

# **REPORT ON A SUPPLEMENTARY GEOTECHNICAL INVESTIGATION FOR A PROPOSED MIXED-USE DEVELOPMENT AT** FORMER CHAMBERS BUS DEPOT, **CHURCH SQUARE, BURES, SUFFOLK, CO8 5AB**

**Report No: 222945S** 

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13 Willow Park, Upton Lane, Stoke Golding, Warwickshire, CV13 6EU Tel: 01455 213311: Fax: 01455 213969 Email: enquiries@compassgeotechnical.co.uk www.compassgeotechnical.co.uk

**Compass Geotechnical Limited** 



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## REPORT ON A SUPPLEMENTARY GEOTECHNICAL INVESTIGATION FOR A PROPOSED MIXED-USE DEVELOPMENT AT FORMER CHAMBERS BUS DEPOT, CHURCH SQUARE, BURES, SUFFOLK, CO8 5AB

## 1. INTRODUCTION AND OBJECTIVES

- 1.1 This report has been prepared on instructions given by the Client, Rose Builders Limited (Riverside House, Riverside Avenue East, Lawford, Essex, CO11 1US).
- 1.2 The site is located on the north eastern side of High Street and immediately to the north of the B1508 (Church Square) in the village of Bures, Suffolk as shown on Figure 1, Appendix (i). Bures lies approximately 9km to the south of Sudbury and 16km to the north west of Colchester. As shown on Figure 2, Appendix (i), the site is irregular in shape comprising a number of buildings and areas of hard standing formerly used as a bus depot. The site is at and around National Grid Reference 590750, 124090 and covers an area of around 0.32ha (Reference 1).
- 1.3 The site has been the subject of a previous desk study and intrusive investigation as referenced below.
  - Compass Geotechnical Limited Report on a Phase 1 Desk Study and Risk Assessment for A Proposed Mixed-Use Development at Former Chambers Bus Depot, Church Square, Bures, Suffolk, CO8 5AB. Report No: 212945A dated September 2021.
  - Compass Geotechnical Limited Report on a Phase 2 Ground Investigation and Contamination Assessment for a Proposed Mixed-Use Development at Former Chambers Bus Depot, Church Square, Bures, Suffolk, CO8 5AB. Report No: 212945B dated June 2022.
- 1.4 Outline proposals are to redevelop the front (west) section of the site for retail/commercial use with residential above and housing with private gardens to the rear (east). A plan showing the proposed layout is presented as Figure 4, Appendix (i).
- 1.5 The aims of the current intrusive investigation were to:
  - Undertake three boreholes to investigate the ground and groundwater conditions at depth to provide geotechnical information for piled foundations.
  - Undertake material property testing of samples recovered from an intrusive investigation.
  - Present an interpretative report on the findings.



- 1.6 The investigation, assessment and reporting has been carried out in general accordance with the following:
  - ▶ BS 5930:2015+A1:2020. Code of Practice for Ground Investigations.
  - BS 10175:2011+A2:2017. Investigation of potentially contaminated sites Code of practice.
  - BS 8485:2015+A1:2019. Code of practice for the design of protective measures for methane and carbon dioxide ground gasses for new buildings.
  - BS 8576:2013. Guidance on investigations for ground gas Permanent gases and Volatile Organic Compounds (VOCs).
  - BS EN ISO 14688-1:2018. Geotechnical investigation and testing Identification and classification of a soil – Part 1: Identification and description.
  - BS EN ISO 14688-2:2018. Geotechnical investigation and testing Identification and classification of a soil – Part 2: Principles for a classification.
  - BS EN ISO 22476-2:2005+A1:2011. Geotechnical investigation and testing Field testing – Part 2: Dynamic Probing.
  - BS EN ISO 22476-3:2005+A1:2011. Geotechnical investigation and testing Field testing – Part 3: Standard Penetration Test.
  - BS EN ISO 14689:2018. Geotechnical investigation and testing Identification and classification of rock – Part 1: Identification and description.
  - BS EN ISO 22475-1:2006. Geotechnical investigation and testing Sampling methods and groundwater measurements – Part 1: Technical principles for execution.
  - > BS 1377-9:1990. Soils for civil engineering purposes Part 9 In-situ tests.
  - BS EN 1997-1:2004+A1:2013 Eurocode 7: Geotechnical design Part 1: General Rules.
  - NA to BS EN 1997-1:2004+A1:2013. UK National Annex to Eurocode 7: Geotechnical design – Part 1: General Rules.
  - BS EN 1997-2:2007. Eurocode 7: Geotechnical design Part 2: Ground investigation and testing.
  - NA to BS EN 1997-2:2007. UK National Annex to Eurocode 7: Geotechnical design Part 2: Ground investigation and testing.

# 2. SITE RECONNAISANCE

2.1 As shown on Figure 2, Appendix (i), the area under consideration comprises a former bus garage and yard off Church Square in the centre of the village of Bures. A detailed description of the site is given in the reports of Section 1.3.

# 3. PUBLISHED GEOLOGY

3.1 Published geological information (Reference 2) indicates that the site lies in an area where the general downwards strata succession is as detailed in Table 3.1 below:

# Table 3.1Geological Sequence

Lithology	Lithological Description	Age Range
River Terrace Deposits	Sand and Gravel	Quaternary Period (3 Ma)
Thanet Formation and Lambeth Group (undifferentiated) to the east	Clay, Silt and Sand	Palaeogene Period (48 to 66 Ma)
Lewes Nodular Chalk Formation and Seaford Chalk Formation (undifferentiated) to the west	Chalk	Cretaceous Period (84 to 94 Ma)

The published geological map (Reference 2) indicates that the site is underlain by solid deposits of the Thanet Formation and Lambeth Group (undifferentiated) to the east and Lewes Nodular Chalk Formation and Seaford Chalk Formation (undifferentiated) to the west. The solid deposits are shown as overlain by River Terrace Deposits. Further superficial deposits including Head to the east and Alluvium to the west are shown.

- 3.2 A search of the British Geological Survey (BGS) borehole database (GeoIndex) indicates that there are few borehole records in the area of the site. The closest borehole, around 50m to the north, indicates around 1.2m of made ground overlying sand and gravel to around 12.8m, in turn overlying the clay, silt and sand of the Thanet Formation and Lambeth Group (undifferentiated), below which at around 19.5m depth deposits of Lewes Nodular Chalk Formation and Seaford Chalk Formation (undifferentiated) are present.
- 3.3 The previous investigation at the site was primarily to assess the near surface ground conditions and possible contamination with a series of exploratory holes (windowless sample holes, boreholes and trial pits) which extended to a maximum 6.0m bgl. The exploratory holes confirmed the presence of variable made ground and disturbed soils overlying sands and gravels of the River Terrace Deposits. It was recommended that further deeper boreholes were drilled in the area of the proposed new structures to provide additional geotechnical information for pile design. For completeness the exploratory hole logs from the previous investigations are included in Appendix (iii). Plans showing the location of all of the exploratory holes are presented as Figure 3 in Appendix (i).

# 4. SITE WORK

4.1 Three exploratory holes (BHE, BHF and BHG) of 150mm diameter was drilled by light cable percussive methods to depths between 13.45 and 15.0m to provide geotechnical information at depth below the site. Within the boreholes, Standard Penetration Tests (SPTs) were undertaken at regular intervals. Small and bulk disturbed samples were recovered from all of the strata encountered in the boreholes.

- 4.2 Groundwater monitoring points were installed in BHE and BHG of the current investigation. The installations comprised a slotted pipe with pea gravel surround between 1.0 and 7.0m bgl. The upper 1m of the installation comprised a plain pipe with a bentonite surround and a lockable cover was concreted in flush with the existing ground surface. Other monitoring points had been installed in some of the previous holes elsewhere at the site. Full details of the ground conditions and the installations are given on the relevant borehole logs of Appendix (ii) and the location of the boreholes is shown on Figure 3, Appendix (i).
- 4.3 The boreholes of the current investigation were drilled during the period 20<sup>th</sup> to 22<sup>nd</sup> July 2022.
- 4.4 The investigation and sampling strategies were to obtain representative samples of any fill, natural deposits and groundwater, where encountered, and to recover materials for laboratory soil property analysis and appraisal. The investigation was in general accordance with the documents of Section 1.6.
- 4.5 All of the samples were transported to the laboratory for detailed examination by an experienced geologist and selected samples were programmed for testing.
- 4.6 Subsequently, return visits were made to site to record the groundwater levels in all of the monitoring points. The results of the groundwater monitoring are presented in Appendix (iv) and it is proposed to continue to monitor groundwater levels at the site. The results of the on-going monitoring will be available in due course.
- 4.7 Details of the strata encountered in the exploratory holes are given on the borehole logs presented in Appendix (ii) and the positions of the holes are shown on Figure 3, Appendix (i).

## 5. LABORATORY WORK

5.1 Detailed below in Table 5.1 is the material property testing undertaken as part of this investigation:

Material Property Test	Number of Tests Natural Soils	
Water Content	4 (7)	
Liquid and Plastic Limit	4 (7)	
Particle Size Distribution (wet sieve)	9 (15)	
Soluble Sulphate Content	6 (13)	
pH Value	6 (13)	

 Table 5.1
 Summary of Material Property Tests

Report on a Supplementary Geotechnical Investigation for a Proposed Mixed-Use Development at Former Chambers Bus Depot, Church Square, Bures, Suffolk, CO8 5AB

Some geotechnical testing was undertaken as part of the initial investigation. The figures in brackets denote the total number of tests carried out over both phases of investigation.

- 5.2 The material property test results from both phases of investigation are included as Appendix (v).
- 5.3 The laboratory testing for the current investigation was undertaken during the period 27<sup>th</sup> July to 11<sup>th</sup> August 2022.
- 5.4 The testing was undertaken at a UKAS accredited laboratory.

## 6. ENGINEERING ASSESSMENT AND RECOMMENDATIONS

### 6.1 Soil Profile

The following discussion on the ground conditions includes information and pertinent comments from the initial investigation. The boreholes of the current investigation were drilled in the central and eastern sections of the site.

The surface conditions across the site were variable. At the eastern end of the site the surfacing to the open yard typically comprised asphalt planings (BHE, BHF, WS1 and WS8 to WS10 and TP1 to TP3). The planings were generally around 0.08 to 0.4m thick however, in WS1 in the north eastern corner the planings were noted as pockets and inclusions in the made ground present from surface. Over the remainder of the external areas concrete was present at surface and the main bus garage had a concrete floor. The concrete varied in thickness, being thinnest (90 and 200mm) inside the oldest section of the garage building with thicker concrete, up to 400mm thick, present external to the structures.

Beneath the surface materials in all of the exploratory holes, variable made ground was encountered comprising demolition rubble, clays, silts, sands and gravels with inclusions of brick, concrete, tile, shell, coal, mortar and fragments of ACM sheet. In TP3 and TP5 towards the rear of the site, significant volumes of made ground were found containing large pieces of metal, concrete fragments up to boulder size, bus parts, timber, rubber matting and ACM. The made ground was found to varying depths, typically between 0.52 and 1.35m but extended to at least 2.50m bgl in TP3 and TP5. Reference should be made to the individual exploratory hole logs for a full description of the materials present.

Beneath the made ground, materials which have been designated disturbed ground were encountered in all of the positions other than BHF, BHG, WS4, WS12, WS13, BHA, BHB and TP1 to TP5. The disturbed ground comprised either clays or sands with rare inclusions of brick or other man made artifacts and the disturbed ground extended to depths between 0.82 and 1.90m bgl. A limited number of in-situ tests

were carried out in the made ground and disturbed ground. The logs suggest SPT N values of 4 and 13 indicating these upper materials are relatively loose or weak.

Underlying the made ground and disturbed ground were natural deposits thought to represent the River Terrace Deposits. These materials were mainly granular in nature comprising sands and gravels in varying proportions. Locally, however, horizons of gravel in a clay matrix were noted particularly in WS11 and WS13 in the west and north of the site, and the upper materials in BHF, BHG, WS4, WS5 and BHA comprised slightly gravelly silty sandy clays which extended to around 2.0m depth. Reference should be made to the individual exploratory hole logs for a full description of the materials present. The geotechnical parameters for the River Terrace Deposits are summarized in Table 6.1 below and on the plot of SPT N Value against depth included in Appendix (vi).

Parameter (units)	Results	Classification	Comments
Undrained Shear	65 – 85		Soft and firm
Strength Cu (kPa)	(based on SPT N)		based on
Cohesive deposits			examination
SPT N Value	General range	Generally medium	
Granular deposits	10 - 67	dense to very dense	
	minimum - 4	Very loose/loose	WS12 @ 2m
	maximum - 74	very dense	(gravel)
Particle Size		GRAVEL in a clay	See individual
Distributions		matrix	logs for full
		Sandy GRAVEL	description
		Very sandy GRAVEL	
		SAND and GRAVEL	
	10.7	Very gravelly SAND	
Water Content (%)	18.7		
	23		Based on 1 clayey
Plastic Limit (%)	1/		sample.
Plasticity Index (%)	6	CL SOIIS	
Modified Plasticity	5	Non-shrinkable	Plasticity tests on
Index (%)			clay matrix in
Organia Mattar	-0.40 1.1		gravels = CL Solis
Content (%)	<0.40 - 1.1		
Soluble Sulphate	<0.010 - 0.17		
Soluble Sulphale $\langle 0.010 - 0.17 \rangle$		۸۲-1	
nH Value	79-91	AC-1	
	7.5 - 5.1	l	

 Table 7.1
 Geotechnical Parameters for River Terrace Deposits

The full depth of the River Terrace Deposits was not proved during the initial investigation. BHE and BHF of the current investigation in the east of the site proved the River Terrace Deposits extended to 7.00m and 6.90m bgl respectively. However, in BHG, located in the centre of the site, the River Terrace Deposits extended to 12.50m bgl which is consistent with the BGS records of boreholes nearby where the River Terrace Deposits extend to around 13m bgl.

Underlying the River Terrace Deposits in BHE to BHG were natural strata thought to represent the Thanet Formation and Lambeth Group (undifferentiated). These deposits consisted of silty sandy clays and sandy clay/silt of stiff consistency. The geotechnical parameters for the Thanet Formation and Lambeth Group (undifferentiated) are summarized in Table 6.2 below.

Parameter (units)	Results	Classification	Comments
Undrained Shear	125 – 280		
Strength Cu (kPa)	(based on SPT N)		
Cohesive deposits			
SPT N Value	25 - 56		
Cohesive Deposits			
Particle Size		Sandy CLAY/SILT	See individual
Distributions		Sandy silty CLAY	logs for full
			description
Water Content (%)	31.0 - 35.6		
Liquid Limit (%)	44 - 45		
Plastic Limit (%)	24 – 30	CI and MI Soils	
Plasticity Index (%)	14 - 21	Low and Medium	
Modified Plasticity	n/a	shrinkable	
Index (%)			
Soluble Sulphate	0.035 - 0.56		
Content SO <sub>4</sub> (g/l)		AC-1	
pH Value	8.3 - 9.2		

 Table 6.2
 Geotechnical Parameters for Thanet Formation and Lambeth Group

The deposits of the Thanet Formation and Lambeth Group were proved to the full depth of the investigation (15.0m bgl). From records of boreholes nearby it is thought that the clays and silts of the Thanet Formation and Lambeth Group are of limited thickness and may only extend to around 19.5m bgl below which the chalk is present.

# 6.2 Ground Contamination Observations

No visual or olfactory evidence of significant contamination was noted during the current investigation. Details of contamination encountered during the previous phases of investigation are detailed in the ground investigation report of Section 1.3.

# 6.3 Groundwater Conditions

Groundwater seepages were encountered at depths between 6.0 and 6.5m in BHE to BHG of the current investigation. Monitoring of groundwater levels at the site has been ongoing since February 2022 and will be continued over at least the next few months. The results of the groundwater monitoring to date are included in Appendix (iv).

To date a shallowest standing water level of 2.76m bgl was recorded in BHA in the extreme west of the site in March 2022. In BHE towards the eastern boundary a water level of 4.69m bgl was reported in August 2022 when groundwater levels were generally lower following a particularly dry period.

It should be borne in mind that groundwater conditions can vary with seasonal and other effects and thus at times may be at variance with the conditions noted at the time of the site work.

# 6.4 Excavations

Random falls and collapse of vertical excavation faces can be expected in the made ground and natural materials dependent on the depth of excavation, the length of time excavations stand open, and the incidence of any groundwater entries.

Consideration should be given to providing at least intermittent to close support in deepened vertical sided excavations where personnel are required to enter. The adequacy of all excavation support should be continually inspected by experienced personnel. Excavations into any deeper made ground are likely to be particularly unstable and collapse readily particularly as inclusions of up to boulder size are present.

# 6.5 Structural Foundations

It is understood that the development is to comprise houses of traditional construction in the rear portion of the site and a retail/commercial unit with residential above in the front (western) section. Foundation recommendations for buildings take account of the following:-

- Ultimate Limit State (ULS) (stability)
- Serviceability Limit State (SLS) (settlements and ground movements)

The ULS assessment of stability examines the bearing resistance of the ground. The SLS assessment limits the settlements to assessed acceptable limits. The SLS also requires that suitable foundation depths and construction are adopted to cater for the potential ground movements due to the presence of trees and other major vegetation (including future planting) in close proximity to the proposed buildings.

The near surface deposits at the site are highly variable with deep made ground (>2.5m) in places and disturbed ground near surface and natural, predominantly granular, soils below. In TP3 and TP5 towards the rear of the site where the made ground is thickest, obstructions and potentially deleterious materials were encountered such as large pieces of metal, concrete up to boulder size, bus parts, timber, rubber matting and ACM. Consideration needs to be given to removal of at least the worst of the materials before construction commences in order to ease foundation operations. There are also a number of inspection pits up to 1.2m deep, bus lifts, a bus wash and a former bus wash, two sets of interceptors and associated pipework, at least two below ground fuel tanks, along with the foundations to the existing bus garage buildings and to Knowle House, and possibly the foundations to a pill box in the southern corner of the site, all of which will need to be removed as part of the redevelopment. The removal of the below ground construction, interceptors, inspection pits, bus washes, tanks, other obstructions and otherwise unsuitable materials is likely to result in significant disturbance to large areas of the site and thus influence the selection of foundation solutions. Careful consideration will need to be given to the choice of foundations for the different parts of the development taking account of the potential disturbance. Careful site preparation prior to development is essential.

A discussion of possible alternative foundations solutions was presented in the previous reports. The following provides information for the design of piles at the site. Although a driven pile would be suitable in the granular deposits it may not be acceptable because of the proximity of adjacent buildings. The alternatives include screw, bored or augered piles. The advice of a specialist piling contractor should be sought given the ground and groundwater conditions. Due to the potential for below ground obstructions allowance should be made for abortive piling.

The current investigation has shown that the ground conditions change from east to west across the site. In the east of the site where the new houses are proposed the sands and gravels of the River Terrace Deposits extend to approximately 7m bgl, however in the west the sands and gravels appear to extend to greater depth (12.5m bgl). Underlying the River Terrace Deposits are silty clays of the Thanet Formation and Lambeth Group which have been proved to extend to around 15m bgl however, it is thought that these clays may only be of limited thickness above the underlying chalk strata.

For the houses, piles could be taken down to bear uniformly in the dense sands and gravels of the River Terrace Deposits at around 6m below existing ground level. Or piles could be taken down to bear in the stiff clays of the Thanet Formation and Lambeth Group with pile lengths of around 12m. For the retail unit in the west of the site where the River Terrace Deposits are thicker, piles could extend further into the sands and gravels. As a guide to likely pile loading calculations, which assess the Ultimate Limit State (ULS) of the ground (Geo Limit State) and the Serviceability Limit State (SLS) (settlements), have been undertaken and are summarized in Table 6.3 below. The characteristic geotechnical parameters for the sands of the River Terrace

Deposits and the clays and silts of the Thanet Formation and Lambeth Group are based on an assessment of the reported SPT results, laboratory testing and examination of the materials. The assessed carrying capacities in Table 6.3 are based two pile diameters and the different scenarios outlined above.

	Houses - E	ast of Site	Retail - W	est of Site
Pile Length (m)	6		1	2
Penetration into				
River Terrace	4		10	
Deposits (m)				
Pile Diameter (m)	0.30	0.45	0.30	0.45
Carrying Capacity in				
River Terrace	167	334	274	568
Deposits (kN)				
Pile Length (m)	12		17.5	
Penetration into				
Thanet Formation		=		=
and Lambeth Group	-	)	-	)
(m)				
Pile Diameter (m)	0.30	0.45	0.30	0.45
<b>Carrying Capacity in</b>				
River Terrace	180	298	180	298
Deposits (kN)				

## Table 6.3 Summary of Pile Carrying Capacities

## 6.6 Ground Floor Slabs

Given the presence of significant volumes of made ground, ground floor slabs for the houses are likely to best be constructed as suspended. Consideration also needs to be given to possible venting of ground gases including radon. In this event a suitable void may be required below a suspended floor.

For the commercial/retail structure, the design of the floor slab will depend on the span and required performance. If a piled foundation is to be adopted then consideration could be given to a piled floor slab although this may not be cost effective. It may be more appropriate to consider a ground bearing floor slab constructed on compacted stone.

## 6.7 Chemical Attack on Concrete

Laboratory determinations of soluble sulphate content have been undertaken on samples of the natural clay soil present at the site. Reported concentrations were between <0.010 and 0.56g/l SO<sub>4</sub> in association with alkali pH values. The highest concentration was reported in the sample from BHE 13.0-14.0m depth in the clays of the Thanet Formation and Lambeth Group.



In accordance with BRE Special Digest 1 (Reference 7) the site has been classed as 'natural ground' the groundwater regime is considered 'mobile' as permeable strata are present on site.

Comparison of the characteristic sulphate contents for the soil (based on the mean of the highest two results) and pH concentrations with Table C1 of Reference 7 suggests the ACEC class for the site is AC-1.

However, if piles are to extend into the clays of the Thanet Formation and Lambeth Group consideration should be given to revising the ACEC class to AC-2.

R. Foord BSc, MSc, MCSM, CGeol, FGS



### REFERENCES

- 1. Ordnance Survey 1:50,000 Series Sheet 155 Bury St Edmunds & Sudbury area 2016.
- 2. British Geological Survey 1:50,000 Series Sheet 223 Braintree. Solid and Drift Edition 1982.
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- 4. Stroud, M. A. and Butler, F. G. 1975. 'The Standard Penetration Test and the Engineering Properties of Glacial Materials' Proceedings of the Symposium of University of Birmingham 21-23 April 1975.
- 5. NHBC Standards Chapter 4.2 2022 'Building Near Trees' National House Building Council.
- 6. BRE Special Digest 1:2005 Third Edition Concrete in Aggressive Ground. BRE Construction Division.



### **GENERAL NOTES**

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The report is provided for the sole use of the client and is confidential to them, their professional advisors, no responsibility whatsoever for the contents of the report will be accepted to any person other than the client.

New information, improved practices, changes in legislation, or changes in guidelines from Statutory Bodies may necessitate a re-interpretation of the report in whole or part after its original submission.

The report and/or opinion will be prepared and written for the specific purposes and/or development stated in the document and in relation to the nature and extent of proposals made available to us at the time of writing. The recommendations should not be used for other schemes on or adjacent to the site.

The report is based on the ground conditions encountered in the exploratory holes together with the results of field and laboratory testing in the context of the proposed development. Conditions between exploratory holes have been interpolated, however soil conditions are highly variable and may differ from the interpolation. There may be conditions, appertaining to the site, which may not be revealed by the investigation, and which may not be taken into account in the report.

The accuracy of the results reported will depend on the technique of measurement, investigation and test used and these values should not be regarded necessarily as characteristic of the strata as a whole. Where such measurements are critical, the technique of the investigation will need to be reviewed and supplementary investigation undertaken in accordance with the advice of the company where necessary.

The economic viability of the proposal referred to in the report, or of the solutions put forward to any problems encountered, will depend on very many factors in addition to the geotechnical considerations hence its evaluation will be outside the scope of the report.

Where any data supplied by the Client or from other sources, including previous site investigations, have been used it has been assumed that the information is correct. No responsibility can be accepted by Compass Geotechnical Limited for inaccuracies in the data supplied by any other party.

The investigation does not include the identification of Japanese Knotweed. Any such survey should be undertaken by a specialist.



Appendix (i) Figures





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August 2022



ĺ	Extract from Randall Surveys Existing Site Layout Drawing No: 16449/OG/1 dated June 2021	s Existing Site Layout Drawing No: 16449/OG/1 dated June 2021 Figure 3 Exploratory Hole Plan	
Date August 2022		August 2022	
		Not to Scale	



Report No: 222945S

August 2022



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Appendix (ii) Borehole Logs – Current Investigation



#### Introduction

All sampling and in-situ test methods are carried out in accordance with the relevant British and European standards as referenced below.

#### **Abbreviations Used**

Exploratory hole records are presented in graphical format with the use of standard abbreviations as outlined below.

#### **Sampling Method**

- BH Borehole
- TP Trial Pit
- WS Windowless Sample Hole
- CC Concrete Cored Hole

#### Sample Types

- D Disturbed Sample
- B Bulk Sample
- ES Environmental Sample
- PID Sample for total VOC screen
- L Liner Tube Sample
- U Undisturbed Sample
- UT Thin Wall Undisturbed Sample
- NR No Recovery
- W Water Sample
- C Rotary Core

#### In-Situ Tests

- DP Dynamic Probe Test
- CPT Cone Penetrometer Test
- SPT Standard Penetrometer Test
- V Hand Shear Vane Strength Determination (kPa) manufacturer's calibration of 1.491 applied to direct reading
- V\* Hand Shear Vane Strength Determination (kPa) on excavated block of material

### References

BS 5930:2015 + A1:2020 Code of Practice for Ground Investigations

BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites – Code of Practice

BS EN ISO 14688-1:2018 Geotechnical Investigation and Testing – Identification and Classification of Soil: Part 1 Identification and description.

BS EN ISO 14688-2:2018 Geotechnical Investigation and Testing – Identification and Classification of Soil: Part 2 Principles of Classification.

BS EN ISO 22475-1:2006 Geotechnical Investigation and Testing – Sampling Methods and Groundwater measurements: Part 1 Technical Principles for Execution.

BS EN ISO 22476-2:2005+A1:2011 Field Testing Part 2: Dynamic Probing.

BS EN ISO 22476-3:2005 + A1:2011 Geotechnical Investigation and Testing – Field Testing: Part 3: Standard Penetration Test.

EUR 26227 EN, 2013 Eurocode 7 Chapter 5 Ground Investigation and Testing.

	) (	Compass C 13 Willow Par	Geotechnical		C	able	Pe	ercus	sion		Proj 222	ect ID		Borehol BH	le No. E
Project 1 Bures	V w	CV1 /ww.compass	geotechnical.co.uk	ocation:	hamber	Bus Gar	eh	Ole Lo	Og Client:	ilders Limit	ed		Scale	Sheet 1 : Date D 20/07/	<u>1:50</u> 1:50 rilled 2022
Dures			Sc	quare, Bi	ures, CC	8 5AB	age,	church	nose bui		cu		Rig C Logg	rew: ed:	RW TF
Easting:	52	mplec & In Situ	No	orthing:				51	Level (m/	AOD):			Chec	ked:	Indwater
De	pth	Sample /	Test Result	Level	Depth	Legend		5	Si	trata Descriptio	n		Depth (mBGL)	Water	Backfill/
- (me	GL)	lest ID		(MAUD)	(mBGL)		МА	ADE GROUN	D: Asphalt pl	annings. (Dril	ler's Descriptio	on).(0.20m)	-		
- 0.	60	D			0.20		MA whi asp	ADE GROUN ite fine to c phalt planni	D: Very dark oarse sub ang ngs, lime moi	grey slightly g gular chert w rtar and rare	gravelly clay. G ith rare white red brick of co	ravel is rare fine quartz, arse gravel	-		
- 0.	90	D			0.80		DIS	TURBED GF	OUND: Dark	yellowish bro	own slightly gra	avelly sandy	+		
- 1.10 - 1.10	- 1.55 - 1.50	SPT(C) B	N=13 (4/3,3,3,4)				CLA bro occ rare bro	AY with occa own white fi casional whi e red brick to own clay poo	asional very d ine to coarse ite fine to coa fragments, sla ckets.(1.00m)	lark brown cla angular to ro arse sub roun ate, asphalt p )	ay pockets. Gra unded chert w ded to rounde lannings and c	avel is black rith d quartz, lark grey and	- 1 - - -		
	- 2.25 - 2.20	SPT(C) B	N=14 (5/3,3,3,5)		1.80		Me coa bro	edium dense arse angular own fine to	e becoming d to sub round coarse. [River	ense brown k ded chert GR/ r Terrace Dep	black white sar AVEL. Sand is y osits].(5.20m)	ndy fine to ellowish	2	Water Added =3600	
- 3.00 3.00	- 3.45 - 3.45	SPT(C) D	N=18 (7/3,4,4,7)										3		
- 4.00 4.00	- 4.45 - 4.40	SPT(C) B	N=20 (7/4,5,5,6)									- 4			
5.00	- 5.45 - 5.45	SPT(C) D	N=27 (7/5,5,9,8)									5			
- - 6.50 - 6.50	- 6.95 - 6.90	SPT(C) B	N=36 (6/5,9,11,11)												
- 7.00 7.00	- 7.45 - 7.45	SPT(S) D	N=27 (9/4,4,8,11)		7.00		× Ver × CLA (Un	ry dark gree AY/SILT. [Tha ndifferentiat	nish grey oxio anet Formatic ted)].(1.30m)	dising dark gr on and Lambe	ey green glauc eth Group	conitic sandy	7		
- - 8.50 - 8.50	- 8.95 - 8.95	SPT(S) D	N=32 (11/4,6,11,11)		8.30	×	× Stif × (Un	ff grey sand ndifferentia	y silty CLAY. T ted)].(6.70m)	hanet Forma	tion and Lamb	eth Group		Water Added	
-												9	-3001		
-						×	×		C!	inund n+	hoot		10		
	Start 8	& End of Shift (	Dbservations	Boreh	I Iole Diame	ter Ca	asing [	Diameter	Remarks:	inuea next s	neet			1	
Date	Ti	me Depth (r	n) Casing (m) Water (n	n) Depth ( 15.00	(m) Dia (r 0 15	nm) Dept 0 15	th (m) 5.00	Dia (mm) 150	Groundwate	r Conditions -	On completio	n 10.5m bgl	s		
		Chiselling &	Pits			Installation	1	1	Strike at (m)	Casing at (m)	Sealed at (m)	Time (min)	Rose t	o (m)	Remarks
From (m) 0.00	To (m)	Duration 01:00	Remarks Service Pit	Top (n 0 00	n) Base	(m) Ty 0 PI	/pe AIN	Dia (mm) 50	6.00						
0.00	1.00	51.50		1.00	) 7.0	0 SLO	TTED	50							

	Compass G 13 Willow Park	eotechnical s, Stoke Golding		C	able	Percus	sion	Pro	ject ID 2945S	Bor	ehole No. BHE
Project Title: Bures	www.compassge	eotechnical.co.uk	<b>Location:</b> Former Ch Square, Bu	namber ures, CC	BUS Gara	age, Church	<b>Client:</b> Rose Builders Lim	ited		Scale: Da 20 Rig Crev Logged:	1:50 te Drilled /07/2022 v: RW TF
Easting:	Samples & In Situ Te	esting	Northing:			St	Level (mAOD): rata Details			Checked	Groundwater
Depth (mBGL)	Sample / Test ID	Test Result	Level (mAOD)	Depth (mBGL)	Legend		Strata Descript	ion		Depth (mBGL)	Water Backfill/ Strike Installation
10.00 - 10.45 10.00 - 10.45	5 SPT(S) 5 D	N=36 (11/6,8,10,12)				Stiff grey sandy (Undifferentiat	y silty CLAY. Thanet Form ed)].(6.70m)	ation and Lamb	eth Group	- 11	
- 11.50 - 11.99 11.50 - 11.99	5 SPT(S) 5 D	N=25 (6/5,6,7,7	)							- 12	
- 13.00 - 13.45 13.00 - 13.45	5 SPT(S) 5 D	N=50 (11/8,11,14,17)								- 13	
- 14.50 - 14.95 14.50 - 14.95	5 SPT(S) 5 D	N=56 (13/10,12,15,19	))	15.00			Borehole Completed	at 15.000m		15	
										- 16 	
										- 18	
- - - - - - - - -	rt & End of Chift O	hearvations	Doroh		ter L C	cing Dismotor	Pemarke			- 19	
Date	Time Depth (m	) Casing (m) Water	Boren (m) Depth ( 15.00	<u>m) Dia (n</u> m) 15	eter Ca mm) Dept i0 15	h (m) Dia (mm) 00 150	Remarks: Groundwater Condition:	s - On completic Groundwater	n 10.5m bgl	<u>s</u>	
From (m) To (r 0.00 1.0	Chiselling & F m) Duration 0 01:00	Pits Remarks Service Pit	Top (m 0.00 1.00	n) Base 1.0 7.0	Installation (m) Ty 00 PL/ 00 SLOT	pe Dia (mm) AIN 50 TED 50	Strike at (m) Casing at (n 6.00	n) Sealed at (m)	Time (min)	Rose to (n	n) Remarks

	1 0	Compass G 13 Willow Par	<b>Geotechni</b> k, Stoke Goldi	cal		C	able	Pe	ercus	sion		Proj	ject ID		Borehol BH	e No. F
		CV1	.3 6EU reotechnical c	o.uk			Bor	eho	ole L		222	29455	Sect	Sheet 1	of 2	
<b>Project Tit</b> Bures	le:	ww.compasse		Fc	ocation: ormer Ch quare, Bu	namber ures, CC	Bus Gara )8 5AB	age, (	Church	Client: Rose Bu	ilders Limit	ed		Rig C	21/07/2 21/07/2	1:50 rilled 2022 RW TF
Easting:			<b>-</b>	N	orthing:					Level (m	AOD):			Chec	ked:	
Depth	Sa 1	Samples & In Situ	Test R	esult	Level	Depth	Legend		51	rata Details S	trata Descriptio	n		Depth	Water	ndwater Backfill/
(mBGL -	_)	Test ID			(mAOD)	(mBGL)		🛛 ма	DE GROUN	D: Asphalt pl	lannings. (Dril	ler's Description	on).(0.20m)	-	SUIKE	
- 0.50	I	D				0.20		MA whi asp	DE GROUN ite fine to c halt planni	D: Very dark oarse sub an ngs, lime mo	grey slightly g gular chert w rtar and rare	gravelly clay. G ith rare white red brick of co	ravel is rare fine quartz, arse gravel	+		
0.90	I	D				0.70		Dar	k greyish b	rown slightly	gravelly sligh	tly silty slightly	y sandy CLAY.			
1.10 - 1 1.10 - 1	.55 .55	SPT(C) D	N=17 (5/	3,4,4,6)		1.00		Gra	vel is rare i e. [River Ter owish brow	solated white race Deposit vn slightly gra	e and brown f s].(0.30m) avelly sandy C	ine angular ch	sional dark		Water Added =4000	
- 2.00 - 2 2.00 - 2	.45 .40	SPT(C) B	N=19 (7/	4,5,5,5)		1.50		Me Me san yell	wn clay po gular chert. dium dense dy fine to c owish brov	Sand is fine. Sand is fine. becoming d coarse angula vn fine to coa	Is rare black ( [River Terrace lense brown b Ir to sub roun arse. [River Te	white fine to n <u>e Deposits].(0.</u> black white slig ded chert GRA rrace Deposits	statum sub 50m) ghtly silty WEL. Sand is 5].(5.40m)	- 2		
- - - 3.00 - 3 - -	.45 .40	SPT(C) B	N=28 (7/5	5,5,7,11)										- 3		
- - - 4.00 - 4 - -	.45 .45	SPT(C) D	N=33 (7/6	5,7,9,11)				17. S.						- 4		
- - - - - - -	.45 .45	SPT(C) D	N=38 (11/	9,8,9,12)										- 5		
- - - - 6.50 - 6 - 6.50 - 6	.95 .90	SPT(C) B	N=32 (11,	/7,8,8,9)				20						6		
- 	.45 .45	SPT(S) D	N=25 (10,	/7,5,5,8)		6.90	× × ×	Yell (Un	owish brow differentia	vn silty CLAY. ted)].(0.55m)	Thanet Form	ation and Lam	beth Group	- 7		
- - - - - - - - - - - - - - - - - - -	.95	SPT(S) D	N=30 (10,	/8,6,8,8)		7.45		× Stiff and	f greenish g I Lambeth (	grey glauconi Group (Undifi	tic sandy silty ferentiated)].	CLAY. Thanet (6.00m)	Formation			
								<u>- 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1 </u>						9		
- 10.00 - 1	0.45	SPT(S)	N=36 (12/	8,10,9,9)						Cont	inued next s	heet		10		
Date	Start &	& End of Shift C me Depth (r	Dbservations n) Casing (m)	Water (n	Boreh n) Depth ( 13.45	ole Diame m) Dia (i 5 15	tter Ca mm) Dept 0 12	asing D th (m) 2.50	Diameter Dia (mm) 150	Remarks: Groundwate	er Conditions -	On completio	on 9.00m bgl	s		
		Chiselling &	Pits	·			Installation	1		Strike at (m)	Casing at (m)	Sealed at (m)	Time (min)	Rose t	o (m)	Remarks
From (m) 0.00	To (m) 1.00	Duration 01:00	Rema Service pit	ırks	Top (m	n) Base	(m) Ty	/pe	Dia (mm)	6.50						

	<b>Cor</b>	<b>mpass G</b> Willow Park CV13	eotechnical 5, Stoke Golding 3 GEU			С	able	e Pe	ercus	sion		Proj 222	ect ID 945S	B	orehole BHF	e No.
Project Title Bures	****	v.compassge	eotechnical.co.uk	< Contract C	<b>cation:</b> rmer Ch uare, Bu	amber Ires, CO	Bus Ga	rage,	Church	Client: Rose Bu	ilders Limit	red		Scale: C Rig Cro Logge	Date Dri 21/07/2 ew: d:	1:50 illed 022 RW TF
Easting:	Sampl	es & In Situ Te	esting	No	orthing:				S	Level (m. trata Details	AOD):			Check	Grour	ndwater
Depth (mBGL)		Sample /	Test Result	t	Level	Depth (mBGL)	Legend	ł		S	trata Descriptio	'n		Depth (mBGL)	Water Strike	Backfill/ Installation
10.00 - 10	0.45	D SPT(S)	N=42			(111002)		Stif	f greenish g I Lambeth (	grey glauconi Group (Undifi	tic sandy silty [erentiated]].	r CLAY. Thanet I (6.00m)	Formation	- 11	Water Added =150 l	
11.50 - 11 11.50 - 11	8.45	SPT(S)	N=42 (10/8,12,10, N=45 (12/7 10 13	12)				u se						- 12		
	.43	U	(12/7,10,13,	.13)		13.45		<u>×</u>		Borehole (	Completed a	it 13.450m		- 14		
- - - - - - - - - - -														- 15		
- - - - - - - - - - - - - - - - - - -														- 16		
-														- - - - - -		
- - - - - - - -														- 18		
														- 19 		
Date	Start & En	nd of Shift Ol Depth (m	I bservations ) Casing (m) Wa	ater (m)	Boreho ) Depth (r 13.45	ole Diame n) Dia (r 15	ter ( nm) De 0 1	L Casing E pth (m) .2.50	Diameter Dia (mm) 150	Remarks: Groundwate	r Conditions	- On completio	n 9.00m bgl			<u> </u>
	<u> </u>	bicolling 9 5	Dite				nctalla# -	n		Strike at /=: \	Cosing st (= )	Groundwater	Observation	S Poss t	(m)	Pomarl
From (m) T 0.00	C To (m) 1.00	Duration 01:00	Remarks Service pit		Top (m	) Base	(m)	n Type	Dia (mm)	6.50	Casing at (m)	sealed at (m)	ııme (min)	Rose to	(m)	ĸemarks

	Compass Ge	eotechnical		С	able	Percussio	on		Proj 222	ect ID 945S		Boreho BH	le No. G
Project Title: Bures	Www.compassge	eotechnical.co.uk	ocation:	amber	Bore Bus Gara	ge, Church Ro	lers Limit	ed		Scale Rig C	Sheet 2 : Date D 22/07/ rew:	1 of 2 1:50 rilled 2022 RW	
Easting:		Sq No	juare, Bu orthing:	ires, CC	98 5AB	Lev	vel (mA0	):			Logg	ed: ked:	TF
Denth	Samples & In Situ Te	esting	Level	Denth		Strata D	etails					Grou	undwater
(mBGL)	Test ID	Test Result	(mAOD)	(mBGL)	Legend		Stra	ta Descriptio	١		(mBGL)	Water Strike	Backfill/ Installation
0.80 1.00 - 1.45	D SPT(C) D	N=13 (6/4,3,3,3)		0.70		MADE GROUND: Bri DISTURBED GROUNI CLAY. (0.30m) Dark yellowish brow black brown white fi	D: Stiff ye	's Descripti llowish brov gravelly ver	on).(0.57m) wn mottled bro ry sandy CLAY. to sub rounde	own silty Gravel is ed chert with	- - - - - - - - - - - - - - - - - - -		
2.00 - 2.45 2.00 - 2.40	SPT(C) B	N=21 (6/4,5,6,6)		1.80		occasional white an quartz. Rare dark gr Deposits].(0.80m) Medium dense becc sandy fine to coarse yellowish brown fine	ine to coars wn clay poc ise brown b ise sub round e. [River Tei	e sub rounded kets. [River Tel lack white slig led chert GRA race Deposits	htly silty VEL. Sand is ].(5.70m)	- - - - - - - - - - - -	Water Addec =3750		
- 3.00 - 3.45 3.00 - 3.45	SPT(C) D	N=28 (8/5,7,7,9)								- - - - - - -			
4.00 - 4.45 4.00 - 4.40	SPT(C) B	N=35 (8/7,8,9,11)							- - - - - -				
- 5.00 - 5.45 5.00 - 5.45	SPT(C) D	N=37 (10/8,9,10,10)									- - - - - - - - - - -		
- 6.50 - 6.95 - 6.50 - 6.90 - 6.50 - 6.90	SPT(C) B	N=34 (10/8,9,8,9)									- - - - - - - - - - - - - - - - - - -		
8.00 - 8.45 8.00 - 8.45 8.00 - 8.40	SPT(C) B	N=31 (11/7,7,8,9)		7.50		Dense becoming ver slightly calcareous S brown and white an medium to coarse ro size. [River Terrace D	ry dense p GAND and ngular to s ounded q Deposits].	bale brown : fine to coar ub rounded uartz and w (5.00m)	slightly silty fir se GRAVEL. Gr chert with rai hite chalk of c	ne to coarse avel is re white oarse sand			
- - - - - 9.50 - 9.95 - - - -	SPT(C) D	N=42 (12/8,10,10,14)					Contin	und port -	hoot		- - - - - - - - - - - - - - - - - - -		
Sta	rt & End of Shift Ol	bservations	Boreh	ole Diame	ter Ca	sing Diameter Rema	arks:	ueu next S	neet		1	I	
Date	Time Depth (m	) Casing (m) Water (m	n) Depth (n 15.00	m) Dia (r ) 15	nm) Depth 0 15.	(m) Dia (mm) Grou 00 150	Indwater (	Conditions -	On completio	n 6.00m bgl. Observations	Surface	concret	e cut out.
From (m) To (	Chiselling & P	Pits	Top /~	Base	Installation	Strike	xe at (m) 0	Casing at (m)	Sealed at (m)	Time (min)	Rose t	o (m)	Remarks
0.00 0.1 0.13 1.0	3 ( 0 01:00 5	Cutting out concrete Service Pit	0.00 1.00	ај вазе 1.0 7.0	00 PLA 00 SLOT	IN 50 TED 50	5.00						

		Ompass G	<b>eotechnical</b> k, Stoke Golding 3 6EU		C	able	Percus	sion		Proj	ect ID 1945S	Bo	BHC	e No.
Project Ti Bures	tle:	ww.compassg	eotechnical.co.uk	<b>Location:</b> Former C Square, B	hamber ures, CC	Bus Gar 08 5AB	age, Church	Client: Rose Bu	ilders Limit	ed		Scale: Di 21 Rig Cre Logged	ate Dri 2/07/2 w:	1:50 illed 022 RW TF
Easting:	Sar	nples & In Situ 1	Festing	Northing:			St	Level (m. rata Details	AOD):			Checke	d: Grour	ndwater
Dept (mBC	th SL)	Sample /	Test Result	Level (mAOD)	Depth (mBGL)	Legend		S	trata Descriptio	n		Depth (mBGL)	Water Strike	Backfill/ Installation
- 11.00 - 1 11.00 - 1	11.45 11.40	SPT(C) B	N=53 (12/9,12,15,17	)			Dense becomir slightly calcare brown and whi medium to coa size. [River Terr	ng very dens ous SAND ar ite angular to rse rounded race Deposit	e pale brown nd fine to coar o sub roundeo quartz and w s].(5.00m)	slightly silty fii rse GRAVEL. Gi J chert with ra /hite chalk of c	ne to coarse ravel is re white oarse sand	- 11		
- 12.50 - 12.5	12.95 12.95	SPT(S) D	N=40 (12/7,9,11,13)	)	12.50	× × × ×   ×   ×   ×   ×   × × × × × × ×	Stiff greenish g	rey glauconi Group (Undifi	tic sandy silty ferentiated)].(	CLAY. Thanet (2.50m)	Formation	- 13		
- 14.00 - 14.0	14.45 14.45	SPT(S) D	N=44 (14/8,9,12,15)	)								- 14		
- - - - - - - - - - - - - - - - - - -					15.00			Borehole (	Completed a	t 15.000m		- 15 - 15 - 16		
- - - - - - - - - - - - - - - - - - -												- 17		
- - - - - - - - - - - - - - - - - - -												- 18 - 18 		
- - - - - - - -												- 20		
Date	Start &	t Ena of Shift C ne Depth (n	ioservations i) Casing (m) Wate	meine Borel r (m) Depth 15.0	mole Diame (m) Dia (i 0 15	eter Ca mm) Dep 0 15	asing Diameter th (m) Dia (mm) 5.00 150	кеmarks: Groundwate	er Conditions -	On completio	n 6.00m bgl. Observations	Surface co	oncrete	cut out.
From ( )	To (= )	Chiselling &	Pits		m) [	Installation	(ma Dia (	Strike at (m)	Casing at (m)	Sealed at (m)	Time (min)	Rose to (	m)	Remarks
0.00 0.13	0.13 1.00	01:00	Remarks Cutting out concret Service Pit	te 0.00	n)         Base           )         1.0           )         7.0	(m) Ty )0 PL )0 SLO	AIN 50 TTED 50	6.00						



Appendix (iii) Exploratory Hole Logs – Previous Investigation



#### Introduction

All sampling and in-situ test methods are carried out in accordance with the relevant British and European standards as referenced below.

#### **Abbreviations Used**

Exploratory hole records are presented in graphical format with the use of standard abbreviations as outlined below.

#### **Sampling Method**

- BH Borehole
- TP Trial Pit
- WS Windowless Sample Hole
- CC Concrete Cored Hole

#### Sample Types

- D Disturbed Sample
- B Bulk Sample
- ES Environmental Sample
- PID Sample for total VOC screen
- L Liner Tube Sample
- U Undisturbed Sample
- UT Thin Wall Undisturbed Sample
- NR No Recovery
- W Water Sample
- C Rotary Core

#### In-Situ Tests

- DP Dynamic Probe Test
- CPT Cone Penetrometer Test
- SPT Standard Penetrometer Test
- V Hand Shear Vane Strength Determination (kPa) manufacturer's calibration of 1.491 applied to direct reading
- V\* Hand Shear Vane Strength Determination (kPa) on excavated block of material

### References

BS 5930:2015 + A1:2020 Code of Practice for Ground Investigations

BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites – Code of Practice

BS EN ISO 14688-1:2018 Geotechnical Investigation and Testing – Identification and Classification of Soil: Part 1 Identification and description.

BS EN ISO 14688-2:2018 Geotechnical Investigation and Testing – Identification and Classification of Soil: Part 2 Principles of Classification.

BS EN ISO 22475-1:2006 Geotechnical Investigation and Testing – Sampling Methods and Groundwater measurements: Part 1 Technical Principles for Execution.

BS EN ISO 22476-2:2005+A1:2011 Field Testing Part 2: Dynamic Probing.

BS EN ISO 22476-3:2005 + A1:2011 Geotechnical Investigation and Testing – Field Testing: Part 3: Standard Penetration Test.

EUR 26227 EN, 2013 Eurocode 7 Chapter 5 Ground Investigation and Testing.

	C	ompass G	eotechnical			С	able	Percuse	sion		Proj	ject ID		Boreho	le No.
	7	13 Willow Parl CV13	k, Stoke Golding 3 6EU			-	Sheet 2	A 1 of 1							
	w itle:	ww.compassg	eotechnical.co.uk	Location	or.				<b>'5</b>				Scale	: Date D	1:50
Chambe	rs Bus l	Depot		Cham	bers	Bus Dej	pot, Chu	rch Square,	Rose Bui	Iders				09/02/	2022
		·		Bures	s, CO8	5AB	,	. ,					Rig C	rew: ed:	SW TF
Easting:	5.21	nnloc & In Situ T	Fosting	Northi	ing:			C+-	Level (m/	AOD):			Chec	ked:	undwator
Dep	th	Sample /	Test Result	Le	evel	Depth	Legend	30	St	rata Descriptio	n		Depth	Water	Backfill/
(mB0	sL)	lest ID		(m/	AOD)	(mBGL)		MADE GROUNI	D: Reinforced	concrete.(0.	30m)		-	JUINE	
- 0.5	0 0	ES PID				0.30 0.80		MADE GROUNI rare red brick a coarse sub ang brown slightly	D: Crushed co nd cinder fra ular to round clavey fine to	oncrete of fin agments, brow led chert grav	e to coarse gra wn and white vel infilled witl .(0.50m)	avel size with fine to n greyish			
- 1.0 - 1.0	0 0	ES PID						Soft dark greyis occasional deca fine angular to	sh brown slig ayed plant m sub rounded	htly gravelly aterial. Grave I chert. [River	slightly silty CL slis rare brown Terrace Depo	AY with n and white sits].(1.10m)	-1		
- 1.5 1.5	0 0	ES PID				1 90		-					-	Water	
- 2.0 2.0	0	ES PID						Black brown an slightly sandy c hydrocarbon od	id white fine hert GRAVEL dour. [River T	to coarse ang Gravel is sta Terrace Depos	gular to sub ro ained grey with sits].(1.80m)	unded n strong	- 2	Addec =1000	1
2.5 2.5 - - 3.0	0	PID													*. <b>.</b>
- 3.0 - 3.5	0	PID			3.70 Yellowish brown slightly gravelly medium to coarse SAND. Grave black brown and white fine to coarse angular to sub rounded ch										
- 3.5 - 4.0	0	PID ES			3.70 Yellowish brown slightly gravelly medium to coarse SAND. Grav black brown and white fine to coarse angular to sub rounded of Faint hydrocarbon odour. [River Terrace Deposits].(1.55m)										
- 4.0 - 4.5 - 4.5	0	ES PID			black brown and white fine to coarse angular to sub rounded cher Faint hydrocarbon odour. [River Terrace Deposits].(1.55m)										
- - 5.0 - 5.0	0 0	ES PID													
- 5.5 - 5.5	0 0	ES PID				5.25		Greyish brown white and black Terrace Deposi	slightly grave k fine to coar ts].(0.75m)	elly fine to co se angular to	arse SAND. Gr sub rounded	avel is brown chert. [River	-		
- 6.0 - 6.0 -	0 0	ES PID				6.00			Borehole	Completed a	at 6.000m		- - - -		* * * <u>-</u> *
-													- - - - - - - -		
- - - - - -													- 8		
- - - - - -													- - - - - - - - - - - - - - -		
-															
- 	Start 8	End of Shift O	bservations		Borehole Diameter Casing Diameter Remarks: m) Depth (m) Dia (mm) Depth (m) Dia (mm) Groundwater ingress masked by water added to aid drilli										
Date 09-02-202	22 13:	ne Depth (m 00 6.00	n) Casing (m) Wat	er (m) D	Borehole Diameter         Casing Diameter         Remarks:           Depth (m)         Dia (mm)         Depth (m)         Dia (mm)           6.00         150         6.00         150										
		Chiselling &	Pits			I	nstallation		Strike at (m)	Casing at (m)	Groundwater Sealed at (m)	Ubservations Time (min)	Rose t	o (m)	Remarks
From (m) 0.30	To (m) 1.00	Duration 01:00	Remarks Service pit		Top (m) 0.00 3.00	Base 3.0 6.0	(m) Ty 0 PLA 0 SLOT	pe Dia (mm) AIN 50 TED 50						۲ و	No groundwat er

		Compass G	eotechnical		<b>^</b>	able	Dorcus	sion	Pro	ject ID	6	Borehol	e No.
	$\rightarrow$	13 Willow Parl	k, Stoke Golding		U	aule	reicus		21	2945		BHI	В
	У <sub>w</sub>	CV1 ww.compassg	3 6EU eotechnical.co.uk	:		Bore	ehole Lo	og	21		Scale	Sheet 1	of 1 1:50
Project T	<b>itle:</b>	Denot		Location:	: Bus De	not Chu	rch Square	Client: Bose Builders			Jeane	Date Dr 09/02/2	illed 2022
	.15 Dus 1	Depot		Bures, CO	8 5AB	pot, chu	ren square,	Nose Builders			Rig C	rew:	SW TE
Easting:				Northing:				Level (mAOD):			Chec	ked:	
Dep	Sai oth	mples & In Situ 1 Sample /	Test Result	Level	Depth	Legend	St	rata Details Strata Descriptio	n		Depth	Grou <sub>Water</sub>	ndwater Backfill/
(mB	GL)	Test ID	Test Nesuri	(mAOD)	(mBGL) 0.15	Legenu	MADE GROUN	D: Reinforced Concrete.(0	.15m)		(mBGL)	Strike	Installation
- 0.5	50 50	ES PID			0.15		MADE GROUN MADE GROUN gravelly slightly coarse angular red brick and c	D: Reinforced Concrete. (0) D: Firm greyish brown and y sandy clay, Gravel is brow to sub rounded chert wit ioncrete. (0.75m)	l yellowish bro vn white and l h occasional fi	own slightly black fine to ne to coarse	- - - - - - -		
- 1.0 - 1.0	00 00	ES PID			0.90		Yellowish brow occasional yell black fine to co	n slightly gravelly slightly owish brown clay pockets parse angular to sub angul	clayey silty fin Gravel is brov ar chert. [Rive	e SAND with wn white and r Terrace	-1		
- 1.9 - 1.9	50 50	ES PID					Veposits].(0.40 Yellowish brow fine to coarse a	0m) In fine to coarse SAND and angular to sub rounded GF arrace Deposite1 (4,40m)	l black brown RAVEL, locally	and white a sandy	/- - -	Water Added =1000 l	
- 2.0 2.0	00 00	ES PID									- 2		
- 2.5	50 50	ES PID					Slight hydro	carbon odour noted at 2.80	n bgl		-		
- 3.0 3.0	00 00	ES PID									- 3 - -		
- 3.5	50 50	ES PID					Slightly grey	staining			-		
– 4.0 - 4.0	00 00	ES PID									- 4 - -		
- 4.9 - 4.9	50 50	ES PID									-		
- 5.0 5.0	00 00	ES PID					- 9 4 • •						
- 5.5	50	PID			5.70		Yellowish brow black and whit	n gravelly fine to coarse S e fine to coarse sub angul	AND. Gravel is ar to sub roun	brown, ded chert			· _ · ·
6.0	00	PID			0.00		and rare white (0.30m)	fine to coarse quartz. [Riv Borehole Completed a	er Terrace De at 6.000m	posits].			
-											- - - - 7		
- - - -											-		
- - - -											- - - 8		
- - -											-		
-													
-											- 9		
- - -											-		
-											- 10		
Date	Start 8	k End of Shift O	Observations	Boreh	nole Diame (m) Dia (i	ter Ca	h (m) Dia (mm)	Remarks: Groundwater ingress mas	ked by water a	added to aid c	Irilling.		
09-02-20	22   16:	:00 6.00	6.00 2	2.60 6.00	9   15	U 6.1	UU 150						
		Chicolling 8	Pits			Installation		Strike at (m) Casing at (m)	Groundwate	Observation	S Rosa +	o (m)	Remarks
From (m)	To (m)	Duration	Remarks	Top (r	n) Base	(m) Ty	pe Dia (mm)	Scrike at (III) Casing at (M)	Jeareu di (III)		nose t	N	0
0.15	1.00	01:00	Service pit	0.00	) 3.0 ) 6.0	00 PLA 00 SLOT	AIN 50 ITED 50					gi ei	oundwat seepage

		<b>ompass Ge</b> 13 Willow Park,	Stoke Golding		C	able	Percuss	ion	Pro 21	ject ID 2945		Boreho BH	le No. IC		
Project Tit	tle:	CV13 ww.compassgeo	6EU otechnical.co.uk	Location:	Borehole Log     212945       ocation:     Client:       Chambers Bus Depot, Church Square,     Rose Builders										
Chamber	s Bus L	Depot		Chamber Bures, CC	s Bus De 08 5AB	pot, Chu	irch Square,	Rose Builders			Rig C Logg	rew: ed:	SW TF		
Easting:	Sar	nnlar & In Situ Ta	cting	Northing:			S+r	Level (mAOD):			Chec	ked:	undwator		
Dept	h	Sample /	Test Result	Level	Depth	Legend	50	Strata Decans	tion		Depth	Water	Backfill/		
Dept (mBG - 0.5( - 0.5( - 1.0( - 1.0( - 1.5( - 2.0( - 2.5( - 2.5( - 3.0( - 3.5( - 3.5( - 3.5( - 3.5( - 4.0( - 4.5( - 5.5( - 5.5()))))))))))))))))))))))))))))))))))	Sar h L)	Piles & In Situ Te Sample / Test ID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID ES PID	ting Test Result	Level (mAOD)	Depth (mBGL) 0.30 1.00 1.40 1.90 6.00	Legend	MADE GROUNE Gravel is brown occasional fine DISTURBED GR( gravelly slightly chert and rare H Yellowish brown white and brown (River Terrace D Yellowish brown fine to coarse a quartz GRAVEL Deposits].(4.10	strata Descrip Strata Descrip D: Reinforced Concrete D: Yellowish brown sligi black white fine to coa to coarse concrete and DUND: Soft yellowish b silty clay. Gravel is bro prick. (0.40m) n slightly gravelly claye m fine to coarse angula beposits]. (0.50m) n fine to coarse SAND a ngular to sub rounded Locally slightly sandy p m)	tion .(0.30m) htly sandy gravel arse sub angular fine brick fragm rown slightly sai wn and white fir y silty fine SAND ar to sub rounde and brown, whiti chert and rare v gravel. [River Ter d at 6.000m	ly clay. chert, lents.(0.70m) ndy slightly le to coarse Gravel is d chert. e and black thite fine race	Depth (m6GL)	Gro Water Strike	undwater sachtill installation installati		
	Start &	Fnd of Shift Oh	servations	Boro	hole Diamo	ter Ca	sing Diameter	Remarks.			10				
Date 10-02-202	Start & Tin 2 12:	e End of Shift Ob ne Depth (m) 00 6.00	servations           Casing (m)         Wat           6.00         2	Borel eer (m) Depth .80 6.00	nole Diame (m) Dia (r D 15	eter Ca mm) Dept	nsing Diameter h (m) Dia (mm) 00 150	Remarks: Groundwater ingress m	Groundwate	added to aid c	Irilling.				
From (m)	To (m)	Chiselling & Pi	Remarks	Tor	m) Raco	Installation	ne Dia (mm)	Strike at (m) Casing at (	m) Sealed at (m)	Time (min)	Rose t	o (m)	Remarks		
0.30	1.00	01:00 S	ervice pit	0.0	) 3.0 ) 6.0	00 PL/ 00 SLO	AIN 50 TTED 50					E E E E E E E E E E E E E E E E E E E	groundwat er seepages		

		Compass G	eotechnical			ſ	ahlo	Percus	ion	Project ID		Boreho	le No.
	$\rightarrow$	13 Willow Park	, Stoke Golding 6611			C	Dor			212945		Shoot	ID
	× "	/ww.compassge	otechnical.co.uk				BOL		)g		Scale	:	1:50
Project T	itle: ors Rus	Denot		Loc Cha	ation: amhers	Rus De	not Chi	irch Square	Client: Rose Builders			Date D 10/02/	<b>7111ed</b> 2022
	TO DUS	Depot		Bur	res, CO8	3 5 A B	pot, ene	inen square,	hose builders		Rig C	Crew:	SW TF
Easting:				Nor	rthing:				Level (mAOD):		Chec	ked:	
Dep	oth	Samples & In Situ Ie	Test Result		Level	Depth	Legend	Str	ata Details Strata Description		Depth	Gro Water	Backfill/
(mB -	GL)	Test ID			(mAOD)	(mBGL)	8	MADE GROUNE	D: Reinforced Concrete.(0.4	0m)	(mBGL)	Strike	
-						0.40					-		
- 0.5	50	ES				0.40		MADE GROUNE	); Dark yellowish brown slig	ghtly clayey slightly	-		
- 0.5	50	PID						pockets. Gravel	is brown black and white f	ine to coarse sub	-		
- 1.0	00	ES						rounded chert, (1.00m)	chert cobbles, rare white c	quartz, brick and concre	te [-1		
- 1.0	0	PID									-		
- 1.5	50	ES				1.40		DISTURBED GR	OUND: Dark yellowish brov	vn slightly clayey slightly	/ -		
- 1.5	50	PID				1.00		pockets. Gravel	is brown black and white f	ine to coarse sub	-		
- 2.0	00	ES				1.90		Dark yellowish	and rare brick. (0.50m) brown slightly clayey slight	tly gravelly fine to	- <u>_</u> 2		
- 2.0	0	PID				2.30		medium SAND	with soft yellowish brown of white fine to coarse sub-	clay pockets. Gravel is	F		
- 2.5	50	ES						Terrace Deposit	s].(0.40m)	Tounded chert. [Kiver	_/F		
2.5	50	PID				2.80		Dark brown slig	htly clayey slightly gravelly k organic matter/decayed r	silty fine SAND with plant material. Gravel is	÷		
- 3.0	00	ES						white and brow	in fine to coarse sub angula	ar chert. [River Terrace	Е з	Wate	r <u></u>
. 3.0	00	PID						Yellowish brow	m) n fine to coarse slightly gra	velly fine to coarse SAN	D	Addeo =1000	
- 3.5	50	ES				3.40		with rare clay p	ockets. Gravel is brown and [River Terrace Denosits] (0	d white fine to coarse su 60m)	<sup>ib</sup> /		· _ · .
3.5	50	PID						Yellowish brow	n fine to coarse SAND and l	brown white and black			
- 4.0	00	ES						greyish brown s	ub angular to sub rounded silty clay pockets. locally sa	chert GRAVEL with rare ndy gravel. [River Terrad	e - 4		
. 4.0	00	PID						Deposits].(2.60	m)		Ē		
- 4.5	50	ES									E		
4.5	50	PID									-		
- 5.0	00	ES									- 5		
5.0	00	PID						2 0			-		
- 5.5	50	ES									Ē		
- 5.5	50	PID									-		
6.0	00	ES				6.00		-	Borehole Completed at	6 000m			
- 6.0	00	PID							borenoie completed at	0.0000111	-		
											-		
-											-		
F											7		
-											-		
											-		
-											-		
F											8		
-											ŀ		
-											-		
-											F		
-											- 9		
ŀ											ŀ		
-													
-											-		
F											- 10		
Date	Start a	& End of Shift Ol	bservations	ter (m)	Boreh	ole Diame	ter Ca	sing Diameter	Remarks:				
10-02-20	22 15	6:00 6.00	6.00 2	.80	6.00	15	0 6.	00 150	Groundwater ingress maske	eu by water added to ai	a arilling.		
									(	Groundwater Observatio	ons		
From (m)	To (m)	Chiselling & P	Pits		Ton (m	) Race	nstallation	ne Dia (mm)	Strike at (m) Casing at (m)	Sealed at (m) Time (mir	) Rose t	:o (m)	Remarks
0.40	1.00	01:00	Service pit		0.00	, base 3.0	0 PL	AIN 50				I	groundwat
					3.00	6.0	U SLO	IIED 50					er seepages

	Co	mpass G	Geotech	nical		\\/;	ndov	vlace Ca	mnla	<b>.</b>		Project	ID	E	Borehole	e No.
	- 13	8 Willow Par	k, Stoke Go	olding		VVI		vicss Jd	mple	-		21294	5		WS1	L of 1
	ww	w.compasse	.3 6EU geotechnica	al.co.uk	Location: Client:										Sheet 1 :	of 1 1:25
Project Title		not		L	ocation:	Due De	nat Chu	rah Causaa	Client:	بناطمتم					Date Dri 04/11/2	i <b>lled</b> 021
	DUS De	εμοι		В	Sures, CO	виз De 8 5AB	ροι, τηυ	ich square,	LUSE DI	Inders				Rig C	rew:	JW
Easting:				N	lorthing:				Level (m	AOD):				Chec	ked:	
Depth	Samp	les & In Situ Sample /	Testing Test	t Result	Level	Depth	Legend	Str	ata Details	Strata Descrir	ation			Depth	Grour <sub>Water</sub>	Backfill/
(mBGL) - 0.00 - 0.7	0	Test ID ES	103	i nesuri	(mAOD)	(mBGL)	Cegenu	MADE GROUNE	D: Dark grey	/ brown bla	ck slightly g	gravelly slig	htly	(mBGL)	Strike	Installation
0.00 - 1.0	0	L PID				0.71		sandy clay. Grav rounded chert v fine to coarse g fragments of fir DISTURBED GRG	vel is browr with occasi ravel size, r ne to mediu OUND: Stiff	and black onal red an are plastic a im gravel si greyish bro	fine to coar d yellow br and very ra ze.(0.71m)	rse angular ick fragmen re asphalt gravelly si	to nts of			
0.90 0.90 - 1.0 1.00 - 1.4 1.00 - 2.0 1.10 1.10 - 1.2	0 5 0	PID ES SPT(C) L PID ES	N=17 (	5/3,3,4,7)	1.05       DISTURBED GROUND: Stiff greyish brown slightly with occasional gravelly silty clay pockets. Gravel and white fine to coarse sub angular to sub round white fine to medium quartz.(0.34m)         1.05       Medium dense yellowish brown mottled orange I clayey slightly gravelly fine to coarse SAND. Grave black fine to coarse angular to rounded chert and sub rounded quartz. [River Terrace Deposits].(0.5         1.62       Medium dense becoming very dense brown and slightly clayey fine to coarse angular to rounded c         1.62       Medium dense becoming very dense brown and slightly clayey fine to coarse angular to rounded c						is brown b ded chert a brown slig el is brown d rare white 57m)	lack and rare htly and e fine	- 1			
1.65 - 2.0 1.90	0	D PID				1.62 Medium dense becoming very dense brown and bi slightly clayey fine to coarse angular to rounded ch white fine to coarse sub rounded quartz GRAVEL. brown fine to coarse. [River Terrace Deposits].(1.33							sandy are ellowish			
2.00 - 2.4 2.00 - 3.0	0	SPI(C) L PID	N=18 (	6/5,4,4,5)										- 2 		
- 3.00 - 3.4	5	SPT(C)	N (22/15	l=67 ,17,17,18)		3.00		Refusal	Borehole	Complete	d at 3.000	)m		3		
														- - - - - - - - - - - - - - - - - - -		
<u> </u>														- 5		
Borehole Dia Depth (m) Di	imeter iameter	Casing Depth (m)	Diameter Diameter	Depth Ton	) To (m)	Chiselling Duratio	; & Pits n	Remarks	Strike at (m	Water Strike Casing at (m)	S Sealed at (m)	Time Mins	Ob: Rose to (r	servati n)	ons Rema	rks
3.00	115	1.00	115		Chiselling & Pits Water Strikes									No see	groundw	ater
	Insta	llation	Dia (n===)	Remarks:	:							•	•			
IOP (m)         Baseline           0.00         1.00	ase (m) 1.00 3.00	PLAIN SLOTTED	50 50 50	No sampl	e recovery	possible b	elow 3.0m	depth due to ver	ry dense na	ture of strat	a.					
		ompass G	ieotech	nical		Wi	ndov	vless Sa	mple	)		Project	ID	E	Borehole WS2	No.
---	----------------------------------	--------------------------------------	----------------------	------------	-----------------------------------	-----------------	---	---	---	--	--	--	-------------------------	------------------------	--	---------------------------
	ノ	CV1	3 6EU				Bore	ehole Lo	Dg			21294	5		Sheet 1	of 1
Project Ti Chamber	tle: s Bus D	vw.compassg epot	eotecnnica	L B	ocation: Chambers Sures, CO	Bus De 8 5AB	pot, Chu	rch Square,	Client: Rose Bu	uilders				Scale Rig C	: Date Dri 04/11/2 rew:	1:25 Iled 021 JW
Easting:				N	lorthing:				Level (m	AOD):				Chec	ked:	IF
Dept	Sam h	iples & In Situ T Sample /	esting	b D a sult	Level	Depth	Lenerd	Str	ata Details	Strata Danaia				Depth	Groun <sub>Water</sub>	dwater Backfill/
(mBG	iL) 1.00	Test ID L	les	Result	(mAOD)	(mBGL)	Legend	Concrete - core	d out.(0.20	m)	tion			(mBGL)	Strike	Installation
0.20 - (	0.50 0.50	ES PID				0.20		MADE GROUNE gravel. Gravel is cinder, yellow b	D: Greyish b s brick, cher brick and mo	orown, dark rt, occasiona ortar.(0.80n	grey and b al ACM she ı)	lack slightle et with rar	y clayey e coal,			
- 1.00 - 1 1.00 - 1 1.00 - 1	1.20 1.20 2.00	ES PID L				1.00		DISTURBED GRI gravelly fine to coarse angular Medium dense	OUND: Gree coarse SAN to rounded vellowish b	yish brown : D. Gravel is chert.(0.34	slightly clay black and m) Iv clavey sl	vey slightly brown fine ightly silty	silty to gravelly	- 1		
1.75 - 2	1.80	PID					fine to coarse SAND with occasional yellowish bi silty fine sand pockets. Gravel is brown and blac angular to rounded chert and rare white fine to rounded quartz. [River Terrace Deposits].(2.11m						y clayey arse	-		
- 2.00 - 3 2.00 - 3 2.00 - 3	3.00 3.00 3.00	D L PID												- - - -		
-																
- 3.00 - 4	4.00	L				3.45		Medium dense	light yellow	vish brown s	silty fine to	coarse SAI	ND and	- 3		
- 3.55 - 3 3.55 - 3	3.65	ES PID						brown and blac white fine sub r [River Terrace D	k fine to co rounded qu Deposits].(1	arse angula artz GRAVE .55m)	r to rounde L with rare	ed chert an fine sand p	d rare oockets.	-		
- 4.00 - 5 - - - - - - -	5.00	L												- 4		
4.50 - 9	5.00	D PID														
<u> </u>						5.00	×		<u>Bore</u> hole	<u>Comp</u> lete	<u>d at 5.</u> 000	)m		5		
Borehole	Diameter	Casing D	iameter	Depth Tor		Chiselling	& Pits	Remarks	Strike at (m)	Water Strike	Sealed at (m)	Time Minc	Ob Bose to /	servati m)	ons	rks
5.00	Diameter 115	1.00	Diameter 115	Depth Top	<u>) IO (m)</u>	Duratio		ĸemarks	<u>ртгке at (m)</u> 3.50	1.00	sealed at (m)	11me Mins	Kose to (I	1) Wa 3.5 cor	Remaind ter standi Om bgl or npletion	ng at
Top (m) 0.00 1.00	Inst Base (m) 1.00 5.00	allation Type PLAIN SLOTTED	Dia (mm) 50 50	Remarks	:											

New The image in the			Compass C	Geotech	nical		Wi	ndov	vless Sa	ample	9		Project	D		Borehol WS	e No. <b>3</b>
Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>		7	CV1	L3 6EU	al ee uk			Bor	ehole L	og			21294	5		Sheet 1	of 1
Chambers Ban Deport         Energies         Energies </td <td>Proiect Ti</td> <td>tle:</td> <td>ww.compassg</td> <td>geotecnnica</td> <td>II.CO.UK</td> <td>ocation:</td> <td></td> <td>_</td> <td></td> <td>Client:</td> <td></td> <td></td> <td></td> <td></td> <td>Scale</td> <td>: Date Di</td> <td>1:25 rilled</td>	Proiect Ti	tle:	ww.compassg	geotecnnica	II.CO.UK	ocation:		_		Client:					Scale	: Date Di	1:25 rilled
Burker, COB 5/0         Provide the two set of two set of the two two set of the two set of the two set of the two set of the two	Chamber	rs Bus [	Depot			Chambers	Bus De	pot, Chu	rch Square,	Rose Bu	uilders					04/11/2	2021
Earthing:         Level (mADD):         OPC-000					E	Bures, CO	8 5AB								Rig C	Crew: ed:	JW TF
Bardel A Gulf Prog         Concerned         Description         Concerned           0.001-100         L         Concerned         State Description         Concerned	Easting:				r	Northing:				Level (m	AOD):				Chec	ked:	
Install         Same D         Data for the control of	Dept	San th	nples & In Situ Sample /	Testing	- Da sult	Level	Depth	t a manual	5	Strata Details	Churche Deservi				Depth	Grou <sub>Water</sub>	ndwater Backfill/
Lot Low       Low       Low       Control       Control <thcontrol< th=""> <thcontrol< th=""> <thco< td=""><td>(mBG</td><td>GL)</td><td>Test ID</td><td>les</td><td>Result</td><td>(mAOD)</td><td>(mBGL)</td><td>Legend</td><td>Concrete - co</td><td>red out (0.20</td><td>strata Descrip</td><td>ption</td><td></td><td></td><td>(mBGL)</td><td>Strike</td><td>Installation</td></thco<></thcontrol<></thcontrol<>	(mBG	GL)	Test ID	les	Result	(mAOD)	(mBGL)	Legend	Concrete - co	red out (0.20	strata Descrip	ption			(mBGL)	Strike	Installation
Output Description         Output DescriptiDescriptiDescription         Output Description	0.00	1.00	-							100 001.(0.20	,				-		
0.35.0.45         ps         pnD         0.31         setS         <	-						0.20		MADE GROUI	ND: Yellowish	brown slig	htly gravell	y fine to me	edium	-		
0.35 - 0.45       PD       MAGE 260/L00 bat greats how number and using the provel, alightly marking the construction of the construle of the construction of the construction of the construction of	0.35 -	0.45	ES				0.31		sand. Gravel i	s brown and	black fine t	o coarse an	igular to ro	unded	-		
0.76 - 0.83     PD     Image: the second of the control of th	0.35 -	0.45	PID						MADE GROUI	ND: Dark grey	ish brown	slightly grav	velly slightly	y sandy	-		
0.76 - 0.85         PD         0.76         0.85         PD         0.76 <th0.76< th="">         0.76         <th0.76< th=""> <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>silty clay. Grav</td><td>vel is brown a t. occasional</td><td>and black fii fine to coai</td><td>ne to coarse rse red bric</td><td>e angular to k. lime mor</td><td>) tar.</td><td>-</td><td></td><td></td></t<></th0.76<></th0.76<>	-								silty clay. Grav	vel is brown a t. occasional	and black fii fine to coai	ne to coarse rse red bric	e angular to k. lime mor	) tar.	-		
0.95 - 0.85     PD     Image: Comparison of the set o	-								oyster shell, t	ile, coal, cera	mic, glass a	and bone. (	).45m)	((1))	-		
1.00 · 2.00     L     L     Prove the first of the source and back the to consider the source and back	0.76 -	0.85	PID				0.76		Disturbed Gro	ound: Greyish	brown and	d dark greyi	sh brown s	lightly	-		
<ul> <li>Loo - 2.00         <ul> <li>Loo - 2.00             <li>L             </li> <li>Loo - 2.00             <li>L             <li>Loo - 2.00             </li> <li>Loo - 2.00             <li>L             <li>Loo - 2.00             </li> <liloo -="" 2.00="" <="" li=""></liloo></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></ul></li></ul>	-								coarse angula	ify silty CLAY.	Gravel is rai	re brown ai rare white f	nd black fin fine sub rou	e to Inded	-		
1.65 - 1.75     F3 HD     H     Image: state in the second state is browned state.     Image: state in the second state is browned state in the second state is browned state in the second state is browned state.     Image: state is browned state in the second state is browned state in the second state is browned state.       1.65 - 1.75     F3 HD     Image: state is browned state in the second state is browned state.     Image: state is browned state is browned state.     Image: state is browned state.       1.65 - 1.75     F3 HD     Image: state is browned state.       1.65 - 1.75     F3 HD     Image: state is browned state.       1.65 - 1.75     F3 HD     Image: state is browned state.       1.65 - 1.75     F4     Image: state is browned state.       1.65 - 1.75     F4     Image: state is browned state.       1.65 - 1.75     F4	- 1.00 - 1	2.00	L						quartz.(0.55m	ר)					- 1		
1.65         1.75         55         1.65         1.75         90         1.15         1.1	-														-		
1.65 · 1.75       FS         1.65 · 1.75       FS         1.65 · 1.75       PID         2.00       Borehole Completed at 2.000m         3       Borehole Completed at 2.000m         4       Borehole Completed at 2.000m         5       Borehole Completed at 2.000m         5       Borehole Completed at 2.000m         6       Borehole Completed at 2.000m         6       Borehole Completed at 2.000m         7       Borehole Completed at 2.000m         7       Borehole Completed at 2.000m         8       Borehole Completed at 2.000m         8       Borehole Completed at 2.000m         8       Borehole	-						1 31								-		
1.65 - 1.75       ES         1.65 - 1.75       ES         1.65 - 1.75       FS         1.65 - 1.75       FS </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.51</td> <td></td> <td>Medium dens</td> <td>se yellowish b D. Gravel is bi</td> <td>prown grave rown and b</td> <td>elly slightly lack fine to</td> <td>clayey fine</td> <td>to ular to</td> <td>-</td> <td></td> <td></td>	-						1.51		Medium dens	se yellowish b D. Gravel is bi	prown grave rown and b	elly slightly lack fine to	clayey fine	to ular to	-		
165 - 1.75       ES       ND       Image: Signature of the signater of the signature of the signatere of the signatere									rounded cher	t and rare wh	nite fine sub	o rounded o	quartz. [Rive	er	-		
1.65 - 1.75       PID       2.00       Borehole Completed at 2.000m       2         1.65 - 1.75       PID       1       1       1       1       1         1.65 - 1.75       PID       1	- 1.65 -	1.75	ES					،، معنی، اس ور 	Terrace Depo	sits].(0.69m)					-		
Borehole Completed at 2.000m     2       Borehole Completed at 2.000m     2       Borehole Completed at 2.000m     2       Borehole Completed at 2.000m     3       Borehole Dameter     Casing Dameter       Describele Diameter     Describele Diameter       Describele Diameter     Desc	1.65 -	1.75	PID						e -						-		
Borehole Dameter       Casing Dameter       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Depth (m)       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Depth (m)       Dameter       Depth (m)       Dameter       Depth (m)															-		
Image: Source of the second state o	-						2.00	······							- 2		
Borehole Diameter       Casing Diameter       Chicelling & Pits       Woter Strikes	-									Borehole	Complete	ed at 2.000	)m				
Borchole Diameter       Casing Diameter       Objective       Objective       - 4         Borchole Diameter       Casing Diameter       Objective       - 4       - 4         Dipti (m) Diameter       Depti (m) Diameter       Depti (m) Diameter       No groundwater       seepages         2.00       115       1.00       115       To (m)       Duration       Remarks       Trie at (m) Casing at (m) Seided at (m)       No groundwater         seepages       Intra Liuton       Remarks       Remarks       Intra at (m) Casing at (m) Seided at (m)       No groundwater         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       - 4	-														-		
Borchie Diameter       Casing Diameter       Chiefling & Pits       Verter Strikes       Observators         Borchie Diameter       Casing Diameter       Chiefling & Pits       No groundwater         2.00       115       1.00       115       100       115       100       115       No groundwater         Imperint         Remarks       Strike at (m Cosing at (m) Seeded (m) Imperints         No groundwater         Imperint         No groundwater         Imperint         No sample recovery possible below 2.0m depth due to very dense nature of strata.	-														-		
Borchole Diameter       Casing Diameter       Cheelling & Pits       Water Strikes       Observations         Borchole Diameter       Casing Diameter       Cheelling & Pits       Water Strikes       Observations         Borchole Diameter       Casing Diameter       Cheelling & Pits       Water Strikes       Observations         Borchole Diameter       Cesting Diameter       Cheelling & Pits       Water Strikes       Observations         Borchole Diameter       Depth (m)       Diameter       Depth (m)       Diameter       Peth (m)         Borchole Diameter       Remarks       Strike at (m) Gaing at (m) Stated at (m)       Remarks       Strike at (m) Gaing at (m) Stated at (m)       Remarks         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m) Gaing at (m) Stated at (m)       No groundwater steep ages         tuner       Installation       Remarks       Inter Mins (Rost of m)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       No sample recovery dense nature of strata.	-														-		
Borchole Diameter       Casing Diameter       Chicelling & Pits       Water Strikes       Observations         Borchole Diameter       Casing Diameter       Depth (m)       Diameter       No groundwater       seepages         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m) Casing of (m) Seeked at (m)       Time Minit Root on (m)       Remarks         Item Visition         Remarks         Item Visition         No groundwater         No groundwater         No groundwater         No groundwater         Item Visition         No sample recovery possible below 2.0m depth due to very dense nature of strata.	-														-		
Image: second	-														-		
a group of a point of a set of mark       Chipeling & Pits       Water Strikes       Observations         a group of a point of mark       Casing Dumeter       Chipeling & Pits       Water Strikes       Observations         a group of a point of mark       Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m) Gasing at (m) based at (m)       Time Mins       Rose to (m)       Remarks         10pt (m)       Data from       Type       Dia (m)       No ample recovery possible below 2.0m depth due to very dense nature of strata.       No ample recovery possible below 2.0m depth due to very dense nature of strata.	-														-		
Borchole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borchole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borchole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Image: Strike at (m) Casing at (m) Seeled at (m)       Despth (m)       Diameter       Despth (m)       Diameter         Image: Imag	-														-		
Borehole Diameter       Casing Diameter															- 3		
Borehole Diameter       Casing Diameter       -4         Borehole Diameter       Casing Diameter       -4         Borehole Diameter       Casing Diameter	-														-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Depth (m)       No groundwater       seepages         2.00       115       1.00       115       Top       No       m       m       m       m       m       m       monitorial second monitorial seco	-														-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Depth (m)       Diameter       Depth (m)       Diameter       Depth (m)         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       Image: Image	-														-		
Borehole Diameter       Casing Diameter       -4         Depth (m)       Diameter       No groundwater       seepages         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       No groundwater       seepages         2.00       115       1.00       115       Remarks       Image at (m)       Image at (m)       Image at (m)       No groundwater       seepages       Seepages       Seepages       Seepages       Seepages       Seepages       Seepages       Seepages       Seepages       Seepages <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></t<>	-														-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m) Casing at (m) Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       Remarks:       No groundwater seepages       No groundwater seepages         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       No sample recovery possible below 2.0m depth due to very dense nature of strata.	-														-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Soaled at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       To       To       M       Duration       Remarks       Strike at (m)       Casing at (m)       Soaled at (m)       No groundwater seepages         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       H	-														-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes at (m) Casing at (m) Sealed at (m)       Time Mins       Remarks         2.00       115       1.00       115       Tom       Tom       Duration       Remarks       Strike at (m) Casing at (m) Sealed at (m)       Time Mins       Rose to (m)       Remarks         100       115       1.00       115       Remarks       Tom       Tom       No groundwater seepages         100       115       No sample recovery possible below 2.0m depth due to very dense nature of strata.       No sample recovery possible below 2.0m depth due to very dense nature of strata.															-		
Borehole Diameter       Casing Diameter       Depth (m)       No groundwater       No groundwater       No groundwater       Seepages       Seepages       No groundwater       Seepages       Seepages       Seepages       Seepages       Seepa	-														-		
Borehole Diameter       Casing Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Depth (m)       No groundwater seepages         2.00       115       1.00       115       In       In       In       In       In       In       In       In       No groundwater seepages         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       In	-														- 4		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       I.00       115       I.00       115       No groundwater seepages         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.	-														-		
Image: Several set in the several set	-														-		
Image: Second	-														-		
Borehole Diameter       Casing Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       To (m)       Duration       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       No groundwater seepages       No groundwater seepages       No groundwater seepages         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       No sample recovery possible below 2.0m depth due to very dense nature of strata.															-		
Borehole Diameter       Casing Diameter       Casing Diameter       Casing Diameter       Cosing & Pits       Vater Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       Internation       Remarks:       No groundwater seepages         image: model       Image: model       Image: model       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       Image: model	-														-		
Borehole Diameter       Casing Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       Interview       Remarks       Interview       Interview       No groundwater seepages         Installation         Top (m)       Base (m)       Type       Dia (mm)         No sample recovery possible below 2.0m depth due to very dense nature of strata.       Interview	-														-		
Image: Constraint of the constr															-		
Borehole Diameter       Casing Diameter       Chiselling & Pits       Water Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       Image: Casing Line Casing at (m)       Sealed at (m)       Sealed at (m)       No groundwater         seepages       Image: Casing Line Casing at (m)       Sealed at (m)       Sealed at (m)       No groundwater         Top (m)       Base (m)       Type       Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.       No       Strike at (m)       Strike at (m)       Strike at (m)       Sealed at (m)       No       No       Strike at (m)       Strike at (m)       Sealed at (m)       No       Sealed at (m)       No       Sealed at (m)       No       Seapages       No       Sealed at (m)       No       Seal	-														- 5		
Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         2.00       115       1.00       115       1.00       115       I	Borehole	Diameter	Casing E	Diameter			 Chiselling	& Pits	I	,	Water Strike	!S		Obs	ervati	ons	
2.00       11.3       1.00       11.3       No groundwater seepages         Installation       Remarks:       Remarks:         Top (m)       Base (m)       Type       Dia (mm)         No sample recovery possible below 2.0m depth due to very dense nature of strata.       No sample recovery possible below 2.0m depth due to very dense nature of strata.	Depth (m)	Diamete	er Depth (m)	Diameter	Depth To	p To (m)	Duratio	n	Remarks	Strike at (m)	) Casing at (m)	Sealed at (m)	Time Mins	Rose to (r	n)	Rema	arks
Installation     Remarks:       Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.	2.00	112	1.00	115											see	epages	valel
Installation     Remarks:       Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.																	
Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 2.0m depth due to very dense nature of strata.		Inc	tallation		Remarks												
	Top (m)	Base (m	) Type	Dia (mm)	No samp	• le recovery	possible b	elow 2.0m	n depth due to v	ery dense na	ture of strat	ta.					

	C	ompass G	eotech	nical		Wi	ndov	vless Sa	mple	)		Project	D	E	Borehole	e No.
	<b>†</b> <sup>1</sup>	3 Willow Par. CV1	k, Stoke Go .3 6EU	olding			Bor	ahola I <i>i</i>	יייייי	-		21294	5		Sheet 1	• of 1
	wv	vw.compassg	eotechnica	al.co.uk	ocation		5010		<b>6</b>					Scale	: Date Dri	1:25
Chamber	rs Bus D	epot			Chambers	s Bus De	pot, Chu	rch Square,	Rose Bu	uilders				Die C	04/11/2	021
				E	Bures, CO	8 5AB								Logge	ed:	TF
Easting:	Sam	ples & In Situ 1	festing	1	Northing:			St	Level (m rata Details	AOD):				Chec	<b>ked:</b> Grour	ndwater
Dept (mBC	:h iL)	Sample / Test ID	Test	t Result	Level (mAOD)	Depth (mBGL)	Legend		:	Strata Descrip	otion			Depth (mBGL)	Water Strike	Backfill/ Installation
- 0.00 - 1	1.00	L						Concrete - core	ed out.(0.19	m)				-		
0.20 - (	0.25 0.50 0.65	PID ES PID				0.19		MADE GROUN coarse sand. G rounded chert, chert cobbles a Soft yellowish CLAY. Gravel is	D: Yellowish ravel is brov , occasional and rare wh brown stain brown and	brown grav vn and blac brick, terra- ite fine sub ed grey and black fine to	velly slightl k fine to co cotta tile, li rounded q l black silty o coarse an	y clayey fin arse angula ime mortar, uartz.(0.33 slightly gra gular to (0	e to ar to rare m) velly unded	-		
- 1.00 - : - 1.00 - : - 1.00 - : - 1.00 - : :	1.10 1.10 2.00 1.60	ES PID L PID				1.00		Soft dark yello is brown and b white fine sub	wish brown lack fine to rounded qu Deposits].(1	slightly grav coarse angu artz. Sand i .13m)	velly slightl ular to rour s fine. Hydi	y silty CLAY nded chert r	. Gravel and rare dour.	1		
1.65 - 1 1.75 - 1 2.00 - 1	1.85 1.85 3.00	ES PID L						Stained blac	k with stron <u>c</u>	<del>g hydroc</del> arbc	on odour.			- - - - - - -		
2.15 - 2	2.20 2.20	ES PID				2.13		Medium dense occasional silty coarse angular quartz. Hydroc	e greyish bro fine sand p to rounded arbon odou	own gravelly lockets. Gra chert and r <u>r. [Rive</u> r Ter	y fine to coa vel is brow rare white f race Depos	arse SAND v n and black fine sub rou sits].(0.87m	with tine to Inded	-		
2.50 - 2	2.60 3.00	PID PID						Stainea biac	<u>k to 2.38m b</u>	<u>gı.</u>				-		
						3.00			Borehole	Complete	d at 3.000	Dm		- 3		
- - - - - - - - - - - - - - -														- 4		
	Diseast	Contract		I		Chine	2 Q. Diác			Nator Stati				- 5		
Depth (m)	Diameter	Depth (m)	Diameter	Depth To	p To (m)	Duratio	n n	Remarks	Strike at (m	Casing at (m)	s Sealed at (m)	Time Mins	Ob Rose to (I	n)	Rema	rks
3.00	115	1.00	115	Pomerie										No see	groundw pages	ater
Top (m)	Base (m)	Туре	Dia (mm)	No samp	le recovery	possible b	elow 3.0m	n depth due to ve	ry dense na	ture of strat	a.					
0.00 1.00	1.00 3.00	PLAIN SLOTTED	50 50													

		ompass G	<b>Geotech</b> k, Stoke Go	nical olding		Wi	ndov	vless Sa	mple	9		Project	ID F	I	Borehol WS	e No. 5
		CV1 ww.compassg	.3 6EU eotechnica	al.co.uk			Bore	ehole Lo	og			21294	5	Scale	Sheet 1	of 1 1.25
Project Ti	tle:			L	ocation:				Client:						Date Dr	illed
Chambe	rs Bus D	)epot		С	hambers	Bus De	pot, Chu	rch Square,	Rose Bu	uilders				Rig C	rew:	2021
Easting:				N	orthing:	6 JAD			Level (m	AOD):				Logg Chec	ed: ked:	
Dan	Sam	ples & In Situ 1	Testing			Donth	1	St	rata Details	- /					Grou	ndwater
(mBC	in GL)	Test ID	Test	t Result	(mAOD)	(mBGL)	Legend		:	Strata Descri	ption			Depth (mBGL)	Water Strike	Backfill/ Installation
- 0.00 -	1.00	L				0.12	****	Concrete - core	ed out. DPM	1 at base.(0	.12m)					
- 0.25 -	0 35	PID				0.25		MADE GROUN	D: Brown ar gravel with	nd black fin I occasional	e to coarse white fine	angular to to coarse r	ounded	-		
0.25 -	0.50	ES				0.25		quartz gravel a	nd occasion	al brick and	d concrete f	ragments.	0.13m)			
-								clay. Gravel is r	ed brick, m	ortar, red ti	le, chert an	d quartz.(0	.54m)			
-																
-																
0.80 -	1.00	ES				0.79		Disturbed Grou	ınd: Dark gr	eyish brow	n mottled y	ellowish b	rown			
- 0.80 -	1.00	PID						slightly gravelly	slightly sar	ndy silty CL	AY. Gravel is	rare brow	n and	-		
- 1.00 - 1.00 -	1.45 2.00	SPT(C) L	N=4 (1	l/1,1,1,1)				rounded quart	z and rare re	ed brick.(0.	65m)	re white hi	ie sub	- 1		
-																
-																
- 1.35 -	1.40	PID				1 44								-		
- 1.50 -	2.00	D					×	Firm yellowish CLAY with rare	brown and black carbo	greyish bro naceous m	wn slightly aterial and	gravelly sa rare pocke	ndy silty ts of	-		
-							×	orange brown	clayey sand	. Gravel is r	are brown a	and black fi	ne to			
- 180-	1 95	FS					$\times$ $\rightarrow$ $\rightarrow$	quartz. [River T	errace Dep	osits].(1.56	rare white i m)	ine sub rol	indea	-		
1.90 -	1.95	PID					×									
2.00 -	2.45	SPT(C)	N=17 (	7/4,4,4,5)			×							- 2		
2.00 -	3.00 3.00	L PID					$\times$ $\rightarrow$ $\rightarrow$	Grading to a	yellowish bi	rown slightly	v clayey sligi	ntly gravelly	fine			
-	0.00						×	to medium S	AND. Gravel	is brown ar	nd black fine hite fine sub	to coarse	iartz	-		
							×		unded ener		inte jine sub	nounaca q	101122.			
-							×							-		
-							×							-		
-							×									
-							×									
-	2 45					2.00	×									
- 3.00 -	3.45	SPI(C)	(22/16	,15,15,15)		3.00			Borehole	Complete	ed at 3.000	)m		- 3		
-																
-																
-														-		
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-																
-																
Borehole	Diameter	Casing F	Diameter			Chiselling	& Pits		, , ,	Water Strike	2S		Obs	э ervati	ons	
Depth (m)	Diamete	r Depth (m)	Diameter	Depth Top	To (m)	Duratio	n	Remarks	Strike at (m	Casing at (m)	Sealed at (m)	Time Mins	Rose to (n	n)	Rema	irks
3.00	115	1.00	115											No see	groundw pages	ater
				. ·												
Top (m)	Inst Base (m	allation	Dia (mm)	Remarks:	e recoverv	possible h	elow 3.0m	i depth due to ve	rv dense na	ture of stra	ta. Hole loc	ated inside	garage			
								add to VC	,				0			
L																

		<b>Ompass G</b> 13 Willow Par	<b>ieotech</b> k, Stoke Go	nical		Wi	ndov	vless Sa	ample	9		Project	ID		Borehol WS	e No. 6
		CV1	3 6EU eotechnica	al co uk			Bore	ehole L	og			21294	5	Coole	Sheet 1	of 1
Project Tit	tle:	ww.compassg	eotechnica	II.CO.UK	ocation:				Client:					Scale	e: Date Dr	1:25 illed
Chamber	s Bus D	Depot		С	hambers	Bus De	pot, Chu	rch Square,	Rose Bu	uilders				Dia C	04/11/2	2021
				В	ures, CO	8 5AB								Logg	ed:	TF
Easting:	-			N	orthing:				Level (m	AOD):				Chec	ked:	1
Dept	:h	Sample /	esting	t Pocult	Level	Depth	Logond	5	trata Details	Strata Doccri	ation			Depth	Grou <sub>Water</sub>	Backfill/
(mBG	iL) 1 00	Test ID	163	i nesun	(mAOD)	(mBGL)	Legend	Concrete - cor	ed out (0 11	m)				(mBGL)	Strike	Installation
0.15-0	1 25	PID				0.11	 XXXXXXXXX	MADE GROUN	ID: Brown ar	nd black slig	htly clavey	fine to coa	rse	-		
0.15 - 0	0.50	ES				0.15		angular to rou	nded chert g	gravel.				-		
-								MADE GROUN	ID: Soft to fir rare brown a	m greyish b and black fi	prown sligh ne to coarse	tly gravelly e angular to	silty	-		
-								rounded chert	and rare wh	nite fine sub	rounded o	quartz, oyst	er shell	-		
0.55 - 0	0.65	PID				0.52	~~~~	fragments, an Disturbed Gro	d tile.(0.37m und: Yellowi	ı) sh brown m	nottled grev	vish brown	slightly	-		
-							×	gravelly silty C	LAY. Gravel is	s very rare	brown and	black fine	to	-		
-							×	coarse angula	r to rounded	chert.(0.65	im)			-		
-							× · · · · ·							-		
- 1.00 - 1	1.45	SPT(C)	N=10 (	2/3,2,2,3)			×							- 1		
1.00 - 2	2.00	L				1 17	×							-		
- 1.20 - 1 1.25 - 1	1.25 1.35	PID ES				1.17		Medium dens	e orange bro ock fine to co	wn clayey f	ine to coar	se SAND an ed chert an	ld d rare	-		
1.35 - 1	1.70	D						white fine sub	rounded qu	artz GRAVE	L. [River Te	rrace Depo	sits].	_		
-							_	(0.57m)								
-														-		
-						1 74	 	- - 0						-		
						1.74		Dense yellowi	sh brown be	coming ligh	it yellowish	brown gra	velly			
								angular to rou	nded chert a	and rare wh	ite fine sub	rounded o	e Juartz.			
2.00 - 2	2.45	SPT(C)	N=33 (1	1/6,8,10,9)				[River Terrace	Deposits].(1	.26m)				- 2		
2.00-3	5.00	L												-		
-								v 4						-		
-								* *								
-								e						-		
2.55 - 2	2.75	ES												-		
- 2.65 - 2	2.75	PID												-		
-								- 9 4						_		
-								0 4						-		
- 3.00 - 3	3.45	SPT(C)	(24/17	I=73		3.00	11.19.21.21		Borehole	Complete	ed at 3.000	)m		- 3		
-			(34/1/	,10,13,13)										-		
-														-		
-														-		
-														-		
-														-		
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-														-		
-														-		
-														- 5		
Borehole	Diameter	Casing D	iameter	<b>D</b>	·	Chiselling	& Pits			Water Strike	S		Ob	servati	ions	
Depth (m) 3.00	Diamete 115	r Depth (m) 1.00	Diameter 115	Depth Top	To (m)	Duratio	n	Remarks	Strike at (m)	Casing at (m)	Sealed at (m)	Time Mins	Rose to (r	n) No	Rema groundw	arks vater
	0													see	epages	-
l	Inc	tallation		Remarks												
Top (m)	Base (m	) Type	Dia (mm)	No sample	e recovery	possible b	elow 3.0m	n depth due to ve	ery dense na	ture of strai	ta. Hole loc	ated inside	bus garag	je.		
					,				. –	_	-	-	5.0			
L																

	C	ompass G	eotech	nical		Wi	ndov	vless Sa	mple	•		Project	ID		Borehol	e No.
		3 Willow Par CV1	k, Stoke Go .3 6EU	olding			Bor		p.c	•		21294	5		WS Sheet 1	of 1
	wv	vw.compassg	eotechnica	al.co.uk			DUI		<u> </u>					Scale	e:	1:25
Project Title	e: Buc D	opot		Lo	ocation:		not Chu	rch Squara	Client:	uildorg					Date Dr 04/11/2	<b>illed</b> 2021
Chambers	bus D	εροι		В	ures. CO	8 5AB	pot, chu	ich square,	NOSE DU	lingers				Rig (	rew:	BC
Easting:				N	orthing:				Level (m	AOD):				Logg Chec	ed: ked:	IF
Depth	Sam	ples & In Situ 1	festing		Level	Depth		Str	ata Details						Grou	ndwater
(mBGL)		Test ID	Test	t Result	(mAOD)	(mBGL)	Legend	_	:	Strata Descrip	ption			(mBGL)	Strike	Installation
0.00 - 1.0	20	L PID				0.09		MADE GROUNI	d out.	vellow brick	( mortar sl	ate hurnt	brick	-		
0.10 - 0.3	30	ES						engineering bri	ck and chei	rt gravel inf	illed with g	reyish brow	vn	-		
0.35 - 0.4	45	PID				0.32		slightly clayey f	ine to coars	se sand. Pos	ssible ACM	sheet fragr	nents. /	-		
0.35 - 0.5	50	ES						MADE GROUNE	D: Firm yello	owish brow	n mottled o	dark greyisł	n brown	-		
-								and black slight chalk. lime mor	ly gravelly tar. rare flir	clay with ra nt. burnt sa	re sand poo It glazed ea	ckets. Grave rthenware	el is .(0.31m)	-		
0.65 - 0.7	75	ES				0.63		DISTURBED GR	OUND: Firm	n dark greyi	sh brown s	lightly grav	elly silty	_		
0.65 - 0.7	75	PID					×	CLAY.(0.52m)						-		
-							×							-		
1.00 - 1.4	45	SPT(C)	N=10 (	2/2,1,2,5)			×							- 1		
1.00 - 2.0	00	L				1.15	×							-		
-		_						Medium dense slightly clayey g	orange bro ravelly fine	to coarse S	ing light yel SAND., Grav	lowish brov vel is brown	wn 1 and	-		
1.30 - 1.7	70	D						black fine to co	arse angula	r to rounde	ed chert an	d rare whit	e fine	-		
-								sub rounded qu Terrace Deposit	iartz. Becor sl.(0.85m)	ning less cl	ayey with d	lepth. [Rive	r	-		
1.60 - 1.7	70	PID							,					-		
-								e e						-		
														-		
-														-		
2.00 - 2.4	45	SPT(C)	(9/10	N=57 14 15 18)		2.00	······································		Borehole	Complete	ed at 2.000	)m		- 2		
			(3) 20)	1,10,10,										-		
-														-		
-														-		
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-														-		
-														-		
-														-		
E														- 5	L	
Borehole Dia	ameter	Casing D	Diameter	Donth T-	To ()	Chiselling	& Pits	Pomarka	Strike at /-	Water Strike	s	Time Min	Ob:	servat	ions	arko
2.00	115	1.00	115	рерти тор	10 (m)	Duratio		nemarKS	Surike at (m	casing at (m)	sealed at (m)	rime iviins	nuse to (r	Nc	кета groundv	ater
														se	epages	
	Inst	allation	I	Remarks:	1				1	1	1	1	1			
Top (m) B	Base (m)	Туре	Dia (mm)	No sample	e recovery	possible b	elow 2.0m	depth due to ver	y dense na	ture of strat	ta. Hole loc	ated inside	bus garag	e.		

		Compass G	k, Stoke Golding			Wi	ndov	vless Sa	mple	9		Project	ID 5		Boreholo WS	e No. 8
	w	CV1: ww.compassg	3 6EU eotechnical.co.u	uk			Bore	ehole Lo	og			21294	J	Scale	Sheet 1	of 1 1:25
Project Tit	tle:			Lo	cation:				Client:						Date Dr	illed
Chamber	s Bus E	Depot		Cł	nambers	Bus De	pot, Chu	rch Square,	Rose Bu	ilders				Rig C	Crew:	JW
Fasting				BU	ares, COa	8 5AB			Level (m	ΔΟD).				Logg	ed:	TF
Lasting.	San	nples & In Situ T	esting		or triing.		1	St	rata Details	RODJ.				Cilee	Groui	ndwater
Dept (mBG	h L)	Sample / Test ID	Test Resu	lt	Level (mAOD)	Depth (mBGL)	Legend		5	Strata Descrip	otion			Depth (mBGL)	Water Strike	Backfill/ Installation
0.00 - 1	L.00	L			(11100)			MADE GROUN	D: Asphalt p	lanings.(0.4	40m)			-		
- 0.40 - C - 0.40 - C	).65 ).65	ES				0.40		DISTURBED GR CLAY. Gravel is rounded chert DISTURBED GR	OUND: Darl rare brown and rare sh OUND: Gree	k greyish br and black f ell fragmen yish brown	own slightl ine to coars ts. (0.26m) slightly gra	y gravelly s se angular t velly silty C	ilty to sub TLAY.	- - - -		
-								Gravel is rare b	rown and b	lack fine to	coarse ang	ular to rou	nded	-		
0.90 - 1	L.00	PID						chert. (0.52m)						-		
1.00 - 1	L.45	SPT(C)	N=12 (2/3,3	,3,3)										-1		
1.00 - 2	2.00	L														
- 1.20 - 1 - 1.40 - 1	L.30 L.80	ES D				1.18		Medium dense SAND. Gravel is chert and rare	yellowish b brown and white fine s	orown claye black fine ub roundeo	y very grav to coarse a d quartz. [R	elly fine to ngular to ro iver Terrace	coarse ounded e	-		
- - - 1.60 - 1	L.70	PID						Deposits].(0.63	im)					-		
-						1.81		Medium dense	yellowish b	orown grave	elly locally v	ery gravell	y owish	- - - -		
2.00 - 2 2.00 - 3	2.45 3.00	SPT(C) L	N=12 (8/3,3	,3,3)				brown silty fine coarse angular quartz. [River T	e sand pock to rounded ferrace Depo	ets. Gravel chert and osits].(1.19	is brown an rare white f m)	id black fin fine sub rou	e to unded	2		
2.30 - 2	2.65	D												-		
2.55 - 2	2.65	PID												-		
- 3.00 - 3	3.45	SPT(C)	N=61 (17/12,15,1	7,17)		3.00			Borehole	Complete	ed at 3.000	)m		3		
-														-		
-														- - 4 - -		
- - - - - - - - - - - - - - - - - - -																
Borehole [	Diameter	Casing D	iameter		-	Chiselling	& Pits		N	Water Strike	S		Ob	servati	ons	<u>.</u>
Depth (m)	Diamete	er Depth (m)	Diameter Dep	th Top	To (m)	Duratio	n	Remarks	Strike at (m)	Casing at (m)	Sealed at (m)	Time Mins	Rose to (	m)	Rema	irks vater
3.00	115	3.00	112											see	epages	ימוכו
	Ins	tallation	Rem	narks:	1	_1			1	1	1	1	1			
Top (m)	Base (m	) Type	Dia (mm) No s	ample	recovery	possible b	elow 3.0m	depth due to ve	ry dense na	ture of strat	ta.					

	Compass G	eotechnical		Wi	ndov	vless Sa	mple	2		Project	ID	I	Borehole WS	e No. Ə
	CV13	3 GEU			Bore	ehole Lo	g			21294	5		Sheet 1	of 1
Project Title:	www.compassge	eotechnical.co.uk	Location:				O Client:					Scale	: Date Dr	1:25
Chambers Bu	is Depot		Chambers	Bus Der	oot. Chu	rch Square.	Rose Bu	uilders					09/11/2	021
	1		Bures, CO8	8 5AB	,	, ,						Rig C	rew:	JW TE
Easting:			Northing:				Level (m	AOD):				Chec	ked:	11
Depth	Samples & In Situ Te Sample /	esting	Level	Depth		Stra	ita Details					Denth	Grour	ndwater Backfill/
(mBGL)	Test ID	Test Result	(mAOD)	(mBGL)	Legend		· Acobalt o	Strata Descrip	tion	of dork grou	ich	(mBGL)	Strike	Installation
. 0.00 - 1.00	L					brown silty sand	l with rare	red brick fr	agments a	nd brown fi	ne to	-		
025-035	PID			0.21		coarse chert gra	vel.(0.21m	) vich brown l	ocoming	lark brown	clightly	ł		
0.25 - 0.50	ES					gravelly slightly	sandy silt v	with rare bla	ack carbon	aceous spe	cs.	-		
-						Gravel is brown	and black t	fine to coarse	se angular	to rounded	l chert , r	-		
0.60-0.70	FS			0.58		ceramic and cin	der. (0.37m	1)	, aver 5120,		'' 	[		
0.60 - 0.70	PID					DISTURBED GRC	UND: Firm silty CLAY	n dark yellov Gravel is rar	wish browr e brown ai	n slightly sa nd black fin	ndy ie to	-		
0.05 0.00	ND			0.82		coarse sub angu	lar to roun	ided chert a	nd rare wh	nite fine sub	)	ļ		
0.85 - 0.90	PID					\rounded quartz. Medium dense	(0.24m) dark vellow	vish brown	slightly gra	vellv becon	/			
- 1.00 - 1.45	SPT(C)	N=9 (3/2,2,2,3	)			gravelly slightly	silty fine to	o medium o	ccasionally	coarse SAI	ND.	- 1		
1.00 - 1.50	L					Gravel is brown and rare white f	and black t ine sub rou	fine to coar: unded quart	se angular tz. [River Te	to rounded errace Depo	l chert osits].	-		
						(1.18m)	-1			CLAY and d	-			
-						yellowish bro	ckets of da vn gravelly	SAND.	brown silty	CLAY and do	ark	-		
-												-		
1.60 - 1.70	ES											-		
[ 1.60 - 1.70	PID											[		
-						Becoming ver	y dense					-		
200.245		N-F4		2.00								-		
2.00 - 2.45	L SPI(C)	(13/15,13,13,13	3)	2.00			Borehole	Complete	d at 2.000	)m				
-												-		
-												-		
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Borehole Diama	eter Cocing Di	iameter		Chicolling	& Pitc			Nator Strike	c	1	Ob	5 5	ons	
Depth (m) Diam	neter Depth (m)	Diameter Depth T	op To (m)	Duration	1	Remarks	Strike at (m)	Casing at (m)	Sealed at (m)	Time Mins	Rose to (r	n)	Rema	rks
2.00 12	15 1.00	115										No see	groundw pages	ater
Top (m) Base	Installation (m) Type	Dia (mm) No com	s: nle recoveru	noscihla b	elow 2 0m	denth due to von	/ dence not	ture of strat	a					
	., ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		pic recovery p	possible D	CIO W Z.UIII	acptin due to very	r ucrise lidi	une on Stidl	u.					

		ompass ( .3 Willow Par	Geotech	nical olding		Wi	ndov	vless Sa	ample	9		Project	ID 5	l	Borehole WS1	e No. 0
Project Ti	tle:	CV1 ww.compasse	13 6EU geotechnica	Il.co.uk	ocation:	Buc De-	Bore	ehole Lo	Client:	ilders		21234		Scale	Sheet 1 : Date Dr 09/11/2	of 1 1:25 illed 021
Chamber	S DUS L	epot		Bu	ures, CO	8 5AB	JOL, CHU	ich square,	NUSE DI	muers				Rig C Logg	rew: ed:	JW TF
Easting:		ular 0 in City	To other a	N	orthing:				Level (m	AOD):				Chec	ked:	
Dept	:h	Sample /	Test	Result	Level	Depth	Legend	51		Strata Descri	otion			Depth	Water	Backfill/
(mBG - 0.00 - 1 - - - - 0.35 - 0	1.00 0.70	L ES			(mAOD)	(mBGL) 0.32		MADE GROUN	ID: Asphalt p ID: Red brick	lanings.(0.	32m) lock with a	matrix of g	reyish	-	June	
0.35 - ( - - - - - - - - - - - - - - - - - -	0.70 0.80	PID				0.75		brown silty sar DISTURBED GF	nd.(0.43m) ROUND: Dar	c greyish bı	own slightl	y gravelly s	lightly	-		
- 1.00 - 2 1.00 - 2 1.10 - 2 1.10 - 2	1.45 2.00 1.15 1.15	SPT(C) L ES PID	N=29 (	9/6,8,8,7)		1.05		silty slightly sa and black fine fine sub round Dense dark yel slightly silty fir gravel. Gravel i chert and rare Deposits].(1.4:	ndy CLAY wi to coarse ar led quartz.(C llowish brow he to coarse is brown and white fine s 3m)	th rare dec gular to ro J.30m) /n gravelly SAND with d black fine ub rounded	ayed roots. unded cher becoming v occasional to coarse a d quartz. [R	Gravel is b t and rare of ery gravelly pockets of ngular to r iver Terrace	rown white y sandy ounded e			
- 2.00 - 2 2.00 - 2	2.45 3.00 2.10	SPT(C) L PID	N=30 (1	2/6,7,7,10)										- 2		
- 2.50 - 3 - 3.00 - 3 - 3.00 - 3	3.00 3.45 3.05 4.00	D SPT(C) PID L	N (29/12,	l=48 12,13,11)	2.48 Dense pale yellowish brown fine to coarse SAND and black fine to coarse angular to rounded chert and rar sub rounded quartz GRAVEL. [River Terrace Deposits]						and browr d rare whit osits].(0.85	n and e fine m)	- - - - - - - - - - - - - - - - - - -			
3.70 - 4	4.00	ES				3.33 3.63		Dense pale yel very rare fine b Very dense bro	llowish brow brown chert own white a	n slightly s gravel. [Riv nd black sa	ilty fine to r ver Terrace ndy fine to	medium SA Deposits].( coarse ang	ND with 0.30m) ular to	-		
-								Sand is pale ye Deposits].(0.3	ellowish brov 7m)	vn fine to c	oarse. [Rive	er Terrace	V L L.	-		
4.00 - 4	4.45	SPT(C)	N (17/13,	I=51 ,12,13,13)		4.00	<u> (1878)</u>		Borehole	Complete	ed at 4.000	)m		- - - - - - - - - - - - -		
- - - Borehole	Diameter	Casing	Diameter			Chiselling	& Pits			Water Strike	25		Obs	- - - - - - - 5 servati	ons	
Depth (m) 4.00	Diameter 115	r Depth (m) 1.00	Diameter 115	Depth Top	To (m)	Duration	n	Remarks	Strike at (m	Casing at (m)	Sealed at (m)	Time Mins	Rose to (n	n) No see	Rema groundw pages	rks ater
Top (m)	Base (m)	anauon   Type	Dia (mm)	No sample	recovery	possible b	elow 4.0m	depth due to ve	ery dense na	ture of stra	ta.					

	Compass C 13 Willow Par CV1	Geotechnical k, Stoke Golding .3 6EU		Wi	ndov	vless Sa	ample	9		Project 21294	ID 5		Borehold WS1 Sheet 1	<b>e No.</b> <b>1</b> of 1
Project Title: Chambers Bu	www.compasse us Depot	geotechnical.co.uk	Location: Chambers Bures, CO	s Bus De 8 5AB	pot, Chu	rch Square,	Client: Rose Bu	ilders				Scale Rig C Logge	Date Dr 09/11/2 rew: ed:	1:25 illed :021 JW TF
Easting:	Samples & In Situ	Testing	Northing:		<u>.                                    </u>	S	<b>Level (m</b> trata Details	AUD):				Chec	Ked: Groui	ndwater
Depth (mBGL)	Sample / Test ID	Test Result	Level (mAOD)	Depth (mBGL)	Legend		S	itrata Descri	otion			Depth (mBGL)	Water Strike	Backfill/ Installation
0.20 - 0.30	PID			0.20		MADE GROUN brown clay.(0.	ea out.(0.20 ID: Brick, con 94m)	m) Icrete and I	mortar infil	led with gr	eyish	- - - - -		
- - - - 1.00 - 1.45	SPT(C)	N=8 (0/1,1,3,3	)											• •
1.00 - 2.00 1.15 - 1.25 1.15 - 1.25	L ES PID			1.14		DISTURBED G	ROUND: Very sandy slight	soft yellov ly gravelly	vish brown CLAY. Grave	mottled gi I is brown	eyish and	-		
1.40 - 1.75	D			1.38		Medium dens angular to rou GRAVEL infille	oarse angula quartz.(0.24n e becoming c inded chert a d with yellow rrace Deposit	r to rounde n) dense brow nd rare wh vish brown cs].(0.62m)	n and blac ite fine sub slightly sar	k fine to cc o rounded ndy slightly	e fine arse quartz gravelly	-		
- - 2.00 - 2.45	SPT(C)	N=74 (20/17,17,20,20	0)	2.00		_ - - - -	Borehole	Complete	ed at 2.000	)m		2		······································
Borehole Diam Depth (m) Diar 2.00 1	leter Casing I neter Depth (m) 15 1.00	Diameter Diameter Depth T 115		Chiselling Duratio	g & Pits	Remarks	Strike at (m)	Vater Strike Casing at (m)	s Sealed at (m)	Time Mins	Ob: Rose to (r	- - - - - - - - - - - - - - - - - - -	ons Rema groundw spages	rks rater
	Installation	Remark	<b>(5:</b>	neerikt		douth du 1				atadia 11				
0.00 1 1.00 2	.00 PLAIN .00 SLOTTED	50 50 50	pie recovery	possible b	elow 2.0m	depth due to v	ery dense nat	ure of stra	ta. Hole loc	ated inside	bus garag	;e.		

	C	ompass G	ieotechn	ical		W/i	ndov	vless Sa	amnle	•		Project	ID	I	Borehole	e No.
		.3 Willow Par CV1	k, Stoke Golo 3 6EU	ding			Bor	aholo L	pic 00	•		21294	5		WS1	2 of 1
	wv	vw.compassg	eotechnical.	co.uk	ontine :		DUI		UK UK					Scale	Date D	1:25
Chamber	s Bus D	epot		CI	hambers	Bus De	pot, Chu	rch Square,	Rose Bu	ilders					09/11/2	021
				В	ures, CO	8 5AB								Kig C	rew: ed:	JW TF
Easting:	Sam	ples & In Situ T	esting	N	orthing:			Si	Level (m trata Details	AOD):				Chec	ked: Grour	ndwater
Dept (mBG	h L)	Sample / Test ID	Test F	Result	Level (mAOD)	Depth (mBGL)	Legend			Strata Descrip	otion			Depth (mBGL)	Water Strike	Backfill/ Installation
0.00 - 1		L						Concrete - cor	ed out.(0.17	m)				-		
0.20 - 1	L.00 L.00	ES PID				0.17		MADE GROUN pottery fragme occasional che slightly sandy	ID: Crushed r ents, burnt b ert and quart clay. (1.11m)	red brick, m rick and wo z gravel infi	oortar, cind ood fibre, fl illed with g	er, clinker, j lint cobbles reyish brov	blaster, and vn			
1.00 - 1 1.00 - 2	L.45 2.00	SPT(C) L	N=4 (1/	1,1,1,1)		1.28								- 		
- 2.00 - 2	2.45	es PID SPT(C)	N=4 (3/	1,2,1,0)				Loose to medi slightly gravell brown and bla and rare white (1.12m)	um dense ye y slightly clay ick fine to co e fine sub rou	llowish bro yey fine to i arse sub an unded quari	wn mottler medium SA Igular to su tz. [River Te	d orange bi ND. Gravel b rounded errace Depo	own is chert osits].	- 2		
2.00 - 3	3.00 2.50	L PID				2.40		Medium dens	e becoming o	dense light	vellowish h	arown sligh	tlv	-		
								gravelly fine S to rounded ch Terrace Depos	AND. Gravel i ert and rare its].(0.60m)	white fine s	id black fin sub rounde	e to coarse d quartz. [l	angular River	-		
- 3.00 - 3 	3.45	SPT(C)	N= (10/9,9	42 ,11,13)		3.00			Borehole	Complete	d at 3.000	0m		- 3		
														- 4		
Borehole I Depth (m)	Diameter Diameter	Casing D Depth (m)	iameter Diameter	Depth Top	To (m)	Chiselling Duratio	; & Pits n	Remarks	Strike at (m)	Vater Strike Casing at (m)	S Sealed at (m)	Time Mins	Ob Rose to (	servati m)	ons Rema	rks
3.00	115	1.00	115		,					0				No	groundw	ater
														see	:haße2	
Top (m)	Inst Base (m)	allation Type	F Dia (mm)	Remarks:	recovery	nossible b	elow 3.0m	denth due to v	ory dense not	ture of strat	a Hole loo	ated incide	hus gara	<b>1</b> 0		
F X 77	()			10 sample	, recovery	שועונייסק		i depair due to Ve	ar y dense fidt	Larc OI Stidt		accumside	Ses Raid			

Note:         Note:         Description         Description <thdescription< th=""> <thdescription< th=""> <thdescript< th=""><th></th><th>7 (</th><th>Compass G</th><th>ieotech</th><th>nical</th><th></th><th>Wi</th><th>ndov</th><th>vless S</th><th>ample</th><th>9</th><th></th><th>Project</th><th>ID</th><th>I</th><th>Borehol WS1</th><th>e No. 1<b>3</b></th></thdescript<></thdescription<></thdescription<>		7 (	Compass G	ieotech	nical		Wi	ndov	vless S	ample	9		Project	ID	I	Borehol WS1	e No. 1 <b>3</b>	
Original Times         Origin Times         Original Times         Original		J	CV1	3 6EU				Bore	ehole L	og			21294	5		Sheet 1	of 1	
Chambers Bus Depol         Chambers Bus Depol         Chamber Sugare, New Construction         Role Fullylers         Role Fullylers <throle fullylers<="" th=""><th>Project Ti</th><th>tle:</th><th>ww.compassg</th><th>eotecnnica</th><th>II.CO.UK</th><th>ocation:</th><th></th><th></th><th></th><th>Client:</th><th></th><th></th><th></th><th></th><th>Scale</th><th>: Date Dr</th><th>1:25 illed</th></throle>	Project Ti	tle:	ww.compassg	eotecnnica	II.CO.UK	ocation:				Client:					Scale	: Date Dr	1:25 illed	
Survey: Cols 5.40         Single Colspan="2"          Single Colspan="2"          Single Colspan="2"         Single Colspan="2"         Single Colspan="2" <th colspan<="" th=""><th>Chamber</th><th>rs Bus I</th><th>Depot</th><th></th><th>С</th><th>hambers</th><th>Bus De</th><th>pot, Chu</th><th>rch Square,</th><th>Rose Bu</th><th>uilders</th><th></th><th></th><th></th><th>Rig (</th><th>09/11/2</th><th>2021</th></th>	<th>Chamber</th> <th>rs Bus I</th> <th>Depot</th> <th></th> <th>С</th> <th>hambers</th> <th>Bus De</th> <th>pot, Chu</th> <th>rch Square,</th> <th>Rose Bu</th> <th>uilders</th> <th></th> <th></th> <th></th> <th>Rig (</th> <th>09/11/2</th> <th>2021</th>	Chamber	rs Bus I	Depot		С	hambers	Bus De	pot, Chu	rch Square,	Rose Bu	uilders				Rig (	09/11/2	2021
Catholic         Under Junct         December         Under Junct         Opposite					В	ures, CO	8 5AB								Logg	ed:	TF	
Note: 10	Easting:	Sar	nples & In Situ T	esting	N	orthing:				Level (m Strata Details	AOD):				Chec	ked: Grou	ndwater	
4.00         1.00         1.01         0.01 <th< td=""><td>Dept</td><td>th</td><td>Sample /</td><td>Test</td><td>Result</td><td>Level</td><td>Depth</td><td>Legend</td><td></td><td></td><td>Strata Descri</td><td>ption</td><td></td><td></td><td>Depth (mBGL)</td><td>Water Strike</td><td>Backfill/</td></th<>	Dept	th	Sample /	Test	Result	Level	Depth	Legend			Strata Descri	ption			Depth (mBGL)	Water Strike	Backfill/	
0.06 - 1.00     CS     0.01 <td>- 0.00 - 1</td> <td>1.00</td> <td>L</td> <td></td> <td></td> <td>(MAOD)</td> <td>(IIIBGL)</td> <td></td> <td>Concrete - co</td> <td>red out.(0.18</td> <td>m)</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>	- 0.00 - 1	1.00	L			(MAOD)	(IIIBGL)		Concrete - co	red out.(0.18	m)				-			
Available declarable for declarable declarable for declara							0.18											
0.03 - 1.00     FA     Add CACHARLE have specific formal signify parely lightly upper lightly	-								MADE GROU	ND: Crushed	red brick ar	nd concrete	.(0.18m)		-			
0.40 - 1.00     PD     Image: Second	0.40 - 1	1.00	ES				0.36		MADE GROU	ND: Dark grey	/ish brown	slightly gra	velly slightl	y sandy	ł			
1.00 - 2.00       L       Image: state in the set of the set	0.40 - 1	1.00	PID						clay. Gravel is	rare fine to c	coarse red b	orick, morta	ir, coal frag	ments, d rare	_			
- 1.00 - 2.00     1.     1.35     - 4     - 1	-								white fine sul	b rounded qu	artz, cinde	r, tile and a	sh.(0.99m)	u fuic	-			
- 1.00 - 2.00       L       -       <	-														-			
- 100 - 2.00     L     - 1     - 1       1.15 - 1.40     ES PID 1.50 - 2.00     D     I     Image: Set in the set in t	-														_			
1.35 - 1.40     55     1.35 - 1.40     P1D     P1	1.00 - 2	2.00	L												- 1			
1.35       1.40 135       1.40 135       1.5 135       1.40 135       1.5 135       1.40 135       1.5 135       1.5 15	-																	
135: 140       PD	-														[			
1.35 · 1.40       PID         1.55 · 1.00       D         D       D         1.55 · 2.00       D         L       D         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L         D       L       L         D       L       L         D       L       L         D       L       L       L         D       L       L       L       L         D       L       L       L       L       L         D       L       L       L       L       L       L         D       L       L       L       L       L       L       L       L       L <td>- 1.35 - 1</td> <td>1.40</td> <td>ES</td> <td></td> <td></td> <td></td> <td>1.35</td> <td></td> <td>Drown and bl</td> <td>aal fina ta aa</td> <td>area angul</td> <td></td> <td>ad abort an</td> <td>drara</td> <td>-</td> <td></td> <td></td>	- 1.35 - 1	1.40	ES				1.35		Drown and bl	aal fina ta aa	area angul		ad abort an	drara	-			
1.00     1.00     1.0<	1.35 - 1	1.40	PID						white fine sul	ack fine to co b rounded qu	artz GRAVE	EL infilled w	ith yellowis	id rare sh	-			
2.00 - 3.00     1     Image: Section 10 and	1.50	2.00	D						brown mottle	d orange bro	wn and lig	ht yellowish	brown slig	shtly	[			
2.00 - 3.00       L       - 2       -2	-										Jeposits].(1				-			
2.00 - 3.00       L <td< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>- - -</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>	-								- - -						-			
2.00 - 3.00       L       - <td< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>- - -</td><td></td><td></td><td></td><td></td><td></td><td>[</td><td></td><td></td></td<>	-								- - -						[			
2.65 - 2.70       PID       Image: Second Se	- 2.00 - 3	3.00	L						- - -						- 2			
2.65 - 2.70       PID       PID       2.61       PID	-								- - -						-			
2.65 - 2.70     PID     Image: Second	-														[			
2.65 - 2.70       PD       PD       2.61       Image: Control Sub Contr	-														-			
2.65 - 2.70       PID       PID       2.61       Image: Construction of the con	-														_			
Image: Second	2.65 - 2	2.70	PID				2.61		Yellowish bro	wn and light	vellowish b	rown slight	lv gravellv	fine to	-			
Image: Solution of Sub Transe Deposition (0.39m)       3         Solution of Sub Transe Deposition (0.39m)       3         Borehole Completed at 3.000m       3         Image: Solution of Sub Transe Deposition (0.39m)       -4         Image: Solution of Sub Tr	-								coarse SAND.	Gravel is bro	wn and bla	ick fine to c	parse sub a	ngular	-			
Borehole Completed at 3.000       3         Borehole Completed at 3.000m       3         Borehole Completed at 3.000m       4         -       -         Borehole Diameter       Casing Diameter         Casing Diameter       Cosing Diameter         Depth (m)       Diameter         Depth (m)       Diameter         Depth (m)       Diameter         Top (m)       115         Top (m)       Base (m)         Top (m)       Base (m)         Top (m)       Base (m)         Top (m)       Some to suppose to suppose to below 3.0m depth due to very dense nature of strata.	-								River Terrace	ed chert and Deposits].(0	.39m)	nne sub rou	inded quar	tz.				
Borehole Completed at 3.000m	-						3.00		- 		0 1 1				- 3			
Borehole Diameter       Casing Diameter       Casing Diameter       Casing Diameter       Casing Diameter       Casing Diameter       Cosing Diameter       Cosing Diameter       Cosing Diameter       Cosing Diameter       Cosing Diameter       Cosing Diameter       Depth (m)       Diameter       Diameter       Depth (m)       Diameter       Diameter       Diameter       Diameter       Diameter       Diameter       Diameter       Dia	-									Borehole	Complete	ed at 3.000	Jm		-			
Borchole Diameter     Casing Jumeter     Ca															[			
Borehole Diameter       Casing Jumeter       Casing Jumeter       Chicelling & Pits       Water Strikes       Observations         Borehole Diameter       Casing Jumeter       Depth (m)       Diameter       Depth (m)       Diameter       Depth (m)       Diameter       Chicelling & Pits       Water Strikes       Observations         Depth (m)       Diameter       Depth (m)       Diameter       Depth (m)       Duration       Remarks       Strike at (m) Gaing at (m) Sealed at (m)       Remarks       No groundwater seepages encountered         3.00       115       1.00       115       Remarks       Strike at (m) Casing at (m)       Sealed at (m)       Remarks       No groundwater seepages encountered         Top (m)       Base (m)       Type       Diameter       Perform       No sampler ecovery possible below 3.0m depth due to very dense nature of strata.       No groundwater seepages         Top (m)       Base (m)       Type       Diametric       Remarks:       No groundwater seepages         Base (m)       Type       No sampler ecovery possible below 3.0m depth due to very dense nature of strata.       No groundwater seepages	-														-			
Sorehole Diameter       Casing Jumeter       Certified Remarks       Strike at (m) Casing at (m) Sealed at (m) Time Mins       Rose to (m) Remarks         Sorehole Diameter       Casing Jumeter       Depth (m) Diameter       To (m) Diameter       No ample recovery possible below 3.0m depth due to very dense nature of strata.         Top (m)       Base (m) Type       Dia (mm)       No sample recovery possible below 3.0m depth due to very dense nature of strata.	-														-			
Image: Serie of the serie	-														[			
Borehole Diameter       Casing Diameter       Depth (m)       No remondwater       seepages       encoundwater       seepages       encoundwater       seepages       encoundwater       seepages       encountered       No remondwater       seepages       encountered       No remondwat	-														-			
Borehole       Casing Diameter       Cepth (m)       Diameter       Depth (m)       Diameter       Sect (m)       Remarks       Strike at (m)       Casing at (m)       Socie (m)       Remarks       Sece (m)       Remarks       Sece (m)       Remarks       Sece (m)       Remarks       Sece (m)       No convolvater	-														-			
Boreholi Vine Casing Jumerer Visual Vine Visual Vi	-														[			
Boreho-Limeter       Casing 2-meter       Visual of the second of	-														- 4			
$ \frac{1}{100} 1$	-														-			
$ \frac{1}{100} \ 1$	-														[			
Image: Second	-														-			
Image: series of the series															-			
$ \frac{1}{100} \ 1$	-														[			
Image: Second Secon	-														-			
Image: Problem in the second of the seco															[			
Borehole Diameter     Casing Diameter     Depth (m)     Diameter     Diameter     Diameter     No groundwater     Seepages     No g	-														- 5			
Depth (m)       Diameter       Depth (m)       Diameter       Depth Top       To (m)       Duration       Remarks       Strike at (m)       Casing at (m)       Sealed at (m)       Time Mins       Rose to (m)       Remarks         3.00       115       1.00       115       1.00       115       Image: Comparison of the compar	Borehole	Diamete	r Casing D	iameter		I	L Chiselling	g & Pits	L		Water Strike	es		Ob	servati	ons		
Store     Liss     Liss     Liss     Liss     No groundwater seepages encountered       Image: Installation     Image:	Depth (m)	Diamete	er Depth (m)	Diameter	Depth Top	To (m)	Duratio	n	Remarks	Strike at (m)	Casing at (m)	Sealed at (m)	Time Mins	Rose to (r	n)	Rema	arks vater	
Installation     Remarks:       Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 3.0m depth due to very dense nature of strata.	3.00	112	1.00	112											see	epages	1010	
Installation     Remarks:       Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 3.0m depth due to very dense nature of strata.															ene	countere	d	
Top (m)     Base (m)     Type     Dia (mm)       No sample recovery possible below 3.0m depth due to very dense nature of strata.	l	Inc	tallation		Remarks													
	Top (m)	Base (m	n) Type	Dia (mm)	No sample	e recovery	possible b	elow 3.0m	n depth due to v	ery dense na	ture of stra	ta.						
						,												
					]													

	Compass Ge	otechnica	I							Project I	D		Trial Pit	No.
	13 Willow Park,	Stoke Golding				Tria	l Pit Log	3		21294	5		TP1	
	CV13 www.compassgeo	bEU otechnical.co.u	ık					-			-	Scale	Sheet 1	ot 1 1:25
Project Title:			Loc	cation:				Client:	I			D	ate Exca	vated
Chambers Bus	Depot		Ch	ambers	Bus De	pot, Chu	rch Square,	Rose Builder	S				25/02/2	022
Easting:			No	rthing:	0 JAD			Level (mAOD)	:			Logge Chec	ed: ked:	TF RF
Sa	mples & In Situ Tes	ting		Level	Denth		Stra	ata Details					Grour	ndwater
(mBGL)	Test ID	Test Resul	t	(mAOD)	(mBGL)	Legend		Strata D	escription			(mBGL)	Strike	Installation
0.30 - 0.40	ES				0.28		MADE GROUND cobble size with	: Brick and concr rare glass and pl	ete fragments o lastic. (0.29m)	f fine grave	l to	-		
0.70 - 0.80	ES				0.57		Firm yellowish t	rown slightly gra	velly silty CLAY. agular to rounde	Gravel is brı d chert.(0.8	ɔwn, i6m)	- 1		
					1.43		Medium dense SAND. Gravel is rounded chert v rounded quartz.	brown slightly sil brown, white an vith occasional w (0.95m)	ty slightly grave d black fine to c hite fine to coar	lly fine to co oarse angul rse sub angu	arse ar to Jar to			
					2.38		Dense light yello and black fine to occasional white [Biver Terrace D	owish brown fine o coarse angular i e fine to coarse so enositel 10 6m)	to coarse SAND to rounded cher ub angular to ro	and brown t GRAVEL w unded quar	ı, white vith rtz.	- 2		
												- 3		
					3.44			Trial Pit Comp	leted at 3.440	m				2///22///2
Pit Length (m)	Dimensions Pit Width	n (m) Pit	Stabilit	Pit S y Shor	tability and	d Comment F	s Remarks	Water Strike at (m)	Strikes Sealed at (m)	Time Mins	Ob Rose to (i	servation m)	ons Rema	rks
2.20	0.60	) <u>(()</u>	Stable	y snor	None		ACTION NO	Suike at (M)	שמוצע מג (M)			No see enc	groundw pages counterec	ater
Plant Used: JCB 3CX		Rem	arks:											

Compass Geotechn	cal						Project ID			Trial Pit	No.
13 Willow Park, Stoke Gold	ing		Tria	l Pit Log	3		212945	-		TP2	of 1
www.compassgeotechnical.	:o.uk								Scale	:	1:25
Project Title: Chambers Bus Depot	Location:		oot Chu	rch Square	Client: Bose Builder	c			Da	ate Exca	vated
	Bures, CO	8 5AB	pot, chu	ich square,	nose builder.	5		-		25/02/20	U22
Easting:	Northing:				Level (mAOD)	:			Check	ked:	RF
Samples & In Situ Testing Depth Sample / Test E	Level	Depth	Logond	Stra	ata Details	locarintian			Depth	Groun <sub>Water</sub>	dwater <sub>Backfill/</sub>
(mBGL) Test ID	(mAOD)	(mBGL)	regenu	MADE GROUND	: Asphalt planing	s.(0.08m)			(mBGL)	Strike	Installation
0.20 - 0.30 ES		0.08		MADE GROUND sandy clay. Grav angular to round concrete and bri	: Dark greyish brd el is black, browr ded chert with oc ick of fine gravel	own and black si and white fine ccasional asphali to cobble size.(C	lightly gravelly to coarse sub t planings, 1.57m)	y			
0.70 - 0.80 ES		0.65		Soft yellowish bi brown, white an (0.81m)	rown slightly grav	velly silty CLAY. C barse angular to	ravel is rare rounded cher	rt.	- 1		
		1.40		Medium dense s Gravel is brown, chert with occas quartz.(0.34m) Dense light yellc and black fine to occasional white [River Terrace D	yellowish brown ; white and black sional white fine f owish brown fine o coarse angular f e fine to coarse si eposits](1.20m)	gravelly fine to c fine to coarse a to coarse sub an to coarse SAND to rounded cher ub angular to ro	coarse SAND. ngular to rour gular to roun and brown, v t GRAVEL witl unded quartz	nded ded h	2		
		3.00			Trial Pit Comp	leted at 3.000	n		- 3		
Pit Dimensions	Dia C		Comment	e 1	Wakes	Strikes		Oha	- 4 	2005	
Pit Length (m) Pit Width (m)	Pit Stability Shore	ring Used	Comment	s Remarks	Water S Strike at (m)	Sealed at (m)	Time Mins Ro	ose to (m	ervation)	Remar	rks
3.00     0.60       Plant Used:     F       JCB 3CX     F	Stable I	None						. (*)	No see enc	groundwa pages countered	ater

	Compass Ge	eotechni	cal							Project ID	)		Trial Pit	No.
	13 Willow Park,	Stoke Gold	ing			Tria	l Pit Log	g		212945			TP3	6.4
	CV13 www.compassgee	6EU otechnical.c	o.uk							212343		Scale	Sheet 1 o	of 1 1:25
Project Title:			Lo	cation:				Client:	I			Da	ate Exca	vated
Chambers Bus	5 Depot		Ch	ambers	Bus Dep	pot, Chu	rch Square,	Rose Builders	S				25/02/20	022
Fasting:			No	orthing:	5 JAD			Level (mAOD)	:			Logge Checl	ed: 	TF RF
Dorth	iamples & In Situ Tes	sting		<b>D</b>	Donth	1	Stra	ta Details					Groun	dwater
(mBGL)	Test ID	Test Re	esult	(mAOD)	(mBGL)	Legend	MADE COST	Strata D	escription			Depth (mBGL)	Water Strike	Backfill/ Installation
(mBGL) 0.10 - 0.20 0.20 - 0.30	ES ES	lest Re	esuit	(mAOD)	0.20 2.50		MADE GROUND clay. Gravel is br rounded chert w (0.20m) MADE GROUND electrical cable, decaying batteri gravelly clayey si <i>Hole continua</i>	Strata D Scrub over very own, black and w ith occasional br Consisting of ru metal, fabric, hyc es with occasiona and and ACM.(2.)	rescription dark grey/black white fine to coa rick and concret bber matting, w draulic pipes, tir al pockets of yel 30m)	m	illy o sub		Srike	
Pit	Dimensions			Pit St	ability and	Comment	s	Water S	Strikes	-	Obs	ervatio	ons _	
Pit Length (m) 11.00 Plant Used:	Pit Widtl 0.60	h (m) ) R	Pit Stabilit Unstable emarks:	e N	ing Used Ione	F	Remarks	Strike at (m)	Sealed at (m)	Time Mins F	Rose to (n	n) No see enc	Remar groundwa pages ountered	ater
JCB 3CX														

	Compass Ge	eotechnical			_				Project	ID		Trial Pit	No.
	13 Willow Park, CV13	Stoke Golding 6EU			Tria	l Pit Lo	g		21294	5		IP4 Sheet 1	of 1
Proiect Title:	www.compassgee	otechnical.co.uk	Location:				Client:				Scale D	: ate Exca	1:10 vated
Chambers Bu	is Depot		Chambers	s Bus De	pot, Chu	rch Square,	Rose Builder	S				25/02/2	022
Fasting:			Bures, CO	8 5AB			Level (mAOD)	•			Logg	ed: ked:	TF
Danth	Samples & In Situ Tes	sting	lovel	Donth		Str	rata Details	•			chec	Grour	ndwater
(mBGL)	Test ID	Test Result	(mAOD)	(mBGL)	Legend		Strata D	escription			Depth (mBGL)	Water Strike	Backfill/ Installation
-				0.03		MADE GROUNI with occasional clayey sand.(0.:	2 Soprati(0.0311) 2 Concrete and b I plastic, timber a 32m)	rick of fine grave nd metal in a ye	el to cobble llowish bro	size - wn - -			
-				0.35		terminated	o encountereu (olu	-	nn byr - thu	in pit			
				0.35			Trial Pit Comp	leted at 0.350	m				
											- 1		
-										-			
-										-			
-										-			
-										F			
F										F	- 2		
P Dit Longth /	it Dimensions	h (m) Dit Ct	Pit S	tability an	d Comment	S Remarks	Water Strike at (m)	Strikes	Timo Min-	Obse Roso to /rr	ervati	ons	rks
3.00	2.50	D Sta	ability Shore	None		Nermarks	Strike at (m)	sealed at (m)	IIME MINS	RUSE TO (M	No see end	groundw pages countered	rater
Plant Used: JCB 3CX		Remar	ks:										

$\square$	Compass Ge	eotechnical							Project ID			Trial Pit	No.
	13 Willow Park,	Stoke Golding			Tria	l Pit Log	ד		212045			TP5	
	CV13	6EU otechnical co.uk							212945		Casla	Sheet 1	of 1
Project Title:	www.compassger	Diechnical.co.uk	Location				Client:				Scale D	: ate Exca	1:25 vated
Chambers Bus	Depot		Chambe	rs Bus De	pot, Chu	rch Square,	Rose Builder	S				25/02/2	022
			Bures, C	08 5AB						ŀ	Logg	ed:	TF
Easting:	amples 9 In City Tec	ting	Northing	:		S++	Level (mAOD)	:			Chec	ked:	RF
Depth	Sample /	Test Result	Level	Depth	Legend	500	Strata D	escription			Depth	Water	Backfill/
(mBGL) -	Test ID		(mAOD	) (mBGL) 0.06		MADE GROUND	: Asphalt planing	s(0.06m)			(mbor)	Strike	
0.30 - 0.40	ES					MADE GROUND coarse angular t gravel to boulde cable, fabric and clay.(2.39m)	: Consisting of bl o sub rounded cl er size with occas I plastic in occasi	ack brown and v nert with concre ional asphalt, m onally infilled w	white fine to and brick o letal, electrical ith greyish bro	f fine			
- 1.00 - 1.10	ES										- 1		
				2.45		Hole continua	Ily collapsed durin	g excavation.	m		- 2		
											3		
											- 4		
-										ŀ	- 5		
Pit	Dimensions		Pit	Stability an	d Comment	s	Water	Strikes		Obs	ervati	ons	l
Pit Length (m)	Pit Widtl	h (m) Pit St	ability Sh	oring Used	F	Remarks	Strike at (m)	Sealed at (m)	Time Mins Ro	ose to (m	1) N-	Remai	rks
Plant Used: JCB 3CX	0.60	Remar	ks:	NONE							end	groundwa pages countered	ater



Appendix (iv) Groundwater Monitoring Results



August 2022

#### Groundwater Monitoring

SITE	Former Cha	mbers Bus (	Garage, Bur	es
Date	Position	Depth to Water (m bgl)	Total Depth (m bgl)	Comments
14.02.22	BHA	3.12	5.47	
	BHB	3.18	5.87	
	внс	3.15	5.79	
	BHD	3.16	5.90	
	WS2	3.27	3.49	
23.02.22	BHA	2.79	5.47	
	BHB	2.85	5.84	
	внс	2.83	5.78	
	BHD	2.84	5.90	
04.03.22	BHA	2.76	5.50	
	BHB	2.83	5.74	
	внс	2.80	5.71	
	BHD	2.81	5.89	
	WS2	2.91	3.48	
06.07.22	BHA	3.53	5.56	
	BHB	3.62	5.81	
	внс	3.59	5.76	
	BHD	3.61	5.96	
	WS2	-	3.54	40mm silt in base
01.08.22	BHE	4.67	6.44	
	BHG	3.89	6.95	
11.08.22	BHA	3.75	5.47	slight odour
	BHB	3.83	5.71	very slight odour
	BHC	3.80	5.69	
	BHD	3.81	5.88	
	BHE	4.69	6.38	
	BHG	3.89	6.83	

Report on a Supplementary Geotechnical Investigation for a Proposed Mixed-Use Development at Former Chambers Bus Depot, Church Square, Bures, Suffolk, CO8 5AB



Appendix (v) Laboratory Test Results – Material Properties





Contract	:	Bures		
Serial No	).	40225_1		
Client:	Compass	Geotechnical Limite	d	Soil Property Testing Ltd
	13 Willow Upton Lan	Park ie		15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon,
	Stoke Gold	ding		Cambridgeshire, PE29 6DG
	Nuneaton			
	Warwicks	nire		Tel: 01480 455579
	CV13 6EU			Email: enquiries@soilpropertytesting.com
Consulat	C	l p		Website: www.soilpropertytesting.com
Samples	Submitted	а ву:		Approved Signatories:
	Compass	Geotechnical Limite	d	☑ J.C. Garner B.Eng (Hons) FGS
				Technical Director & Quality Manager
Samples	Labelled:			
	Bures			🗖 W. Johnstone
				Materials Lab Manager
				Ille
Date R	eceived:	28/07/2022	Samples	s Tested Between: 28/07/2022 and 11/08/2022
Remarks	:			
	For the a	ttention of Rachel Fo	oord	
	Your Ord	er No: 212945h		
Notas	1	All remaining samples o	r remnants	from this contract will be disposed of after 21 days from today
NULES.	Ŧ	unless we are notified to	o the contra	ary.
	2	Opinions and interpreta	ations expre	essed herein are outside the scope of UKAS accreditation.
	3	Tests marked "NOT UKA Schedule for this testing	AS ACCREDIT g laboratory	TED" in this test report are not included in the UKAS Accreditation /.
	4	This test report may not issuing laboratory.	t be reprodi	uced other than in full except with the prior written approval of the
	5	The results within this re	eport only r	relate to the items tested or sampled.



## **TEST REPORT**

ISSUED BY SOIL PROPERTY TESTING LTD



Contra	act		Bures																		
Serial	No.		40225_	1												Т	arg	et l	Date	e	11/08/2022
Sched	uled	Ву	Compa	ss G	Seo	tecl	nnica	l Lim	ite	d											
Sched	ule R	emarks																			
Bore Hole No.	Bore Hole No. Type Sample Ref. Top Depth Depth Depth Sample Depth																Sample Remarks				
BHE	В	2+3	1.80	1	Í	ĺ															
BHE	В	4	6.50	1																	
BHE	D	5	7.00	1	1	1															
BHE	D	7	10.00	1	1	1															
BHF	В	2	3.00	1																	
BHF	D	8	8.50	8.50 1 1 1 1																	
BHG	В	2	4.00	.00 1																	
BHG	В	4	8.00	8.00 1																	
BHG	D	7	14.00	1	1	1															
		Totals		9	4	4															End of Schedule

























































#### TEST REPORT ISSUED BY SOIL PROPERTY TESTING LTD DATE ISSUED: 11/08/2022



Contract	t	Bure	es	J										
Serial No	о.	4022	25_1											
					ΓΕΝΊ, Ι Τ		) LIVIII,	, PLAS		IIT, PLA			JEX AND LIQUIDITY INDEX	<b>.</b>
Borehole /Pit No.	Depth (m)	Туре	Ref.	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	city Index (%)	ity Index	د Method	Ret'd 0.425mm (%)	Corr'd W/C <0.425mm	Curing Time (hrs)	Description	Class
BHE	7.00	D	5	35.0	44	30	14	0.36	From Natural	0 (A)		25	Olive sandy CLAY/SILT	MI
BHE	10.00	D	7	31.0	45	26	19	0.26	From Natural	0 (A)		24	Olive sandy silty CLAY	CI
BHF	8.50	D	8	35.6	45	24	21	0.55	From Natural	0 (A)		24	Olive sandy silty CLAY	CI
внд	14.00	D	7	32.6	44	24	20	0.43	From Natural	0 (A)		25	Olive sandy silty CLAY	CI
Method Of I Method of ⊺ Type of San Comments:	Preparation Test: nple Key:	:	BS EN ISO: BS EN ISO: U = Undistu	17892-1:2 17892-1:2 urbed, B =	2014 & B 2014 & B Bulk, D =	S 1377: P S 1377: P = Disturbe	art 2:199 'art 2:199 ed, J = Jar,	0:4.2 0:3.2, 4.4 W = Wat	4, 5.3, 5.4 ter, SPT =	: : Split Spo	on Sampl	ie, C = C	Core Cutter	
Table Notat	ion:		Ret'd 0.425	= (A) mm: (A)	= Assume	ed, (M) = 1	Measured	ł						



# TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD DATE ISSUED: 11/08/2022









Contract		Bures							
Serial No.		40225	_1						
		DET	ERMINA DI	TION OF W	ATER CO	NTENT, LI FICITY INI		AND PLASTIC LIMIT	AND
Borehole / Pit No.	Depth m	n S Type	Sample Reference	Water Content e (W) %			Description		Remarks
BHE	7.00	D	5	35.0	Olive sandy C	CLAY/SILT			
				PREPARATI	ON			Liquid Limit	44 %
Method of	prepa	aration	1				From natur	al Plastic Limit	30 %
Sample reta	ained	0.425	mm sieve	(Assun	ned)		0 %	Plasticity Index	14 %
Corrected v	water	conte	nt for mat	erial passing	g 0.425mm	า		Liquidity Index	0.36
Sample reta	ained	2mm	sieve	(Assun	ned)		0 %	NHBC Modified (I'p)	) n/a
Curing time	9		2	5 hrs	Clay Co	ontent	24 %	Derived Activity	0.58
C=CLAY Plasticity Ir % (Ip) M=SILT	ndex	70       60       50       40       30       20       10		CL	CI	СН	CV	CE	Low Medium High NHBC Volume Change Potential
		0 0	10	20 30	40 5	0 60	70 80 Plast	90 100 110 :	Liquid Limit %
Method of P Method of T Type of Sam Comments:	repara est: ple Ke	ation: y:	BS EN ISC BS EN ISC U=Undistu	0: 17892-1: 2 0: 17892-1: 2 rbed, B=Bulk	2014 & BS 2014 & BS , D=Disturb	1377: Part 1377: Part ed, J=Jar, W	: 2: 1990: 4.2 : 2: 1990: 3.2, /=Water, SPT=S	4.4, 5.3, 5.4 plit Spoon Sample, C=Cc	ore Cutter





Contract	I	Bures													
Serial No.	(	40225	5_1												
		DET	ERMIN			ATER CC	DNTENT,		D LIMIT A	ND PLAS	TIC LIN	IIT ANI	)		
Borehole / Pit No.	Depth m	Type	Sample Referer	W Connce (V	'ater ntent V) %			Desc	cription				Rema	rks	
BHE 1	10.00	D	7	3	31.0	Olive sandy	silty CLAY								
				PREP/	ARATIC	ON				Liquid Lir	nit			45	5 %
Method of <sub>l</sub>	prepa	iration	1					Fro	om natural	Plastic Li	mit			26	5 %
Sample retained 0.425mm sieve (Assumed) 0 % Plasticity Index														19	€ %
Corrected w	vater	conte	nt for m	aterial p	bassing	g 0.425m	m			Liquidity	Index			0.26	5
Sample reta	ained	2mm	sieve		(Assum	ned)			0 %	NHBC M	odified (	l'p)		n/a	a
Curing time				24 hrs		Clay C	Content		<b>19</b> %	Derived A	Activity			1.00	C
C=CLAY Plasticity In % (Ip) M=SILT	dex	70       60       50       40       30       20       10			CL	CI	СН		CV	CE			Low Medium High	NHBC Volume Change Potential	
		0 0	10	20	ML 30	40	MH 50 60	70	MV 80 Plasticit	ME 90 100 y Chart BS59	110 30: 2015: F	120 igure 8	Liquic	l Limit	%
Method of Pr Method of Te Type of Samp Comments:	repara ≥st: ble Ke	ition: y:	BS EN IS BS EN IS U=Undis	50: 178 50: 178 turbed, 1	92-1: 2 92-1: 2 B=Bulk,	:014 & BS :014 & BS . D=Disturi	5 1377: Pa 5 1377: Pa bed, J=Jar, '	rt 2: 1 rt 2: 1 W=Wa	990: 4.2 990: 3.2, 4 ter, SPT=Spl	.4, 5.3, 5.4 it Spoon Sa	4 ample, Ci	=Core Cu	utter		





Contract	1	Bures							
Serial No.	4	40225	_1						
		DET	ERMINATI DEF	ON OF W	ATER CO	NTENT, LI	QUID LIMIT	AND PLASTIC LIMIT	AND
Borehole / Pit No.	Depth m	Type	Sample Reference	Water Content (W) %			Description		Remarks
BHF	8.50	D	8	35.6	Olive sandy s	ilty CLAY			
			PI	REPARATI	ON			Liquid Limit	45 %
Method of <sub>t</sub>	prepa	ration					From natura	I Plastic Limit	24 %
Sample reta	ained	0.425	mm sieve	(Assur	ned)		0 %	Plasticity Index	21 %
Corrected v	vater	conte	nt for mate	rial passin	g 0.425mm	າ		Liquidity Index	0.55
Sample reta	ained	2mm	sieve	(Assur	ned)		0 %	NHBC Modified (I'p)	n/a
Curing time			24	hrs	Clay Co	ontent	19 %	Derived Activity	1.11
C=CLAY Plasticity In % (Ip) M=SILT	ıdex	70 60 50 40 30 20 10		CL	CI	СН	CV	CE	Low Medium High NHBC Volume Change Potential
		0 0	10 2	ML .0 30	40 5	MH 0 60	70 80 Plasti	ME 90 100 110 1 city Chart BS5930: 2015: Figure	Liquid Limit %
Method of Pr Method of Te Type of Samp Comments:	repara est: ole Ke	ation: y:	BS EN ISO: BS EN ISO: U=Undisturb	17892-1: 2 17892-1: 2 Ded, B=Bulk	2014 & BS 2014 & BS , D=Disturb	1377: Part 1377: Part ed, J=Jar, W	2: 1990: 4.2 2: 1990: 3.2, =Water, SPT=S	4.4, 5.3, 5.4 olit Spoon Sample, C=Co	re Cutter


DATE ISSUED: 11/08/2022



Contract	l	Bures												
Serial No.	"	40225	_1											
		DET	ERMINATI	ON OF W	ATER CO	NTENT, LI	QUID LIMI	T A	ND PLASTIC LIN	IIT AND	)			
Borehole / Pit No.	Depth m	Type	ample Reference	Water Content (W) %			Description	)			Remark	s		
BHG :	14.00	D	7	32.6	Olive sandy s	silty CLAY								
			PI	REPARATIO	DN				Liquid Limit			44 %		
Method of	prepa	ration	l				From nat	ural	Plastic Limit			24 %		
Sample retained 0.425mm sieve     (Assumed)     0 %     Plasticity Index     20														
Corrected water content for material passing 0.425mm Liquidity Index 0.43														
Sample reta	ained	2mm	sieve	(Assun	ned)		0 %	/ D	NHBC Modified (	l'p)		n/a		
Curing time	!		25	hrs	Clay C	ontent	19 %	/ 0	Derived Activity			1.05		
C=CLAY Plasticity In % (Ip)	ıdex	70       60       50       40       30       20       10		CL	CI	СН	CV		CE		Low Medium High	NHBC Volume Change Potential		
Method of P	repara est:	0 0 ation:	10 2 BS EN ISO: BS EN ISO:	ML 0 30 17892-1: 2 17892-1: 2	40 5 2014 & BS 2014 & BS	MH 60 60 1377: Part 1377: Part	70 80 Pla 2: 1990: 4. 2: 1990: 3.	asticit 2 2, 4	ME 90 100 110 y Chart BS5930: 2015: F	120 Figure 8	Liquid L	imit %		
Type of Samp Comments:	ole Ke	y:	U=Undisturb	ed, B=Bulk	, D=Disturb	oed, J=Jar, W	/=Water, SPT	=Spl	it Spoon Sample, C	=Core Cu	ıtter			

# 🔅 eurofins



Chemtest Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070 Email: info@chemtest.com

Report No.:	22-29201-1		
Initial Date of Issue:	05-Aug-2022		
Client	Compass Geotechnical Limited		
Client Address:	13 Willow Park, Upton Lane Stoke Golding Warwickshire CV13 6EU		
Contact(s):	Rachel@compassgeotechnical.co.uk		
Project	Bures		
Quotation No.:	Q19-18078	Date Received:	02-Aug-2022
Order No.:	2229451	Date Instructed:	02-Aug-2022
No. of Samples:	6		
Turnaround (Wkdays):	5	Results Due:	08-Aug-2022
Date Approved:	05-Aug-2022		
Approved By:			

**Details:** 

Stuart Henderson, Technical Manager

# <u> Results - Soil</u>

Proj	ject:	Bures

Client: Compass Geotechnical Limited		Che	mtest Jo	ob No.:	22-29201	22-29201	22-29201	22-29201	22-29201	22-29201	
Quotation No.: Q19-18078	(	Chemte	est Sam	ple ID.:	1479647	1479648	1479649	1479650	1479651	1479652	
		Cli	ent Sam	ple ID.:	ES	ES	ES	ES	ES	ES	
		Sa	ample Lo	ocation:	BHE	BHE	BHF	BHF	BHG	BHG	
			Sampl	е Туре:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
			Top Dep	oth (m):	3.0	13.0	2.0	4.0	6.5	9.5	
		Bot	tom Dep	oth (m):		14.0	2.4		6.9		
			Date Sa	ampled:	26-Jul-2022	26-Jul-2022	26-Jul-2022	26-Jul-2022	26-Jul-2022	26-Jul-2022	
			Time Sa	ampled:	0:00	0:00	0:00	0:00	0:00	0:00	
Determinand	Accred.	SOP	Units	LOD							
Moisture	N 2030 % 0.020				7.0	21	7.2	7.8	5.9	8.9	
рН	U 2010 4.0				8.3	8.3	8.5	8.8	8.7	9.2	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010	0.56	0.017	0.010	0.010	0.035	

## Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	рН	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES

#### **Report Information**

Кеу	
U	UKAS accredited
Μ	MCERTS and UKAS accredited
Ν	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request None of the results in this report have been recovery corrected All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently

corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis All Asbestos testing is performed at the indicated laboratory Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

#### **Sample Deviation Codes**

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

#### Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: <u>customerservices@chemtest.com</u>





Contract	:	Bures									
Serial No	).	39688_1									
Client:	Compass	Geotechnical Limite	d	Soil Property Testing Ltd							
	13 Willow Upton Lan	Park le		15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon, Cambridgeshire, PE29 6DG							
	Nuneaton Warwicksł	nire		Tel: 01480 455579							
	CV13 6EU			Email: <a href="mailto:enquiries@soilpropertytesting.com">enquiries@soilpropertytesting.com</a> Website: <a href="mailto:www.soilpropertytesting.com">www.soilpropertytesting.com</a>							
Samples	Submitted	d By:		Approved Signatories:							
	Compass	Geotechnical Limite	d	🗆 J.C. Garner B.Eng (Hons) FGS							
				Technical Director & Quality Manager							
Samples	Labelled: Bures			W. Johnstone Materials Lab Manager							
				✓ D. Sabnis Operations Manager Dular Salowo							
Date R	eceived:	08/11/2021	Sample	s Tested Between: 08/11/2021 and 18/11/2021							
Remarks	: For the a Your Refe	ttention of Rachel Forence No: 212945c	bord								
Notes:	1	All remaining samples o unless we are notified to	or remnants o the contra	from this contract will be disposed of after 21 days from today, ary.							
	2	Opinions and interpreta	ations expre	expressed herein are outside the scope of UKAS accreditation.							
	3	Tests marked "NOT UKA Schedule for this testing	AS ACCREDI <sup>-</sup> g laboratory	REDITED" in this test report are not included in the UKAS Accreditation atory.							
	4	This test report may not issuing laboratory.	t be reprod	uced other than in full except with the prior written approval of the							
	5	The results within this re	eport only r	only relate to the items tested or sampled.							



# TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD



Contra	act		Bures																
Serial	No.		39688_	1												Tar	get D	ate	e 22/11/2021
Sched	uled	Ву	Compa	ompass Geotechnical Limited															
Sched	ule R	emarks																	
Bore Hole No.	Туре	Sample Ref.	Top Depth		aride	Ster	onter and	tionesi tionesi pasticin pasti	11) Itelata	<u>101</u>									Sample Remarks
WS1	D	-	1.65	1	ĺ	ĺ	ĺ												
WS2	D	-	4.50	1															
WS5	D	-	1.50		1	1	1												
WS6	D	-	1.35	1															
WS8	D	-	1.40	1															
WS8	D	-	2.30	1															
		Totals		5	1	1	1												End of Schedule





Contract	Contract Bures																
Serial No.		39688	8_1						_		_						_
		DET	ERMIN		I OF W	ATER O		ENT, L					IC LIN FX		ND		
Borehole / Pit No.	Depti m	n S Type	Sample Referen	V Co ce ()	Vater ontent W) %		<u> </u>		Desc	ription	<u>, , , , , , , , , , , , , , , , , , , </u>	1 1142			F	Remark	S
WS5	1.50 2.00	D	-		18.7	Soft brow white fine	vn slight e to med	ly gravelly dium angu	sandy s Ilar to su	ilty CLAY. Gra ubrounded ch	avel is b iert and	rown, bl quartzit	ack and e.				
				PREP	ARATI	ON					Liqu	id Lim	it				23 %
Method of	f prep	aration	1			Wet	sieve	d over	0.425	mm sieve	Plas	tic Lim	it				17 %
Sample retained 0.425mm sieve     (Measured)     12 %     Plasticity Index															<mark>6</mark> %		
Corrected water content for material passing 0.425mm 21.3 % Liquidity Index																0.29	
Sample re	ample retained 2mm sieve (Measured) 4 % NHBC Modified (I'p) 5 %															5 %	
Curing tim	uring time 25 hrs Clay Content Not analysed Derived Activity															Not ar	nalysed
C=CLAY Plasticity I % (Ip) M=SILT	Index	70 60 50 40 30 20 10 0 0	10	20	CL ML 30	CI MI 40	50	CH MH 60	70	CV MV 80 Plastici	90 ty Char	CE ME 100	110 12015: F	120	, 1	Low Medium High	NHBC Volume Change Potential %
Method of Preparation:BS EN ISO: 17892-1: 2014 & BS 1377: Part 2: 1990: 4.2Method of Test:BS EN ISO: 17892-1: 2014 & BS 1377: Part 2: 1990: 3.2, 4.4, 5.3, 5.4Type of Sample Key:U=Undisturbed, B=Bulk, D=Disturbed, J=Jar, W=Water, SPT=Split Spoon Sample, C=Core CutterComments:Corrected water content assume material greater than 0.425mm non-porous. See BS1377: Part2: 1990 Clause 3 Note 1 Volume Change Potential: NHBC Standards Chapter 4.2 Unmodified Plasticity Index Note: Modified Plasticity Index I'p = Ip x (% less than 425microns/100)																	



































Contract	:	Bures										
Serial No	).	39688_2										
		·										
Client:	Compass	Geotechnical Limite	d	Soil Property Testing Ltd								
	13 Willow Upton Lan	Park Ie		15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon,								
	Stoke Gold	ding		Cambridgeshire, PE29 6DG								
	Nuneaton			T-1, 01400 455570								
	Warwicks	nire		Tel: 01480 455579								
	CV13 DEU			Email: enquiries@solipropertytesting.com								
Samplas	<u>Cubmitta</u>	J.n.,,		Website: <u>www.solipropertytesting.com</u>								
Samples	Submitter	1 By:		Approved Signatories:								
	Compass	Geotechnical Limite	d	J.C. Garner B.Eng (Hons) FGS								
				Technical Director & Quality Manager								
Samples	Labelled:			□ W. Johnstone								
	Bures			Materials Lab Manager								
				☑ D. Sabnis Operations Manager Drilor Salouio								
Date R	eceived:	08/11/2021	Samples	s Tested Between: 08/11/2021 and 29/11/2021								
Remarks	:	,										
	For the a	ttention of Rachel Fo	oord									
	Your Refe	erence No: 212945g										
Notes:	1	All remaining samples o unless we are notified to	or remnants o the contra	from this contract will be disposed of after 21 days from today, ary.								
	2	Opinions and interpreta	ations expre	essed herein are outside the scope of UKAS accreditation.								
	3	Tests marked "NOT UKA Schedule for this testing	AS ACCREDIT g laboratory	REDITED" in this test report are not included in the UKAS Accreditation atory.								
	4	This test report may not issuing laboratory.	t be reprodi	uced other than in full except with the prior written approval of the								
	5	The results within this re	eport only r	only relate to the items tested or sampled.								



# TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD



Contra	act		Bures         39688_2         Target Date         26/11/2021																
Serial	No.															26/11/2021			
Sched	uled	By Compass Geotechnical Limited																	
Sched	ule R	emarks																	
Bore Hole No.	Туре	Sample Ref.	Top Depth	/<	atile 1	Sile	istibi Conter	ionesia nesturi nesturi nesturi	n) repa	lation									Sample Remarks
WS10	D	-	2.50	1															
WS11	D	-	1.40		1	1	1												
WS13	D	-	1.50		1	1	1												
		Totals		1	2	2	2												End of Schedule



#### TEST REPORT ISSUED BY SOIL PROPERTY TESTING LTD DATE ISSUED: 29/11/2021



-		_												
Contract	t	Bure	es .											
Serial No	ο.	3968	38_2											
	SUMMA	ARY C	OF WATE	R CON1	ENT, I	LIQUID	LIMIT,	, PLAS		1IT <i>,</i> PL/	ASTICIT	Y IN	DEX AND LIQUIDITY INDEX	
Borobolo	Dopth	Tuno	Pof	Water	Liquid	Plastic	Plasti-	Liquid-	S	ample Pro	eparation			
/Pit No.	Deptil	Type	Ner.	Content	Limit	Limit	Index	Index	Method	Ret'd 0.425mm	Corr'd W/C	Time	Description	Class
	(m)			(%)	(%)	(%)	(%)			(%)	<0.425mm	(hrs)		
WS11	1.40 - 1.75	D	-	11.1	28	14	14	-0.21	Wet Sieved	69 (M)	N/R*	24	Brown, black and white fine to coarse angular to subrounded chert GRAVEL in a very soft yellowish brown sandy silty clay matrix	CL
WS13	1.50 - 2.00	D	-	7.7	23	16	7	-1.19	Wet Sieved	69 (M)	N/R*	25	Brown, black and white fine to coarse angular to subrounded chert GRAVEL in a very soft yellowish brown sandy silty clay/very clayey sand matrix	CL
Method Of Preparation:BS EN ISO: 17892-1: 2014 & BS 1377: Part 2:1990:4.2Method of Test:BS EN ISO: 17892-1: 2014 & BS 1377: Part 2:1990:3.2, 4.4, 5.3, 5.4Type of Sample Key:U = Undisturbed, B = Bulk, D = Disturbed, J = Jar, W = Water, SPT = Split Spoon Sample, C = Core CutterComments:*Corrected water content assume material greater than 0.425mm is non-porous. See BS1377: Part 2: 1990 Clau corrected water content is not reported due to material type.Table Notation:Ret'd 0.425mm: (A) = Assumed, (M) = Measured						ore Cutter 7: Part 2: 1990 Clause 3 Note 1. Where	N/R,							











Contract		Bures									
Serial No. 3968		39688	3_2								
		DET		ION OF W		NTENT, LI			IIT AND		
Borehole / Pit No. Depth Sample			Water Content (W) %				Remarks				
WS11	1.40 · 1.75	D	-	11.1	Brown, black GRAVEL in a v	and white fine very soft yellow	to coarse angular to vish brown sandy silt	o subrounded chert ty clay matrix			
			Р	REPARATI	ON			Liquid Limit			28 %
Method of	fprepa	aration	1		Wet sie	eved over (	).425mm sieve	Plastic Limit			14 %
Sample re	tained	0.425	mm sieve	(Meası	ured)		<mark>69</mark> %	Plasticity Index			14 %
Corrected	water	conte	nt for mate	rial passing	g 0.425mm	I N	ot reported	Liquidity Index		-0.21	
Sample re	tained	2mm	sieve	(Meası	ured)		<mark>51</mark> %	NHBC Modified (	l'p)	p) 4 %	
Curing tim	e		24	hrs	Clay Content Not analysed Derived Activity				Not ana	lysed	
C=CLAY Plasticity I % (Ip) M=SILT	Index	70 60 50 40 30 20 10 0 0		CL	CI MI 40 50	CH MH 0 60	CV CV MV 70 80 Plastici	CE CE 90 100 110 ty Chart BS5930: 2015: F	120 igure 8	Low Medium High	NHBC Volume Change Potential %
Method of Preparation: BS EN ISO: Method of Test: BS EN ISO: Type of Sample Key: U=Undistur Comments: Corrected wa Corrected wa Volume Char Note: Modifi			17892-1: 2 17892-1: 2 bed, B=Bulk iter content r iter content a ge Potential: ed Plasticity I	2014 & BS 2014 & BS , D=Disturbe not reported assume mater NHBC Standa ndex I'p = Ip :	1377: Part 1377: Part ed, J=Jar, W due to mater rial greater th ards Chapter x (% less thar	2: 1990: 4.2 2: 1990: 3.2, 4 =Water, SPT=Sp rial type. nan 0.425mm non 4.2 Unmodified P	4, 5.3, 5.4 lit Spoon Sample, Ca -porous. See BS1377: lasticity Index )	=Core Cut Part2: 199	ter 0 Clause 3 M	Note 1	





Contract		Bures									
Serial No.		39688	_2								
		DET	ERMINA D	TION OF W	ATER CO	NTENT, LI		AND PLASTIC LIM	IT AND		
Borehole / Pit No. Depth Sample Co				Water Content			Remarks				
WS13	1.50 2.00	D	-	7.7	Brown, blac GRAVEL in a matrix	k and white fine very soft yellov	e to coarse angular t vish brown sandy si	o subrounded chert ty clay/very clayey sand			
				PREPARATI	ON			Liquid Limit			23 %
Method o	f prepa	aration	l		Wet si	eved over (	0.425mm sieve	Plastic Limit			16 %
Sample re	tained	0.425	mm sieve	(Meası	ured)		<mark>69</mark> %	Plasticity Index			7 %
Corrected	water	conte	nt for mat	erial passing	g 0.425mr	n N	lot reported	Liquidity Index		-1	L.19
Sample re	tained	2mm	sieve	(Meası	ured)		52 %	NHBC Modified (I	(l'p) 2 %		2 %
Curing tim	е		2	5 hrs	Clay C	ontent N	lot analysed	Derived Activity		Not anal	lysed
C=CLAY Plasticity % (Ip) M=SILT	Index	70 60 50 40 30 20 10 0 0		CL	CI MI 40	CH 	CV CV NV 70 80 Plastic	CE	120 gure 8	Liding Tid	NHBC Volume Change Potential %
Method of Method of Type of San Comments:	Prepar Test: nple Ke	ation: :y:	BS EN ISC BS EN ISC U=Undistu Corrected v Corrected v Volume Cha Note: Modi	0: 17892-1: 2 0: 17892-1: 2 1rbed, B=Bulk vater content r vater content a ange Potential: fied Plasticity I	2014 & BS 2014 & BS ot reported ssume mate NHBC Stand ndex I'p = Ip	5 1377: Part 5 1377: Part Ded, J=Jar, W I due to mater erial greater t dards Chapter 5 x (% less than	2: 1990: 4.2 2: 1990: 3.2, 4 Water, SPT=Sp rial type. han 0.425mm nor 4.2 Unmodified P n 425microns/100	1.4, 5.3, 5.4 Ilit Spoon Sample, C= I-porous. See BS1377: F Plasticity Index	Core Cutt Part2: 1990	ter ) Clause 3 N	lote 1







# 🔅 eurofins



Chemtest Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070 Email: info@chemtest.com

Report No.:	21-39171-1		
Initial Date of Issue:	15-Nov-2021		
Client	Compass Geotechnical Limited		
Client Address:	13 Willow Park, Upton Lane Stoke Golding Warwickshire CV13 6EU		
Contact(s):	Rachel@compassgeotechnical.co.uk		
Project	Bures		
Quotation No.:	Q19-18078	Date Received:	09-Nov-2021
Order No.:	212945B	Date Instructed:	09-Nov-2021
No. of Samples:	6		
Turnaround (Wkdays):	5	Results Due:	15-Nov-2021
Date Approved:	15-Nov-2021		
Approved By:			
11/10 Mary			

**Details:** 

Ul

Glynn Harvey, Technical Manager

## <u>Results - Soil</u>

#### Project: Bures

Client: Compass Geotechnical Limited		Cher	ntest Jo	ob No.:	21-39171	21-39171	21-39171	21-39171	21-39171	21-39171
Quotation No.: Q19-18078	Chemtest Sample ID.:		1315668	1315669	1315670	1315671	1315672	1315673		
		Clie	ent Sam	ple ID.:	ES	ES	ES	ES	ES	ES
		Sa	mple Lo	ocation:	WS1	WS2	WS5	WS6	WS7	WS8
			Sample	e Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):		1.65	2.0	1.5	1.35	1.3	1.4		
		Bot	tom Dep	oth (m):	2.0	3.0	2.0	1.70	1.7	1.8
			Date Sa	ampled:	05-Nov-2021	05-Nov-2021	05-Nov-2021	05-Nov-2021	05-Nov-2021	05-Nov-2021
			Time Sa	ampled:	0:00	0:00	0:00	0:00	0:00	0:00
Determinand	Accred.	SOP	Units	LOD						
Moisture	N	2030	%	0.020	5.8	5.4	16	6.1	6.9	9.1
рН	U	2010		4.0	8.9	9.1	8.0	8.6	9.0	7.9
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.013	< 0.010	0.092	< 0.010	< 0.010	< 0.010

## Test Methods

SOP	Title	Parameters included	Method summary	
2010	pH Value of Soils	рН	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	

#### **Report Information**

Кеу	
U	UKAS accredited
Μ	MCERTS and UKAS accredited
Ν	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request None of the results in this report have been recovery corrected All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently

corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis All Asbestos testing is performed at the indicated laboratory Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

#### **Sample Deviation Codes**

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

#### Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: <u>customerservices@chemtest.com</u>

# 🔅 eurofins



Chemtest Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070 Email: info@chemtest.com

Report No.:	21-39705-1		
Initial Date of Issue:	18-Nov-2021		
Client	Compass Geotechnical Limited		
Client Address:	13 Willow Park, Upton Lane Stoke Golding Warwickshire CV13 6EU		
Contact(s):	Rachel@compassgeotechnical.co.uk		
Project	Bures		
Quotation No.:	Q19-18078	Date Received:	12-Nov-2021
Order No.:	212945F	Date Instructed:	12-Nov-2021
No. of Samples:	1		
Turnaround (Wkdays):	5	Results Due:	18-Nov-2021
Date Approved:	18-Nov-2021		
Approved By:			
14/1 Mary			

**Details:** 

Glynn Harvey, Technical Manager

Project: Bures

Client: Compass Geotechnical Limited		ob No.:	21-39705		
Quotation No.: Q19-18078	(	Chemte	st Sam	ple ID.:	1318298
		Clie	ent Sam	ple ID.:	ES
		Sa	ample Lo	ocation:	WS9
			Sampl	e Type:	SOIL
	Top Depth (m):			1.0	
		Bot	tom Dep	oth (m):	1.5
			Date Sa	ampled:	10-Nov-2021
			Time Sa	ampled:	12:00
Determinand	Accred.	SOP	Units	LOD	
Moisture	N	2030	%	0.020	7.5
рН	U	2010		4.0	8.7
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.17

## Test Methods

SOP	Title	Parameters included	Method summary	
2010	pH Value of Soils	рН	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	

#### **Report Information**

Кеу	
U	UKAS accredited
Μ	MCERTS and UKAS accredited
Ν	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis All Asbestos testing is performed at the indicated laboratory Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

#### **Sample Deviation Codes**

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

#### Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: customerservices@chemtest.com



Appendix (vi) Plots **Compass Geotechnical** Geotechnical, Geoenvironmental and Civil Engineering Consultants Report No: 222945S

August 2022



Report on a Supplementary Geotechnical Investigation for a Proposed Mixed-Use Development at Former Chambers Bus Depot, Church Square, Bures, Suffolk, CO8 5AB



Tel: 01455 213311: Fax: 01455 213969 www.compassgeotechnical.co.uk