				0.15		SAND & GRAVEL underlayer	
						Dark brown silty clayey GRAVEL	
				0.60		Orange/brown silty sandy CLAY	
						Foundation top-0.75m (Concrete construct projects 150mm with a thickness of 350mm)	
	1.10	D	V (kPa) = 88 V (kPa) = 90			Foundation level-1.10m Noted to contain hairlike-6mm roots at F/L	1
	1.50	D	V (kPa) = 126 V (kPa) = 128			Noted to contain hairlike-6mm roots at 1.50m	
	2.00	D	V (kPa) = 140			Noted to contain hairlike roots at 2.00m	2
				2.10		Orange/brown silty clayey SAND	
	2.50	D	MP = 20/75mm MP = 20/75mm MP = 21/75mm MP = 21/75mm			End of Borehole at 3.000m	3
	3.00	D	MP = 23/75mm MP = 24/75mm MP = 24/75mm MP = 24/75mm	3.00			

Key: D - Disturbed Sample V - Insitu Vane Test MP - Mackintosh Probe Test

Remarks: Borehole closed at 3.00m.
 Borehole noted to be dry on completion.



LABORATORY RESULTS

Property Address: School Bungalow, Erskine Road, Vigo, Gravesend, Kent, DA13 0RL
Client Claim Ref: L/2018/53447/S **Client:** Graham High Group

SAMPLE DETAILS	ANALYSIS REQUESTED
Investigation date: 02/12/2022	Moisture Content ☒ PSD ☐
Sample details: Bags as received	Liquid Limit ☒ Soil Suction ☒
Samples received: 05/12/2022	Plastic Limit ☒ Shear Strength ☐
Schedule recieved: 05/12/2022	Plasticity Index ☒ Contamination ☐
Samples tested: 06/12/2022-13/12/2022	Root ID ☒ Root/Tree DNA ☐
Results reported: 13/12/2022	Other (please state) ☐

TEST DETAILS

General

Sample descriptions were written in accordance with BS 5930:1999.

Samples were prepared in accordance with BS 1377: Part 1: 1990, section 7

Samples from this contract will be retained for 1 calendar month following the issue of this report unless otherwise notified

Written approval is required from Fastrack Site Investigations Limited to reproduce report in full. The results shown within this report only relate to the samples tested

Moisture Content

Samples were tested in accordance with BS 1377: Part 2: 1990, section 3.2 (Oven drying method)

In accordance with Note 1 to paragraph 3.2.4 of BS 1377 Part 2 1990; these moisture contents have been corrected to give the equivalent moisture content of the fraction passing the 425µm sieve, to enable comparison with the liquid & plastic limits. (If condition of test is 'natural' the retained percentage is an estimated value, if condition is 'washed' the percentage is a measured value).

Samples are dried at 105-110°C unless otherwise stated.

Atterberg Limits

Samples were tested in accordance with BS 1377: Part 2: 1990, section 4.3 (4 drop LL), 4.4 (1 drop LL), 5.3 (PL) and 5.4 (PI)

Test results on samples with a sand content, may show less accurate results. If condition of test is 'washed' results relate to the fraction passing the 425µm sieve only.

* Driscoll's rules deem the soil to be desiccated where the moisture content is less than the value calculated using driscoll's rule 1 and/or 2

Particle Size Distribution

Samples were tested in accordance with BS 1377: Part 2: 1990 section 9.2 (Wet sieving method)

Undrained Shear Strength

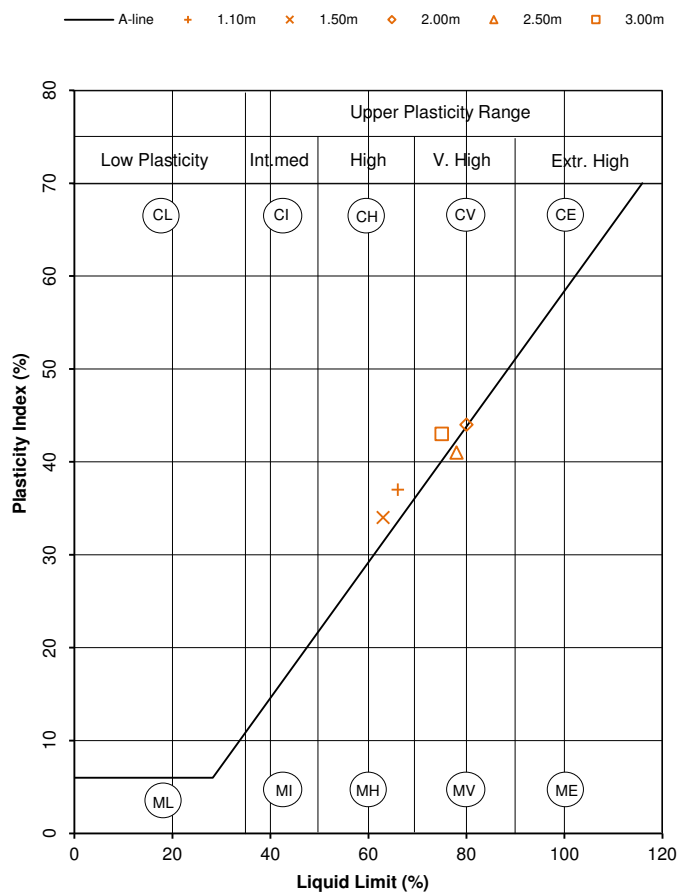
Samples were prepared in accordance with BS 1377: Part 7: 1990 section 8.3 and testing in accordance with BS 1377: Part 7: 1990: section 8.4 (undrained shear strength in triaxial compression without measurement of pore pressure (UU))

Soil Suction

Samples were prepared and tested based on the BRE digest No:IP4/93 (Corrected). 'A method of determining the state of desiccation in clay soils.' (Filter paper method).

Test results on samples with a sand or silt content, may show less accurate results. Deviation to standard procedure - Polythene bags are not used from weighing filter papers.

Property Address:	School Bungalow, Erskine Road, Vigo, Gravesend, Kent, DA13 0RL
Client Claim Ref:	L/2018/53447/S

[illegible]

Comments:	BH1 @ 2.50, 3.00m - Unable to perform soil suctions due to not enough sample
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Issued by: ☒ Jade McLellan (Laboratory Manager) ☐ Ted Smith (Laboratory Technician)
☐ Isabella Acerbis (Assistant Laboratory Manager) ☐ Other

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ROOT IDENTIFICATION

School Bungalow

Client Reference: 25382
Report Date: 8 December 2022
Our Ref: R49181

Sub Sample	Species Identified		Root Diameter	Starch
BH1:				
FL	probably <i>Alnus</i> spp. but possibly <i>Betula</i> spp.	1	1 mm	Abundant
1.5m	<i>Quercus</i> spp.		1 mm	Abundant
1.5m	probably <i>Alnus</i> spp. but possibly <i>Betula</i> spp.		<1 mm	Abundant

Comments:

1 - Plus 3 others the same.

Alnus spp. are alders; *Betula* spp. are birches.
Quercus spp. are oaks (both deciduous and evergreen).

Signed: R. Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.

