

**BRIDGES**  
Fund Management

# Bridges Healthcare (Richmond) Limited



## **RICHMOND INN**

Desk Study, Basement Impact Assessment and  
Ground Investigation Report

GEA



**Richmond Inn Hotel  
50–56 Sheen Road  
Richmond  
TW9 1UG**

Desk Study, BIA &  
Ground Investigation  
Report

Bridges Healthcare (Richmond) Ltd

May 2022

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## Executive summary

This executive summary contains an overview of the key findings and conclusions. No reliance should be placed on any part of the executive summary until the whole of the report has been read. Other sections of the report may contain information that puts into context the findings that are summarised in the executive summary.

### Brief

This report describes the findings of a site investigation carried out by Geotechnical and Environmental Associates Limited (GEA) on the instructions of Elliott Wood, on behalf of Bridges Healthcare (Richmond) Ltd, with respect to the proposed development which comprises the partial demolition and extension of the Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation. This includes the construction of a single level basement beneath the south of the site and the replacement of the existing rear extension.

The purpose of the investigation has been to research the history of the site with respect to possible contaminative uses, to determine the ground conditions, to assess the extent of any contamination and to provide information to assist with the design of retaining walls and foundations. This report forms part of a Basement Impact Assessment (BIA) in accordance with the requirements of London Borough of Richmond upon Thames.

### Site history

The earliest map studied, dated 1871, shows the site to have been occupied by residential buildings with rear gardens. The 1879 OS map shows more detail which indicates the site was developed with four houses with rear gardens, fronting onto a named road to the south, although the name of the road is unclear. Church Road and an unnamed road to the north of the site are shown as existing. The immediate surrounding area was primarily occupied by residential buildings, with a railway line and station located roughly 130 m to the north of the site. By the time of the next available map, dated 1896, the surrounding area had become more developed with terraced houses and the road to the front of the site was named Sheen Road. The site and surrounding area remained essentially unchanged until some time between 1940 and 1960 when Nos 50 and 52 Sheen Road are shown to be a single property and no boundary fences are shown in the north of the site. A small building is shown in the northwest of the site. Additionally, a works was located roughly 50 m to the east of the site and a ruin is labelled roughly 90 m to the west. The western wing of the building was constructed at some time between 1999 and 2006. The site and surrounding area have since remained essentially unchanged.

### Ground conditions

Below a moderate thickness of made ground, Kempton Park Gravel was encountered over the London Clay Formation. The made ground comprised an initial layer of brown mottled reddish brown gravelly sand with brick and concrete fragments and coal, to a depth of 0.40 m (9.33 m OD), over greyish brown clayey sandy silt with rare coal, roots and rootlets to a depth of 0.90 m (8.83 m OD). The Kempton Park Gravel comprised loose brown very clayey sand or very sandy clay with pockets of gravel to a depth of 6.40 m (3.33 m OD). The London Clay comprised an initial layer of brown silty clay to a depth of 6.60 m (6.13 m OD) over stiff high strength grey silty clay with claystones to the maximum depth investigated, of 15.00 m (-5.27 m OD).

Groundwater was encountered within the Kempton Park Gravel at a depth of 3.00 m during drilling and has subsequently been monitored at a depth of 5.50 m.

## Recommendations

The proposed basement will extend to a depth of approximately 3.50 m below ground level and the lower ground floor will extend to a depth of roughly 1.50 m. As such, formation level is expected to be within the Kempton Park Gravel. Groundwater is unlikely to be encountered within the basement excavation and it is proposed to cast reinforced concrete retaining walls in the same sequence as underpinned walls. The single borehole completed to date has indicated that the soil is loose, such that it will only be able to support light loads, but additional investigation may allow this to be reviewed. As such, without further investigation consideration may need to be given to the use of piled foundations.

Additionally, a check should be made to determine the depth of desiccation around the central tree to determine the requirement for heave protection measures.

### Basement Impact Assessment

It has been concluded that the majority of the impacts identified can be mitigated by appropriate design and standard construction practice. Groundwater is likely to be present beneath the basement and lower ground floor excavations and will still be able to flow around and beneath the basement following construction. As the new basement does not close a pathway or create a cut-off, it is considered that the groundwater will follow a pathway around and beneath the proposed basement and will not build up significantly behind it. The proposed development should not, therefore, have any noticeable effect on groundwater flow.



## Part 1: Investigation Report

This section of the report details the objectives of the investigation, the work that has been carried out to meet these objectives and the results of the investigation. Interpretation of the findings is presented in Part 2.

### 1.0 Introduction

Geotechnical and Environmental Associates Limited (GEA) has been commissioned by Elliott Wood, on behalf of Bridges Healthcare (Richmond) Ltd, to carry out a desk study, BIA and ground investigation at Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG.

#### 1.1 Proposed Development

The proposed development comprises the partial demolition and extension of the Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation. This includes the construction of a single level basement beneath the south of the site and the replacement of the existing rear extension.

This report is specific to the proposed development and the advice herein should be reviewed once the development proposals are finalised.

#### 1.2 Purpose of Work

The principal technical objectives of the work carried out were as follows:

- to check the history of the site with respect to previous contaminative uses;
- to determine the risk of encountering unexploded ordnance (UXO);
- to determine the ground conditions and their engineering properties;
- to use the above information to provide recommendations for retaining walls and shallow foundations;
- to provide an indication of the degree of soil contamination present;
- to assess the risk that any such contamination may pose to the proposed development, its users or the wider environment; and

- to provide a preliminary assessment of the possible impact of the proposed development on the local hydrogeology, hydrology and stability of surrounding structures in support of a planning application.

#### 1.3 Scope of Work

In order to meet the above objectives, a desk study was carried out, followed by a ground investigation. The desk study comprised:

- a review of historical Ordnance Survey (OS) maps and environmental searches sourced from the Envirocheck database;
- a review of planning records;
- commissioning of a preliminary UXO risk assessment from 1<sup>st</sup> Line Defence;
- a review of readily available geology maps; and
- a walkover survey of the site carried out in conjunction with the fieldwork.

In the light of this desk study an intrusive ground investigation was carried out which comprised, in summary, the following activities:

- a single cable percussion borehole advanced to a depth of 15.00 m (-5.27 m OD);
- standard penetration tests (SPTs) carried out at regular intervals within the boreholes to provide quantitative data on the strength of the soils;
- the installation of a single groundwater monitoring standpipe to a depth of 6.50 m, and a single subsequent monitoring visit to date;
- testing of selected soil samples for contamination and geotechnical purposes; and
- provision of a report presenting and interpreting the above data, together with our advice and recommendations with respect to the proposed development.

This report includes a contaminated land assessment which has been undertaken by a suitably qualified and competent professional in accordance with the methodology presented by the Environment Agency in their Land contamination risk assessment (LCRM)<sup>1</sup> published 8 October 2020. This involves identifying, making decisions on, and taking

<sup>1</sup> <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>



appropriate action to deal with, land contamination in a way that is consistent with government policies and legislation within the United Kingdom. Risk management is divided into three stages; Risk Assessment, Options Appraisal and Remediation, and each stage comprises three tiers. The Risk Assessment stage includes preliminary risk assessment (PRA), generic quantitative risk assessment (GQRA) and detailed quantitative risk assessment (DQRA) and this report includes the PRA and GQRA.

The exploratory methods adopted in this investigation have been selected on the basis of the constraints of the site including but not limited to access and space limitations, together with any budgetary or timing constraints. Where it has not been possible to reasonably use an EC7 compliant investigation technique a practical alternative has been adopted to obtain indicative soil parameters and any interpretation is based upon engineering experience, local precedent where applicable and relevant published information.

### 1.3.1 Basement Impact Assessment

In accordance with the Good Practice Guide on Basement Developments planning advice note, dated May 2015, for the London Borough of Richmond upon Thames, and the London Borough of Richmond upon Thames Basement Assessment User Guide, a Basement Impact Assessment (BIA) is required to be submitted with the planning application, in order to assess the potential impacts on the site, neighbouring sites and the wider natural environment. The aim of the work is to provide information on subterranean characteristics, land stability and surface water in particular to assess whether the development will affect neighbouring properties or groundwater movements and whether any identified impacts can be appropriately mitigated by the design of the development.

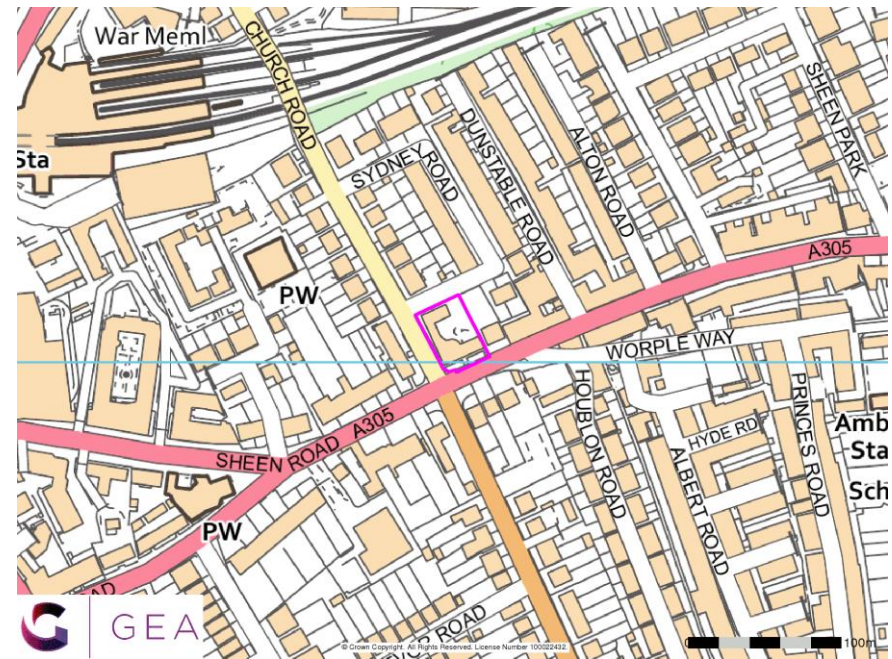
### 1.4 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or ground water samples tested. No liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

## 2.0 The Site

### 2.1 Site Description

The site is located in the London Borough of Richmond upon Thames, approximately 180 m southeast of Richmond London Underground station. It fronts onto Sheen Road to the south and is bounded by Church Road to the west, Sydney Road to the north and No 62 C Sheen Road. The site may be additionally located by National Grid Reference 518338, 175024 and is shown on the map extract below.



A walkover of the site was carried out by a geotechnical engineer from GEA at the time of the fieldwork. The site is roughly rectangular in shape and measures approximately 30 m east-west by 50 m north-south. It is occupied by a three-storey, roughly 'L' shaped vacant hotel, in the south and west of the site. Hardstanding is present along the southern perimeter of the site, formerly used as a patio area and the northeast of the site for car parking. Localised shrubs and mature deciduous trees are present around the areas of hardstanding.



The local topography slopes down relatively steeply towards north, whereas the outside areas of the site are terraced, with the southern area roughly 2.5 m higher than the area in the north. These areas are relatively level in comparison to the local topography.

## 2.2 Site History

The site history has been researched by reference to internet sources and historical Ordnance Survey (OS) maps obtained from the Envirocheck database.

The earliest map studied, dated 1871, shows the site to have been occupied by residential buildings with rear gardens. The 1879 OS map shows more detail which indicates the site was developed with four houses, with rear gardens, fronting onto a named road to the south, although the name of the road is unclear. Church Road and an unnamed road to the north of the site are shown as existing. The immediate surrounding area was primarily occupied by residential buildings with a railway line and station located roughly 130 m to the north of the site.

By the time of the next available map, dated 1896, the surrounding area had become more developed with terraced houses and the road to the front of the site was named Sheen Road.

The site and surrounding area remained essentially unchanged until some time between 1940 and 1960 when Nos 50 and 52 Sheen Road are shown to be a single property and no boundary fences are shown in the north of the site. A small building is shown in the northwest of the site. Additionally, a works was located roughly 50 m to the east of the site and a ruin is labelled roughly 90 m to the west.

The western wing of the building was constructed at some time between 1999 and 2006. The site and surrounding area have since remained essentially unchanged.

## 2.3 Other Information

A search of public registers and databases has been made via the Envirocheck database and relevant extracts from the search are appended. Full results of the search can be provided if required.

The Envirocheck report has indicated no landfill, waste management, transfer, treatment or disposal sites are located within 1 km of the site and additionally, no areas of potentially infilled land are located within 250 m of the site.

No pollution incidents to controlled waters have been recorded within 500 m of the site.

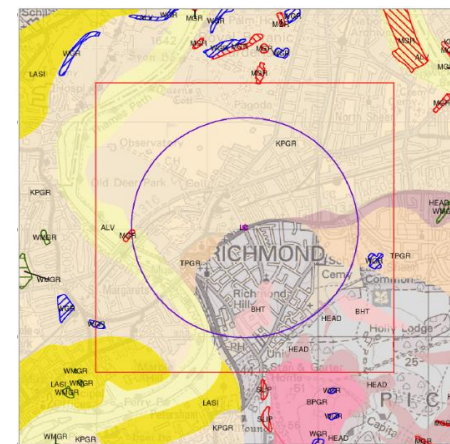
There are no active contemporary trade directories but six inactive contemporary trade directory entries located within 100 m of the site, including a general engineers, 18 m to the east of the site, two printers 44 m and 69 m both to the northeast, dry cleaners 59 m to the east, Edible oils, 80 m to the east and gas suppliers 96 m to the east.

No fuel station entries are located within 250 m of the site and the site is not within any areas of sensitive land use.

Reference to records compiled by the Health Protection Agency (formerly the National Radiological Protection Board) indicates that the site falls within an area where less than 1% of homes are affected by radon emissions and therefore radon protective measures will not be necessary.

## 2.4 Geology

The British Geological Survey (BGS) map of the area (sheet 270) indicates that the southern half of the site is directly underlain by the London Clay Formation, whereas Kempton Park Gravel is present above the London Clay in the north of the site.



Artificial Ground and Landfill				
Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
[Red]	MSGR	Made Ground (Unwaded)	Artificial Deposit	Not Supplied - Holocene
[Blue]	WGR	Worked Ground (Unwaded)	Void	Not Supplied - Holocene
[Green]	WMSR	Infilled Ground	Artificial Deposit	Not Supplied - Holocene
[Red/White]	SLIP	Landslide Deposit	Clay, Silt and Sand	Not Supplied - Quaternary

Superficial Geology				
Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
[Yellow]	ALV	Alluvium	Clay, Silt, Sand and Peat	Not Supplied - Holocene
[Orange]	KPGR	KEMPTON PARK GRAVEL MEMBER	Sand and Gravel	Not Supplied - Devensian
[Yellow]	LASH	Langley Silt Member	Clay and Silt	Not Supplied - Devensian
[Light Blue]	TPGR	TAPLOW GRAVEL MEMBER	Sand and Gravel	Not Supplied - Wolstonian
[Light Green]	BHT	Boyn Hill Gravel Member	Sand and Gravel	Not Supplied - Holstein
[Pink]	BPGR	Black Park Gravel Member	Sand and Gravel	Not Supplied - Anglian
[Light Brown]	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults				
Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
[Light Brown]	LC	London Clay Formation	Clay and Silt	Not Supplied - Ypresian
[Red/White]		Faults		

## 2.5 Hydrology and Hydrogeology

The London Clay Formation is classified as Unproductive Strata, rather than its former classification as a non-aquifer, referring to rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow. The London Clay cannot support a water table or effectively transmit groundwater flow because



of its low permeability and cohesive nature. The permeability will be predominantly secondary, through fissures in the clay. Published data indicates the horizontal permeability of the London Clay to generally range between  $1 \times 10^{-11}$  m/s and  $1 \times 10^{-9}$  m/s.

The Kempton Park Gravel is classified as a Secondary 'A' Aquifer, which refers to permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

The nearest surface water feature is a pond located approximately 653 m to the east of the site.

Groundwater may be encountered within the Kempton Park Gravel where present. If the Kempton Park Gravel is absent, perched water is likely to be present within any made ground whereas a groundwater table would not be expected to be present within the London Clay. However, this formation does include pockets and partings of silt and fine sand that can be water-bearing, and perched water may be expected where claystones are encountered.

The site is not within an area shown by the Environment Agency to be at risk from flooding from rivers or the sea, or from surface water. Additionally, the southern half of the site is shown to have the potential for groundwater flooding to occur at the surface, as shown by the BGS. The site is not within a groundwater source protection zone.

The site is almost entirely covered by the existing building and hardstanding and therefore infiltration of rain water into the ground beneath the site is limited such that the majority of surface runoff is likely to drain into combined sewers in the road. Whilst on site, a CCTV survey identified a soakaway drain in the northeast of the site beneath the car park. The proposed development is unlikely to significantly change the proportion of hardstanding, such that infiltration of surface water is unlikely to be unchanged.

## 2.6 Preliminary Risk Assessment

Part IIA of the Environmental Protection Act 1990, which was inserted into that Act by Section 57 of the Environment Act 1995, provides the main regulatory regime for the identification and remediation of contaminated land. The determination of contaminated sites is based on a "suitable for use" approach which involves managing the risks posed by contaminated land by making risk-based decisions. This risk assessment is carried out on the basis of a source-pathway-receptor approach.

### 2.6.1 Source

The desk study findings indicate that the site does not have a potentially contaminative history as it has apparently been developed with residential buildings and the existing hotel since prior to 1871.

There are no historical or existing landfill sites within 1 km of the site, such that there is not considered to be a risk from migrating landfill gas.

### 2.6.2 Receptor

The continued use of the site as a hotel will mean the end users represent moderate sensitivity receptors. As the site is underlain by a Secondary 'A' Aquifer in the north of the site, adjacent sites are considered to be a moderately sensitive receptors; however, due to the presence of the cohesive London Clay either from the surface in the south of the site or beneath the Kempton Park Gravel in the north, the deep aquifer beneath the site is not considered to be a particularly sensitive receptor. Buried services are likely to come into contact with any contaminants present within the soils through which they pass and site workers are potential receptors during construction or maintenance works.

### 2.6.3 Pathway

The granular Kempton Park Gravel would allow the migration of contaminated groundwater through the shallow soils to surrounding sites. The presence of negligibly permeable London Clay beneath the Kempton Park Gravel or from the surface will however limit the potential for groundwater percolation into the underlying chalk, and thus a pathway is not considered likely to exist to the major aquifer. Within the site, end users will be largely isolated from direct contact with any contaminants present within the made ground by the presence of the buildings and the extent of the hardstanding. Only in areas of soft landscaping could end users come into contact with any contaminants present within the soil. Buried services may be exposed to any contaminants present within the soil through direct contact and site workers will come into contact with the soils during construction works. There is thus considered to be a low potential for a contaminant pathway to be present between any potential contaminant source and a target for the particular contaminant.

### 2.6.4 Preliminary Risk Appraisal

On the basis of the above it is considered that there is a LOW risk of there being a significant contaminant linkage at this site which would result in a requirement for major remediation work.







## 3.0 Screening

The Richmond guidance suggests that any development proposal that includes a basement should be screened to determine whether or not a full BIA is required.

### 3.1 Screening Assessment

A number of screening tools are included in the London Borough of Richmond upon Thames Basement Assessment User Guide.

To determine whether the screening assessment is required, The London Borough of Richmond upon Thames require the below questions to be assessed against its SFRA map<sup>2</sup>. A screening assessment is required if the answer is yes to either question and a basement is proposed.

-  is the site within an area with 25 % or more susceptibility to groundwater flooding; and
-  is the site within one of four throughflow catchment areas.





Given the site is within an area of 75 % or more susceptibility to groundwater flooding and is located within a catchment throughflow area, a screening assessment is required which includes a series of questions relating to subterranean characteristics, land stability and flood risk and drainage. The questions and responses to these questions are tabulated below.

#### 3.1.1 Subterranean Characteristics Screening Assessment

Question	Response for Richmond Inn Hotel
Does the recorded water table extend above the base of the proposed subsurface structure?	<i>Possibly.</i>
Is the proposed subsurface development structure within 100 m of a watercourse or spring line?	No. The nearest surface water feature is a pond located 653 m to the east of the site.
Are infiltration methods proposed as part of the site's drainage strategy?	No. Soakaway drainage is not proposed to be utilised on site.
Does the proposed excavation during the construction phase extend below the local water table level or spring line (if applicable)?	<i>Possibly.</i>

Question	Response for Richmond Inn Hotel
Is the most shallow geological strata at the site London Clay?	<i>Probably. The southern half of the site is directly underlain by the London Clay Formation.</i>
Is the site underlain by an aquifer and / or permeable geology?	<i>Yes. The northern half of the site is underlain by a Secondary 'A' Aquifer.</i>


The above assessment has identified the following potential issues that need to be assessed:

-  the water level may be above the base of the proposed subsurface structure.
-  the proposed excavation may extend below the local water table.
-  London Clay is the shallowest strata in the southern half of the site.
-  The northern half of the site is underlain by a Secondary 'A' Aquifer.

#### 3.1.2 Land Stability Screening Assessment

Question	Response for Richmond Inn Hotel
Does the site, or neighbouring area, topography include slopes greater than 7°?	No. There is a difference in height of roughly 3.3 m between the north and south of the site, over a distance of about 50 m, giving a slope angle of roughly 3.8°.
Will changes to the site's topography result in slopes that are greater than 7°?	No. The site is not to be significantly re-profiled as part of the development.
Will the proposed subsurface structure extend significantly deeper underground compared to the foundations of the neighbouring properties?	<i>Probably.</i>
Will the implementation of the proposed subsurface structure require any trees to be felled or uprooted?	<i>Yes. The tree in the centre of the site will be felled as part of the proposed plans.</i>
Has the ground at the site been previously worked?	No. There are no areas of worked or infilled land in close proximity to the site.
Is the site within the vicinity of any tunnels or railway lines?	No. The nearest railway line is approximately 130 m to the north of the site.

The above assessment has identified the following potential issues that need to be assessed:

-  the subsurface structure may extend significantly deeper than neighbouring properties.



- ⚙ the tree in the centre of the site will be felled as part of the proposed development.
- ⚙ The development will increase the foundation depths relative to the neighbouring properties.

### 3.1.1 Surface Flow and Flooding Screening Assessment

Question	Response for Richmond Inn Hotel
Will the proposed subsurface development result in a change in impermeable area coverage on the site?	<i>Yes. The proposed development will result in a reduction of impermeable area.</i>
Will the proposed subsurface development impact the flow profile of throughflow, surface water or groundwater to downstream areas?	<i>Possibly. The reduction in the amount of hardstanding may alter infiltration rates of surface water.</i>
Will the proposed subsurface development increase throughflow or groundwater flood risk to neighbouring properties?	<i>Possibly. The reduction in hardstanding may increase the risk of groundwater flooding to neighbouring sites.</i>

The above assessment has identified the following potential issues that need to be assessed:

- ⚙ the proposed development will result in a reduction in the amount of impermeable areas.
- ⚙ the reduction in hardstanding may alter infiltrations rates.
- ⚙ the reduction in hardstanding may increase the risk of groundwater flooding to neighbouring properties.

## 4.0 Scoping and Site Investigation

The purpose of scoping is to assess in more detail the factors to be investigated in the impact assessment. Potential impacts are assessed for each of the identified potential impact factors.

### 4.1 Potential Impacts

The following potential impacts have been identified by the screening process.

Potential Impact	Consequence
The proposed basement will change the proportion of hard surface / paved areas	The proportional reduction in hardstanding could potentially increase rates of recharge, increasing groundwater flow to a nearby watercourse. The reduction could also reduce rates of runoff, reducing flood risk.
Infiltration rates may be altered by the reduction in hardstanding	
The reduction in hardstanding may increase the risk of groundwater flooding to neighbouring properties.	
London Clay is the shallowest stratum at the site	Th London Clay is prone to seasonal shrink-swell and can cause structural damage.
The basement will increase differential depth of foundations relative to neighbouring properties	If not designed and constructed appropriately, the excavation of a basement may result in structural damage to neighbouring buildings and structures.
The tree in the centre of the site will be felled as part of the proposed development	If a new basement is not dug to below the depth likely to be affected by tree roots this could lead to damaging differential movements.
The proposed subsurface structure may extend below the local water table	Groundwater may be encountered within the basement excavation
The site is underlain by a Secondary 'A' Aquifer	

These potential impacts have been investigated through the site investigation, as detailed in Section 9.0.



## 4.2 Exploratory Work

The original scope included a single cable percussion borehole to 15.00 m, CBR testing and six trial pits, with a series of window sampler boreholes through the base of these in the south of the site. At the request of the client, the window sampler boreholes and trial pits that had been proposed in the courtyard initially were omitted to limit any damage to the existing structures.

A single cable percussion borehole was advanced to a depth of 15.00 m (-5.27 m OD). During boring, disturbed and undisturbed samples were obtained from the boreholes for subsequent laboratory examination and testing.

A single groundwater monitoring standpipe has been installed to a depth of 6.50 m to facilitate groundwater monitoring, which has been carried out on a single occasion to date, approximately two weeks after installation.

A selection of the samples recovered from the boreholes was submitted to a soil mechanics laboratory for a programme of geotechnical testing and an analytical laboratory for a programme of contamination testing.

All of the above work was carried out under the supervision of a geotechnical engineer from GEA. The borehole and dynamic probe records are appended, together with a site plan indicating the exploratory positions.

## 4.3 Sampling Strategy

The borehole location was specified by the consulting engineers, Elliott Wood, and positioned on site by an engineer from GEA whilst avoiding any known or suspected services.

A single sample of the made ground has been tested for the presence of contamination. The analytical suite of testing was selected to identify a range of typical industrial contaminants for the purposes of general coverage. For this investigation the analytical suite for the soil included a range of metals, speciation of total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAH), total cyanide and monohydric phenols. In addition the samples were screened for the presence of asbestos.

The contamination analyses were carried out at an MCERTs accredited laboratory with the majority of the testing suite accredited to MCERTS standards. A summary of the MCERTS accreditation and test methods are included with the attached results and further details are available upon request.

## 5.0 Ground Conditions

The investigation has generally confirmed the expected ground conditions in that, beneath a moderate thickness of made ground, Kempton Park Gravel was encountered over the London Clay Formation.

### 5.1 Made Ground

Beneath a layer of block paving and subbase, the made ground comprised an initial layer of brown mottled reddish brown gravelly sand with brick and concrete fragments and coal, to a depth of 0.40 m (9.33 m OD), over greyish brown clayey sandy silt with rare coal, roots and rootlets to a depth of 0.90 m (8.83 m OD).

Apart from the presence of fragments of extraneous material noted above, no visual or olfactory evidence of contamination was observed during the fieldwork. A single sample of the made ground has however been analysed for a range of contaminants as a precautionary measure and the results are detailed within Section 5.5.

### 5.2 Kempton Park Gravel

This stratum comprised loose brown very clayey sand or very sandy clay with pockets of gravel to a depth of 6.40 m (3.33 m OD).

The results of the plasticity index tests indicate the clay to be of low volume change potential

### 5.3 London Clay

The London Clay comprised an initial horizon of brown silty clay extending to a depth of 6.60 m (3.13 m OD), whereupon stiff high strength fissured grey silty clay with claystones was encountered to the maximum depth investigated, of 15.00 m (-5.27 m OD).

The results of the plasticity index tests indicate the clay to be of high volume change potential and the results of the quick undrained triaxial compression tests indicate the clay to be of high strength.



## 5.4 Groundwater

Groundwater was encountered within the Kempton Park Gravel, at a depth of 3.00 m (6.73 m OD). A single standpipe was installed in the borehole to a depth of 6.50 m and the findings of the first groundwater monitoring visit is presented in the table below.

Borehole No	Date	Depth to water (m) [Level (m OD)]
1	19/04/2022	5.50 [4.23]

A further two monitoring visits are scheduled at monthly intervals.

## 5.5 Soil Contamination

The table below sets out the values measured within the single sample analysed; all concentrations are in mg/kg unless otherwise stated.

Determinant	BH1 0.30 m
pH	8.6
Arsenic	17
Cadmium	< 0.2
Chromium	14
Copper	19
Lead	110
Mercury	< 0.3
Nickel	14
Selenium	< 1.0
Zinc	140
Total Cyanide	< 1.0

Determinant	BH1 0.30 m
Total Phenols	< 1.0
Total PAH	7.06
Benzo(a)pyrene	0.92
Naphthalene	< 0.05
TPH	11
Sulphide	16
Total Organic Carbon %	0.4

Note: Figure in bold indicates concentration in excess of risk-based soil guideline values, as discussed in Part 2 of this report

In addition, the sample was screened for the presence of asbestos. However, none was identified.

### 5.6.1 Generic Quantitative Risk Assessment

The use of a risk-based approach has been adopted to provide an initial screening of the test results to assess the need for subsequent site-specific risk assessments. Contaminants of concern are those that have values in excess of generic human health risk-based guideline values, which are either the CLEA<sup>3</sup> Soil Guideline Values where available, the Sutable 4 Use Values<sup>4</sup> (S4UL) produced by LQM/CIEH calculated using the CLEA UK Version 1.07<sup>5</sup> software, or the DEFRA Category 4 Screening values<sup>6</sup>, assuming a residential end use without plant uptake. The key generic assumptions for this end use are as follows:

- ☒ that groundwater will not be a critical risk receptor;
- ☒ that the critical receptor for human health will be a working female aged 16 to 65 years old;
- ☒ that the exposure duration will be 49 years;
- ☒ that the critical exposure pathways will be direct soil and indoor dust ingestion, skin contact with soils and dust, and inhalation of dust and vapours; and
- ☒ that the building type equates to a three-storey office.

<sup>3</sup> Updated Technical Background to the CLEA Model (Science Report SC050021/SR3) Jan 2009 and Soil Guideline Value reports for specific contaminants; all DEFRA and Environment Agency.

<sup>4</sup> The LQM/CIEH S4ULs for Human Health Risk Assessment S4UL3065 November 2014

<sup>5</sup> Contaminated Land Exposure Assessment (CL|EA) Software Version 1.071 Environment Agency 2015

<sup>6</sup> CL:AIRE (2013) Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination Final Project Report SP1010 and DEFRA (2014) Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination Policy Companion Document SP1010



It is considered that these assumptions are acceptable for this generic assessment of this site. The tables of generic screening values derived by GEA and an explanation of how each value has been derived are included in the Appendix.

Where contaminant concentrations are measured at concentrations below the generic screening value it is considered that they pose an acceptable level of risk and thus further consideration of these contaminant concentrations is not required. However, where concentrations are measured in excess of these generic screening values there is considered to be a potential that they could pose an unacceptable risk and thus further action will be required which could include;

- additional testing to zone the extent of the contaminated material and thus reduce the uncertainty with regard to its potential risk;
- site specific risk assessment to refine the assessment criteria and allow an assessment to be made as to whether the concentration present would pose an unacceptable risk at this site; or
- soil remediation or risk management to mitigate the risk posed by the contaminant to a degree that it poses an acceptable risk.

The results of the chemical analyses have indicated that the sample tested does not contain any elevated concentrations of contaminants.

The significance of these results is considered further in Part 2 of the report.



## Part 2: Design Basis Report

This section of the report provides an interpretation of the findings detailed in Part 1, in the form of a ground model, and then provides advice and recommendations with respect to the proposed development.

### 6.0 Introduction

The proposed development comprises the partial demolition and extension of the Richmond Inn for Class C2 visitor accommodation providing care and physiotherapy-led rehabilitation. This includes the construction of a single level basement beneath the south of the site and the replacement of the existing rear extension.

Both the front basement and rear extension will have a formation level approximately 1.5 m below the existing ground floor level of the main building, approximately 8.90 m OD and 8.70 m OD respectively.

The loads are not known but are anticipated to be light to moderate.

### 7.0 Ground Model

The desk study has revealed that the site has not had a potentially contaminative historical use as it has been developed with residential buildings and the existing hotel since sometime between 1871, and on the basis of the fieldwork, the ground conditions at this site can be characterised as follows:

- ☒ below a moderate thickness of made ground, the Kempton Park Gravel is present, over the London Clay which extends to the maximum depth of the investigation, of 15.00 m (-5.27 m OD);
- ☒ beneath the hardstanding, the made ground comprises brown sand over brown mottled reddish brown gravelly sand brick and concrete fragments and coal, to a depth of 0.40 m. over greyish brown clayey sandy silt with rare coal, roots and rootlets and extends to a depth of 0.90 m (8.83 m OD);
- ☒ loose brown very clayey sand or very sandy clay with pockets of gravel of the Kempton Park Gravel extends to a depth of 6.40 m (3.33 m OD);
- ☒ the London Clay initially consists of brown silty clay extending to a depth of 6.60 m (3.13 m OD) whereupon stiff high strength fissured grey silty clay with claystones is present and extends to the full depth of the investigation of 15.00 m (-5.27 m OD);
- ☒ groundwater is present towards the base of the Kempton Park Gravel at a depth of approximately 5.50 m (4.23 m OD); and
- ☒ contamination testing has revealed the sample tested to not contain any elevated concentrations of contaminants, or asbestos.



## 8.0 Advice & Recommendations

It is understood that formation level for the proposed basement and lower ground floor level will be at a level of approximately 8.90 m OD and 8.70 m OD. On the basis of the fieldwork and subsequent monitoring, groundwater is likely that formation level will be within the Kempton Park Gravel and groundwater is expected to present beneath the depth of the basement and lower ground floor excavations.

### 8.1 Basement Construction

The formation level for the basement and lower ground floor level is likely to be within the loose very clayey sand or very sand clay of the Kempton Park Gravel at a level of about 8.90 m OD and 8.70 m OD. Groundwater was encountered at a depth of 3.00 m (6.73 m OD) during drilling and groundwater has subsequently been measured at a depth of 5.50 m (4.23 m, OD) within the standpipe; on this basis inflows of groundwater are unlikely to be encountered within the basement excavation, although monitoring of the standpipe should be carried out to confirm the groundwater level. Shallow inflows of perched water may also be encountered from within the made ground and ideally a number of trial excavations should be carried out, to depths as close to the full basement / lower ground floor depth as possible, to provide an indication of stability and the extent to which the excavation may be affected by groundwater inflows; this is however unlikely to be possible due to the access restrictions.

The design of basement and lower ground floor support in the temporary and permanent conditions needs to take account of the necessity to maintain the stability of the surrounding structures and the possible requirement to control groundwater inflows.

There are a number of methods by which the sides of the basement excavation could be supported in the temporary and permanent conditions. The choice of wall may be governed to a large extent by whether it is to be incorporated into the permanent works and have a load bearing function.

It is understood that the preferred option for the formation of new retaining walls is by casting reinforced concrete retaining walls in the same sequence as underpinned walls.

Consideration could also be given to the use of a bored pile retaining wall, which would have the advantage of being incorporated into the permanent works and will be able to provide support for structural loads. A contiguous bored pile wall may be adopted for the groundwater conditions at this site.

The ground movements associated with the basement excavation will depend on the method of excavation and support and the overall stiffness of the basement structure in the temporary condition. Thus, a suitable amount of propping will be required to provide the necessary rigidity. In this respect the timing of the provision of support to the wall will have an important effect on movements.

#### 8.1.1 Basement Retaining Walls

The following parameters are suggested for the design of the permanent basement retaining walls.

Stratum	Bulk Density (kg/m <sup>3</sup> )	Effective Cohesion (c' – kN/m <sup>2</sup> )	Effective Friction Angle (φ' – degrees)
Made ground	1700	Zero	27
Kempton Park Gravel	1800	Zero	29
London Clay	1950	Zero	25

Monitoring of the standpipe should be continued to assess the design water level but at this stage it would appear that groundwater may be assumed to be below basement level; the advice in BS8102:2009<sup>7</sup> should also be followed in this respect.

#### 8.1.2 Basement Heave

The approximately 3.0 m deep excavation of the basement and 1.5 m for the rear extension will result in a differential net unloading of between around 60 kN/m<sup>2</sup> and 30 kN/m<sup>2</sup>, respectively, which will theoretically lead to long term swelling of the London Clay. The presence of approximately 5.50 m of Kempton Park Gravel over the London Clay at the rear of the site will limit the effects of this movement, although this should be checked once final loads and levels are known.

Additionally, given the front of the site might be directly underlain by the London Clay the construction of the 3.0 m deep basement will result in differential heave of the underlying London Clay. This will comprise immediate elastic movement, which will account for

7 BS8102 (2009) Code of practice for protection of below ground structures against water from the ground



approximately 40 % of the total movement and be expected to be complete during the construction period, and long term movements, which will theoretically take many years to complete. These movements will, to some extent, be mitigated by the loads applied by the proposed development.

It is recommended that further investigation take place at the front of the site to confirm the existing ground conditions, once access becomes available.

## 8.2 Spread Foundations

Based on the findings of the single borehole completed to date, it has indicated the soil is loose, such that it will only be able to support light loads, but additional investigation may allow this to be reviewed.

Given the Kempton Park Gravel has been identified as containing a high clay content, foundations will need to be deepened in the vicinity of existing and proposed trees and National House Building Council (NHBC) guidelines should be followed in this respect. Low shrinkability clays should be assumed. Where trees are to be removed the required founding depth should be determined on the basis of the existing tree height if it is less than 50% of the mature height and on the basis of full mature height if the current height is more than 50% of the mature height. Where a tree is to be retained the final mature height should be adopted. Notwithstanding NHBC guidelines, all foundations should extend beyond the zone of desiccation. In this respect it would be prudent to have all foundation excavations inspected by a suitably experienced engineer. Due allowance should be made for future growth of the trees.

If trees are to be planted in close proximity to the new buildings founding depths should be deepened in accordance with NHBC guidelines and using the mature height of the tree. Low shrinkability clay should be assumed.

It is recommended that once access is available to the south of the site that further investigation take place to confirm the ground conditions at the front of the site.

## 8.3 Piled Foundations

For the ground conditions at this site a bored pile could be adopted. A conventional rotary augered pile could be utilised but consideration will need to be given to the possible instability and water ingress within the made ground and granular parts of the Kempton Park Gravel. The use of bored piles installed using continuous flight auger (cfa) techniques may therefore be the most appropriate and the limited site access may be a factor in the selection of most appropriate pile type.

The following table of ultimate coefficients may be used for the preliminary design of bored piles, based on the SPT and cohesion / depth graph in the appendix.

Stratum	Depths m	kN / m <sup>2</sup>
<b>Ultimate Skin Friction</b>		
Basement Excavation	GL to 3.50	Ignore (Basement excavation)
Kempton Park Gravel	3.50 to 6.50	27
London Clay	6.50 to 15.00	Increasing linearly from 37.5 to 82.5
<b>Ultimate End Bearing</b>		
London Clay	6.50 to 15.00	Increasing linearly from 675 to 1485

In the absence of pile tests, guidance from the London District Surveyors Association (LDSA)<sup>8</sup> suggests that a factor of safety of 2.6 should be applied to the above coefficients in the computation of safe theoretical working loads. On the basis of the above coefficients, the following pile capacities have been estimated.

<sup>8</sup> LDSA (2017) *Guidance notes for the design of straight shafted bored piles in London Clay*. LDSA





Pile diameter mm	Pile Length m	Safe Working Load kN
300	10	140
	12	185
450	10	230
	12	305

The above examples are not intended to constitute any form of recommendation with regard to pile size or type, but merely serve to illustrate the use of the above coefficients. Specialist piling contractors should be consulted with regard to the design of a suitable piling scheme and their attention should be drawn to the cohesive nature of the Kempton Park Gravel, the proximity of the existing tree in the centre of the site, potential groundwater inflows and instability within the Kempton Park Gravel and the presence of the London Clay beneath.

#### 8.4 Shallow Excavations

On the basis of the borehole findings it is considered that it will be generally feasible to form relatively shallow excavations terminating within the made ground or the Kempton Park Gravel without the requirement for lateral support, although localised instabilities may occur where more granular material or groundwater is encountered.

Significant inflows of groundwater into shallow excavations are not generally anticipated, although seepages may be encountered from perched water tables within the made ground, although such inflows should be suitably controlled by sump pumping.

If deeper excavations are considered or if excavations are to remain open for prolonged periods it is recommended that provision be made for battered side slopes or lateral support. Where personnel are required to enter excavations, a risk assessment should be carried out and temporary lateral support or battering of the excavation sides considered in order to comply with normal safety requirements.

#### 8.5 Basement and Lower Ground Floor Slab

Following the excavation of the basement, formation level will be within the granular soils of the Kempton Park Gravel and it should be possible to adopt a moderately loaded ground

bearing floor slab for the reduced lower ground floor of the rear extension and basement floor slab.

Should the London Clay be present at formation level at the front of the site the floor slab will need to be suspended over a void or layer of suitably compressible material to accommodate the anticipated heave unless the slab can be suitably reinforced to cope with these movements.

#### 8.6 Effect of Sulphates

Chemical analyses of the made ground and natural soils have revealed relatively low concentrations of soluble sulphate and near-neutral pH in accordance with Class DS-2 conditions of Table C2 of BRE Special Digest 1:SD Third Edition (2005). The measured pH values of the samples show that an ACEC class of AC-2 would be appropriate for the site. This assumes a mobile water condition at the site. The guidelines contained in the digest should be followed in the design of foundation concrete.

#### 8.7 Disposal of Surface Water

A falling head test was completed within the cable percussion borehole in the Kempton Park Gravel. The water level remained static throughout the test and as such, the disposal of surface water through soakaways or infiltrations within the Kempton Park Gravel is not considered feasible.

#### 8.8 Contamination Risk Assessment

The desk study findings indicate that the site does not have a potentially contaminative history as it has apparently been developed with residential buildings and the existing hotel since sometime before 1871.

The results of the chemical analyses have indicated that the sample tested did not contain any elevated concentrations of contaminants and as such no remedial measures are considered necessary.

Once access is available, it is recommended that further testing be completed in the southern half of the site to fully assess the risk to end users, site workers and groundwater.



### 8.8.1 Site Workers

A programme of working should be identified to protect workers handling any soil. The method of site working should be in accordance with guidelines set out by HSE<sup>9</sup> and CIRIA<sup>10</sup> and the requirements of the Local Authority Environmental Health Officer.

A watching brief should be maintained during the site works and if suspicious soil is encountered, it should be inspected by a suitably qualified engineer and further testing carried out if required.

### 8.9 Waste Disposal

Under the European Waste Directive, waste is classified as being either Hazardous or Non-Hazardous and landfills receiving waste are classified as accepting hazardous or non-hazardous wastes or the non-hazardous sub-category of inert waste in accordance with the Waste Directive. Waste classification is a staged process and this investigation represents the preliminary sampling exercise of that process. Once the extent and location of the waste that is to be removed has been defined, further sampling and testing may be necessary. The results from this ground investigation should be used to help define the sampling plan for such further testing, which could include WAC leaching tests where the totals analysis indicates the soil to be a hazardous waste or inert waste from a contaminated site. It should however be noted that the Environment Agency guidance WM3<sup>11</sup> states that landfill WAC analysis, specifically leaching test results, must not be used for waste classification purposes.

Any spoil arising from excavations or landscaping works, which is not to be re-used in accordance with the CL:AIRE<sup>12</sup> guidance, will need to be disposed of to a licensed tip. Waste going to landfill is subject to landfill tax at either the standard rate of £98.60 per tonne (about £185 per m<sup>3</sup>) or at the lower rate of £3.15 per tonne (roughly £5.85 per m<sup>3</sup>). However, the classifications for tax purposes and disposal purposes differ and currently all made ground and topsoil is taxable at the 'standard' rate and only naturally occurring soil and stones, which are accurately described as such in terms of the 2011 Order, would qualify for the 'lower rate' of landfill tax.

Based on the technical guidance provided by the EA it is considered likely that the soils encountered during this ground investigation, as represented by the chemical analyses carried out, would be generally classified as follows.

Soil Type	Waste Classification (Waste Code)	WAC Testing Required Prior to Landfill Disposal?	Current applicable rate of Landfill Tax
Made ground	Non-hazardous (17 05 04)	No	£98.60/tonne (Standard rate)
Natural soils	Inert (17 05 04)	Should not be required but confirm with receiving landfill	£3.15 / tonne (Reduced rate for uncontaminated naturally occurring rocks and soils)

Under the requirements of the European Waste Directive all waste needs to be pre-treated prior to disposal. The pre-treatment process must be physical, thermal, chemical or biological, including sorting. It must change the characteristics of the waste in order to reduce its volume, hazardous nature, facilitate handling or enhance recovery. The waste producer can carry out the treatment but they will need to provide documentation to prove that this has been carried out. Alternatively, the treatment can be carried out by an approved contractor. The Environment Agency has issued a position paper<sup>13</sup> which states that in certain circumstances, segregation at source may be considered as pre-treatment and thus excavated material may not have to be treated prior to landfilling if the soils can be segregated onsite prior to excavation by sufficiently characterising the soils in situ prior to excavation.

The above opinion with regard to the classification of the excavated soils is provided for guidance only and should be confirmed by the receiving landfill once the soils to be discarded have been identified.

The local waste regulation department of the Environment Agency (EA) should be contacted to obtain details of tips that are licensed to accept the soil represented by the test results. The tips will be able to provide costs for disposing of this material but may require further testing.

9 HSE (1992) HS(G)66 *Protection of workers and the general public during the development of contaminated land* HMSO  
 10 CIRIA (1996) *A guide for safe working on contaminated sites* Report 132, Construction Industry Research and Information Association  
 11 Environment Agency 2015. *Guidance on the classification and assessment of waste*. Technical Guidance WM3 First Edition

12 CL:AIRE March 2011. *The Definition of Waste: Development Industry Code of Practice* Version 2  
 13 Environment Agency 23 Oct 2007 *Regulatory Position Statement Treating non-hazardous waste for landfill - Enforcing the new requirement*



## Part 3: Basement Impact Assessment

This section of the report evaluates the direct and indirect implications of the proposed project, based on the findings of the previous screening and scoping and site investigation.

### 9.0 Introduction

The screening identified a number of potential impacts. The desk study and ground investigation information has been used below to review the potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

#### 9.1 Potential Impacts

The table below summarises the previously identified potential impacts and the additional information that is now available from the ground investigation in consideration of each impact.

Potential Impact	Site Investigation Conclusion
The proposed basement will change the proportion of hard surface / paved areas	The proportional reduction in hardstanding could potentially increase rates of recharge, increasing groundwater flow to a nearby watercourse. The reduction could also reduce rates of runoff, reducing flood risk.
Infiltration rates may be altered by the reduction in hardstanding	
The reduction in hardstanding may increase the risk of groundwater flooding to neighbouring properties.	
London Clay is the shallowest stratum at the site	Based on the investigation, the London Clay is overlain by the Kempton Park Gravel and no below the depth where it would be affected by tree roots.
The basement will increase differential depth of foundations relative to neighbouring properties	If not designed and constructed appropriately, the excavation of a basement may result in structural damage to neighbouring buildings and structures.
The tree in the centre of the site will be felled as part of the proposed development	New foundations will need to be designed in accordance with NHBC guidelines to protect from future shrinking and swelling associated with tree removal / growth. subject to inspection of foundation excavations in the normal way.
The proposed subsurface structure may extend below the local water table	Groundwater may be encountered within granular portions of the Kempton Park Gravel within the basement excavation

Potential Impact	Site Investigation Conclusion
The site is underlain by a Secondary 'A' Aquifer	The site is underlain by a Secondary 'A' Aquifer

The results of the site investigation have therefore been used below to review the remaining potential impacts, to assess the likelihood of them occurring and the scope for reasonable engineering mitigation.

*The site is underlain by a Secondary Undifferentiated Aquifer / The proposed subsurface structure may extend below the local water table.*

The ground investigation has identified that significant groundwater inflows are not expected to be present within the proposed basement or lower ground floor level excavations.

*The basement will increase the differential depths of foundations relative to neighbouring properties*

The proposed basement will extend to a significant depth relative to the existing foundations of the neighbouring properties and the proposed retaining walls will need to be designed to ensure the stability of the site and any potentially sensitive structures that are in close proximity to the site. Appropriate propping and temporary works installed during basement construction will limit the effect of ground movements on the surrounding properties.

*Trees will be felled as part of the development*

The proposed basement at the front of the site will extend to a depth such that new foundations will bypass any desiccated soils.

However, the proposed lower ground floor level will be within the zone of influence of the tree which is to be felled and new foundations within the zone of influence of the tree will need to be deepened in accordance with NHBC guidelines. Heave protection measures should form part of the final proposals.



## 9.2 BIA Conclusion

A Basement Impact Assessment has been carried out following the information and guidance published by the London Borough of Richmond upon Thames.

It is concluded that the proposed development is unlikely to result in any specific land or slope stability issues.

## 9.3 Non-Technical Summary of Evidence

This section provides a short summary of the evidence acquired and used to form the conclusions made within the BIA.

### 9.3.1 Screening

The following table provides the evidence used to answer the subterranean characteristics screening questions.

Question	Evidence
Does the recorded water table extend above the base of the proposed subsurface structure?	Unknown prior to site investigation, answer carried forward to the scoping stage.
Is the proposed subsurface development structure within 100 m of a watercourse or spring line?	Topographical and historical maps acquired as part of the desk study, site walkover.
Are infiltration methods proposed as part of the site's drainage strategy?	Proposed plans
Does the proposed excavation during the construction phase extend below the local water table level or spring line (if applicable)?	Unknown prior to site investigation, answer carried forward to the scoping stage.
Is the most shallow geological strata at the site London Clay?	Geological maps
Is the site underlain by an aquifer and / or permeable geology?	Aquifer designation maps acquired from the Environment Agency as part of the desk study.

The following table provides the evidence used to answer the land stability screening questions.

Question	Evidence
Does the site, or neighbouring area, topography include slopes greater than 7°?	Site walkover, topographical survey and LiDAR maps
Will changes to the site's topography result in slopes that are greater than 7°?	Proposed plans
Will the proposed subsurface structure extend significantly deeper underground compared to the foundations of the neighbouring properties?	Site walkover and online planning portal
Will the implementation of the proposed subsurface structure require any trees to be felled or uprooted?	A site walkover, existing and proposed plans of the site
Has the ground at the site been previously worked?	Geological and historical maps acquired as part of the desk study
Is the site within the vicinity of any tunnels or railway lines?	Maps and plans of infrastructure tunnels were reviewed

The following table provides the evidence used to answer the surface flow and flooding screening questions.

Question	Evidence
Will the proposed subsurface development result in a change in impermeable area coverage on the site?	Site walkover and a review of existing and proposed plans
Will the proposed subsurface development impact the flow profile of throughflow, surface water or groundwater to downstream areas?	Existing and proposed plans.
Will the proposed subsurface development increase throughflow or groundwater flood risk to neighbouring properties?	Existing and proposed plans.

### 9.3.2 Scoping and Site Investigation

The questions in the screening stage that there were answered 'yes', were taken forward to a scoping stage and the potential impacts discussed in Section 4.0 of this report.

A ground investigation has been carried out, which has allowed an assessment of the potential impacts of the basement development on the various receptors identified from the screening and scoping stages. Principally the investigation aimed to establish the



ground conditions, including the groundwater level and the engineering properties of the underlying soils to enable suitable design of the basement development.

The findings of the investigation are discussed in Part 2 of this report and summarised in the Executive Summary.

### 9.3.3 Impact Assessment

Section 9.0 of this report summarises whether, on the basis of the findings of the investigation, the potential impacts still need to be given consideration and identifies ongoing risks that will require suitable engineering mitigation. Section 8.0 of this report also provides recommendations for the design of the proposed development.

## 10.0 Outstanding Risks & Issues

This section of the report aims to highlight areas where further work is required as a result of limitations on the scope of this investigation, or where issues have been identified by this investigation that warrant further consideration. The scope of risks and issues discussed in this section is by no means exhaustive, but covers the main areas where additional work may be required.

The ground is a heterogeneous natural material and variations will inevitably arise between the locations at which it is investigated. This report provides an assessment of the ground conditions based on the discrete points at which the ground was sampled, but the ground conditions should be subject to review as the work proceeds to ensure that any variations from the Ground Model are properly assessed by a suitably qualified person.

Monitoring of the standpipe should be continued to determine equilibrium groundwater levels and to establish any seasonal fluctuations. Ideally, trial excavations extending to as close to the full depth of the proposed basement as possible should be carried out to determine likely groundwater inflows into the basement excavation.

It is recommended that once access is available to investigate the southern area of the site that the remainder of the proposed investigation be completed to confirm the expected ground conditions, groundwater levels, configuration of the existing foundations and presence of any contamination. Additionally, a check should be made to determine the depth of desiccation around the central tree to determine the requirement for heave protection measures.

If during ground works any visual or olfactory evidence of contamination is identified it is recommended that further investigation be carried out and that the risk assessment is reviewed.

These areas of doubt should be drawn to the attention of prospective contractors and further investigation will be required or sufficient contingency should be provided to cover the outstanding risk.



## Appendix

### a. Field Work

Site Plan  
Borehole Record  
SPT vs Cohesion depth Graph

### b. Lab Testing

Geotechnical Test Results  
Chemical Test Results  
Generic Risk Based Screening Values

### c. Desk Study

Envirocheck Extracts  
Historical Maps  
Preliminary UXO Risk Assessment



## appendix a

### Field Work

Site Plan  
Borehole Records  
SPT vs Cohesion depth Graph



GEA

Geotechnical & Environmental Associates

www.gea-ltd.co.uk

Site Plan

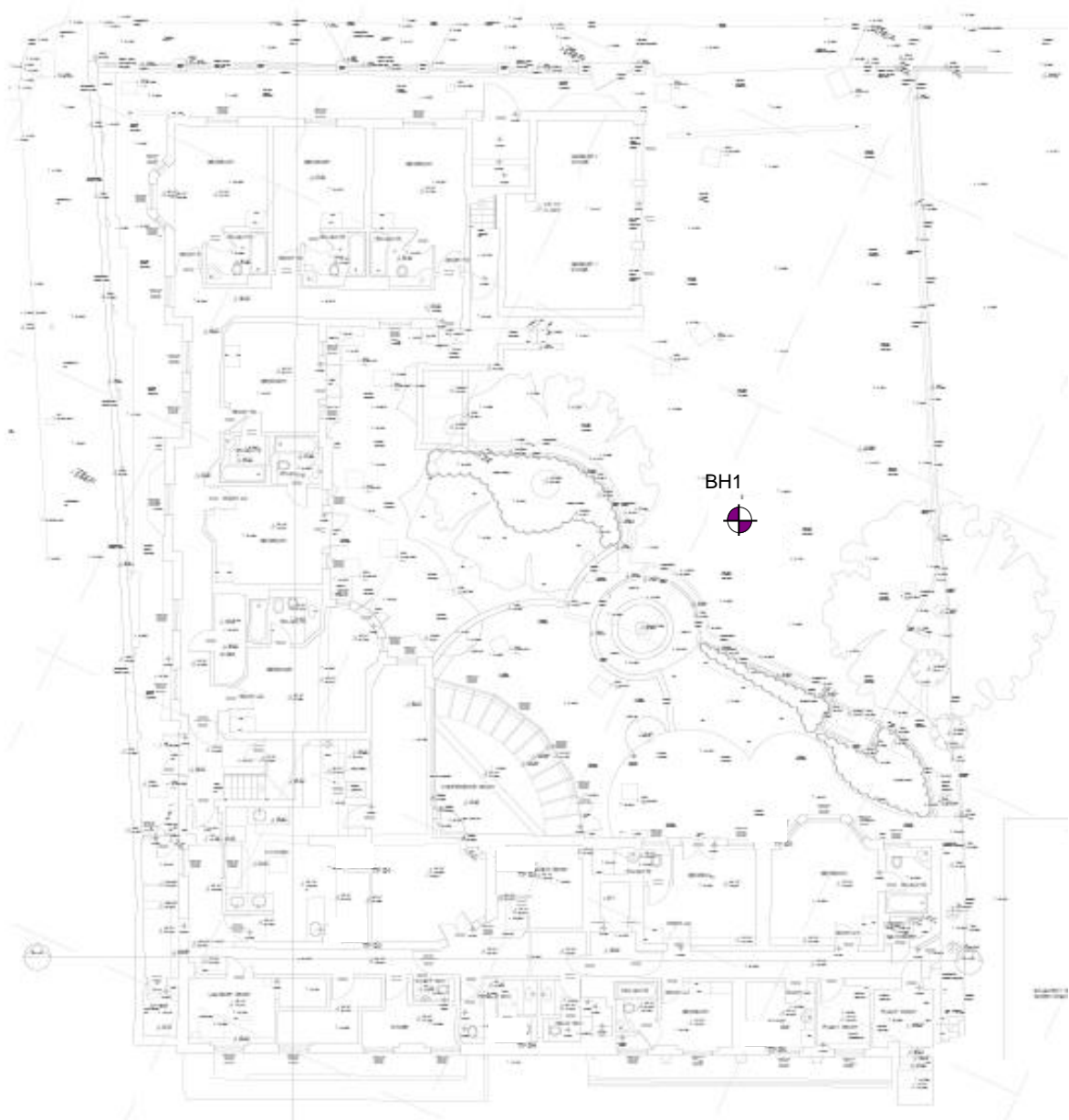
Site Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG

Job Number  
J22097

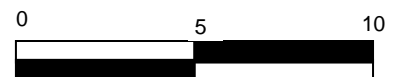
Client Bridges Property Alternatives Fund V LP

Sheet  
1 / 1

Engineer Elliott Wood



Approximate Scale in metres







Project Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG				BOREHOLE No <b>BH1</b>	
Job No J22097	Date 05-04-22 05-04-22	Ground Level (m OD) 9.73	Co-Ordinates ( )		
Client Bridges Property Alternatives Fund V LP		Engineer Elliott Wood		Sheet 1 of 2	

SAMPLES & TESTS			STRATA				Instrument / Backfill
Depth	Type No	Test Result	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.20	D1		9.68	[Cross-hatched pattern]	0.05	Block paving	[Black vertical bar]
0.50	D3		9.58		0.15	MADE GROUND (brown sand)	
0.80	D2		9.33		0.40	MADE GROUND (brown mottled reddish brown gravelly sand with brick and concrete fragments and coal)	
1.20	B4	2,2/2,1,2,2 N60 = 7	8.83		0.90	MADE GROUND (greyish brown clayey sandy silt with rare coal, roots and rootlets)	
2.00	B5	3,5/6,7,5,4 N60 = 23			(0.50)	Loose brown very clayey SAND / very sandy clay with pockets of gravel	[Patterned area]
3.00-3.45	U6						
3.50	D7				(5.50)		
4.00	D8	1,1/1,1,2,1 N60 = 5					
5.00-5.45	U9						
5.50	D10						
6.00	D11	2,4/2,1,2,2 N60 = 7					
6.80	D12		3.33		6.40		
7.00	D13		3.13		6.60	Brown silty CLAY	
7.50-7.95	U14					Stiff fissured grey silty CLAY with a claystone at 6.60 m to 6.80 m	
8.00	D15						
9.00	D16	3,4/4,4,5,6 N60 = 20					

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Boring Progress and Water Observations						GENERAL REMARKS
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth	
						Services inspection pit excavated to 1.20 m for 1 hour 15 minutes. 1 hour spent conducting falling head test at 2.50 m - water level did not drop. 30 minutes spent chiselling from 6.60 m to 6.80 m. 1 hour spent tidying up site and bagging excess spoil.

All dimensions in metres Scale 1:62.5	Method/ Plant Used Cable Percussion Rig	Logged By Preliminary
--	---	--------------------------



Project Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG				BOREHOLE No <b>BH1</b>	
Job No J22097	Date 05-04-22 05-04-22	Ground Level (m OD) 9.73	Co-Ordinates ( )		
Client Bridges Property Alternatives Fund V LP		Engineer Elliott Wood		Sheet 2 of 2	

SAMPLES & TESTS			STRATA				Instrument / Backfill	
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)		DESCRIPTION
10.50-10.95	U17					(8.40)	Stiff fissured grey silty CLAY with a claystone at 6.60 m to 6.80 m(continued)	
11.00	D18							
12.00	D19	4,4/5,6,7,7 N60 = 27						
13.50-13.95	U20							
14.00	D21							
14.50	D22	5,6/7,7,8,8 N60 = 32		-5.27		15.00		

Report ID: CABLE PERCUSSION || Project: J22097 - RICHMOND INN HOTEL.GPJ || Library: GEA LIBRARY.GLB || Date: 6 April 2022

Boring Progress and Water Observations						GENERAL REMARKS
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth	
						Services inspection pit excavated to 1.20 m for 1 hour 15 minutes. 1 hour spent conducting falling head test at 2.50 m - water level did not drop. 30 minutes spent chiselling from 6.60 m to 6.80 m. 1 hour spent tidying up site and bagging excess spoil.

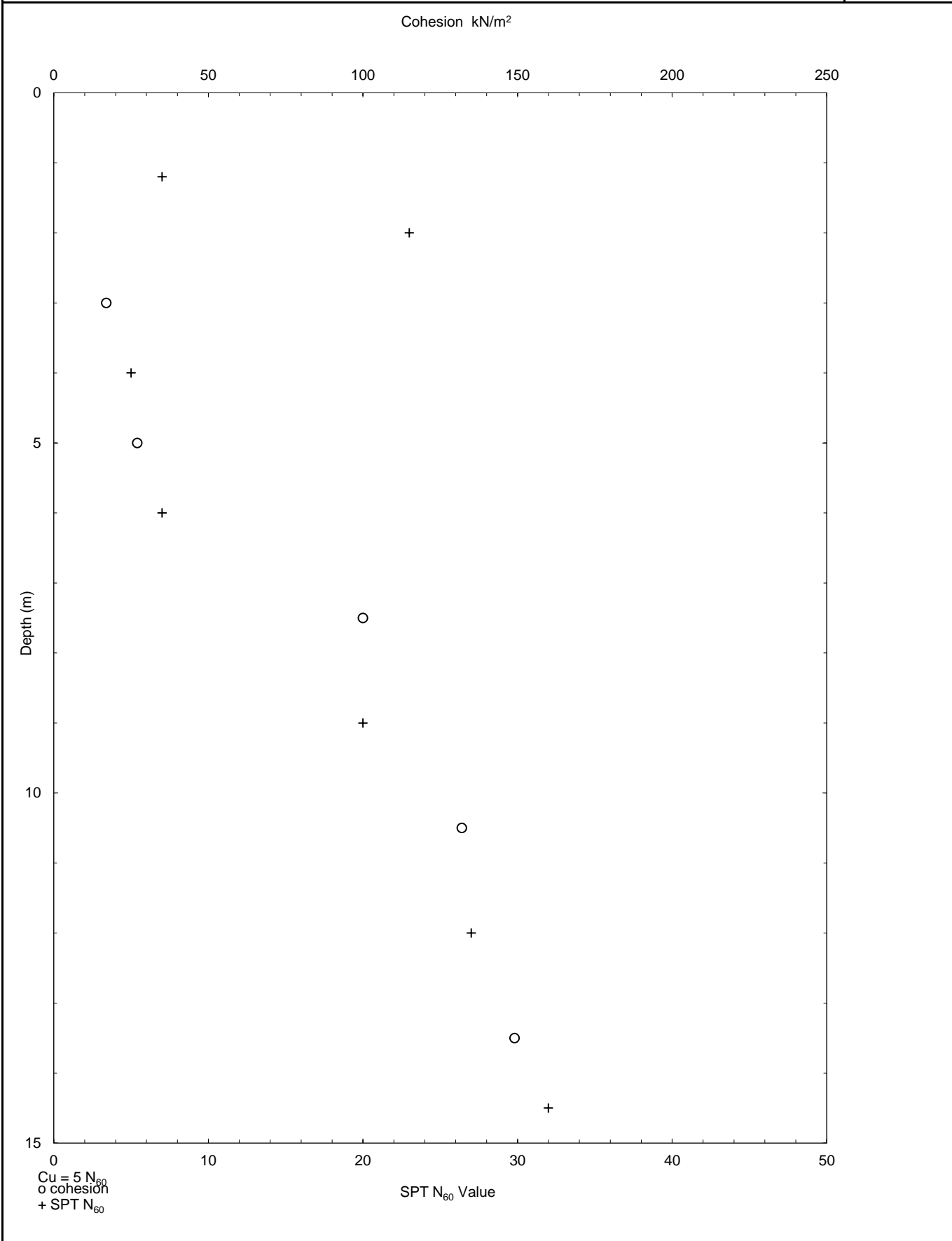
All dimensions in metres Scale 1:62.5	Method/ Plant Used Cable Percussion Rig	Logged By Preliminary
--	--	--------------------------

**Site** Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG

**Job Number**  
J22097

**Client** Bridges Property Alternatives Fund V LP

**Sheet**  
1 / 1

**Engineer** Elliott Wood




## appendix b

### Lab Testing

Geotechnical Test Results

Chemical Test Results

Generic Risk Based Screening Values



## Summary of Natural Moisture Content, Liquid Limit and Plastic Limit Results

Job No. 31666	Project Name Richmond Inn Hotel	Programme	
		Samples received	06/04/2022
Project No. J22097	Client GEA	Schedule received	06/04/2022
		Project started	07/04/2022
		Testing Started	14/04/2022

Hole No.	Sample				Soil Description	NMC %	Passing 425µm %	LL %	PL %	PI %	Remarks
	Ref	Top m	Base m	Type							
BH1	-	5.00	-	U	Low strength brown mottled orangish brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)	25	95	34	17	17	
BH1	-	7.00	-	D	Dark grey silty CLAY	29	100	69	28	41	
BH1	-	12.00	-	D	Dark grey silty CLAY	26	100	74	32	42	

<p><b>Test Methods: BS1377: Part 2: 1990:</b>          Natural Moisture Content : clause 3.2          Atterberg Limits: clause 4.3, 4.4 and 5.0  <i>These results only apply to the items tested</i></p> <p>NOTE: The report shall not be reproduced except in full without authority of the laboratory</p> <p>Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)</p>	<p><b>Test Report by K4 SOILS LABORATORY</b>          Unit 8 Olds Close Olds Approach          Watford Herts WD18 9RU</p> <p>Tel: 01923 711 288          Email: James@k4soils.com</p>	<p><b>Checked and Approved</b></p> <p>Initials     J.P</p> <p>Date:         20/04/2022</p>
---	---	--



# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No. 31666

Borehole/Pit No. BH1

Site Name Richmond Inn Hotel

Sample No. -

Project No. J22097 Client GEA

Depth Top 5.00 m

Soil Description Low strength brown mottled orangish brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)

Depth Base - m

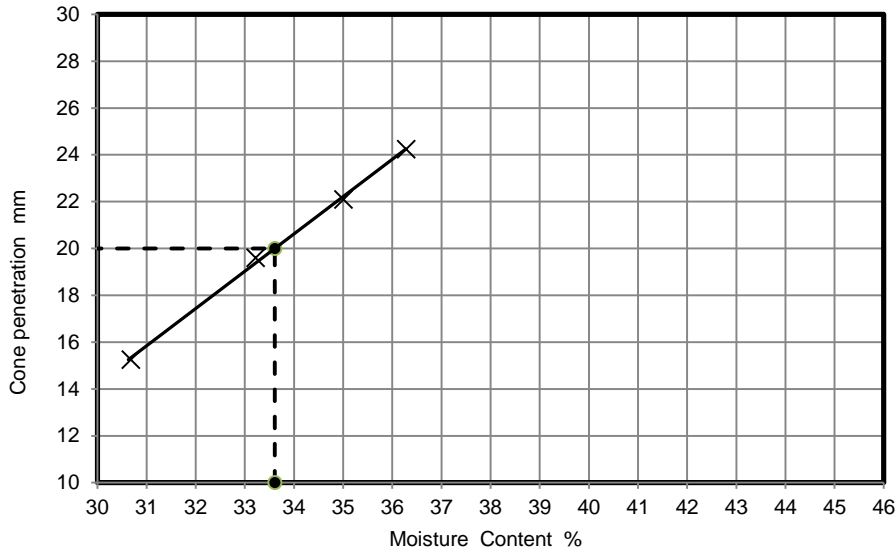
Sample Type U

Samples received 06/04/2022

Schedules received 06/04/2022

Project Started 07/04/2022

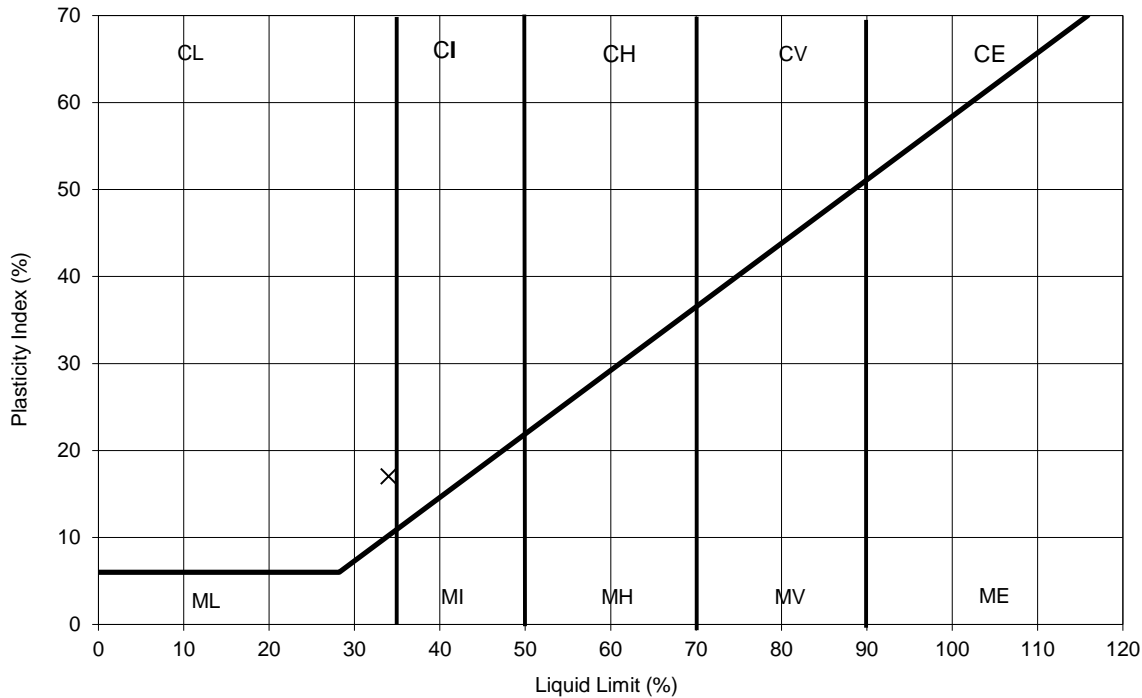
Date Tested 14/04/2022



NATURAL MOISTURE CONTENT	25	%
% PASSING 425µm SIEVE	95	%
LIQUID LIMIT	34	%
PLASTIC LIMIT	17	%
PLASTICITY INDEX	17	%

### Remarks

### PLASTICITY INDEX



### TEST METHOD

BS1377: Part 2 :Clause 4.3 : 1990 Determination of the liquid limit by the cone penetrometer method

BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index

BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying method

Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU

Tel: 01923 711 288 Email: James@k4soils.com

Checked and Approved

Initials: J.P  
Date: 20/04/2022

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5 R2



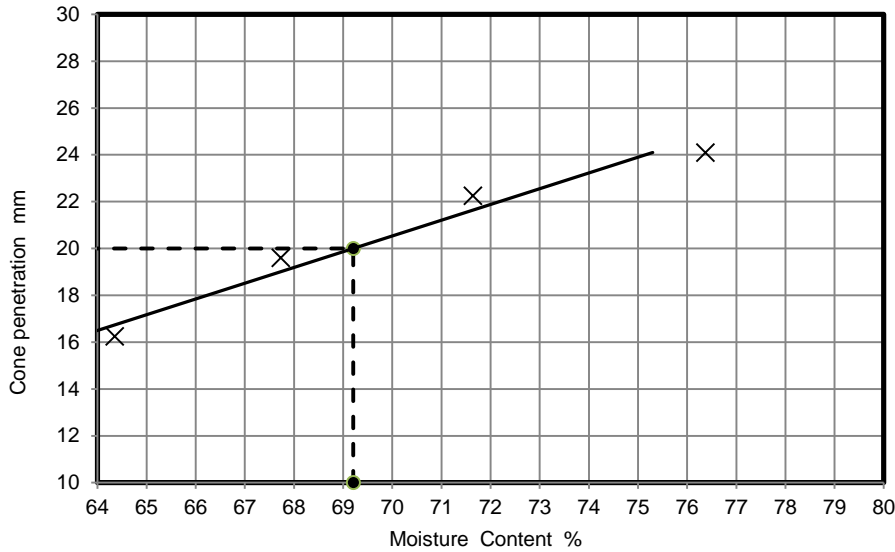
2519



# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	7.00 m
Depth Base	- m
Sample Type	D
Samples received	06/04/2022
Schedules received	06/04/2022
Project Started	07/04/2022
Date Tested	14/04/2022

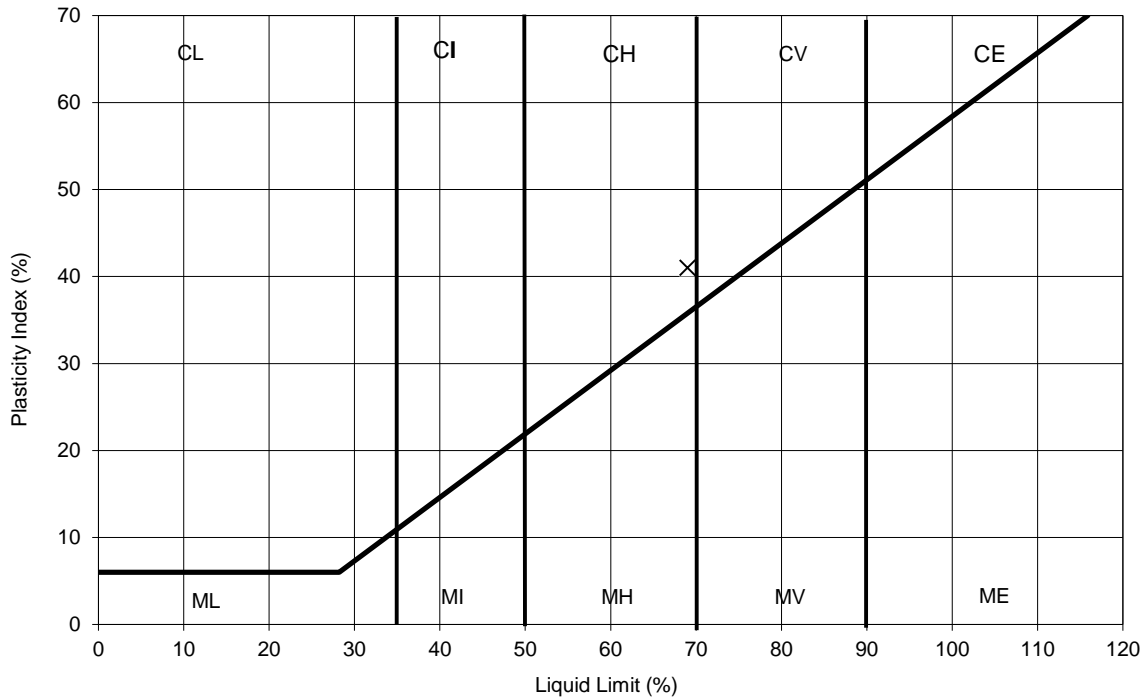
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	Dark grey silty CLAY		



NATURAL MOISTURE CONTENT	29	%
% PASSING 425µm SIEVE	100	%
LIQUID LIMIT	69	%
PLASTIC LIMIT	28	%
PLASTICITY INDEX	41	%

**Remarks**

## PLASTICITY INDEX



### TEST METHOD

BS1377: Part 2 :Clause 4.3 : 1990 Determination of the liquid limit by the cone penetrometer method  
 BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index  
 BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying method  
 Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU  
 Tel: 01923 711 288 Email: James@k4soils.com

**Checked and Approved**

Initials: J.P  
 Date: 20/04/2022

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

MSF-5 R2

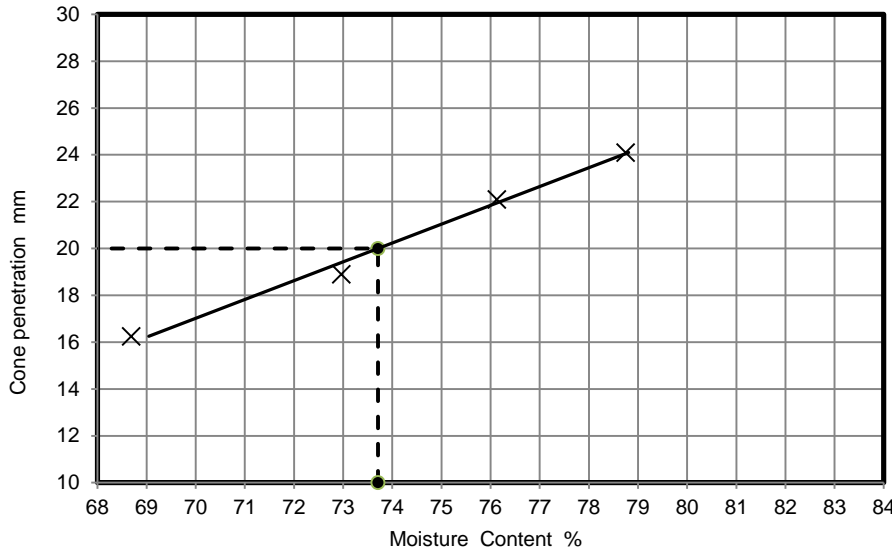




# LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Job No.	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	12.00 m
Depth Base	- m
Sample Type	D
Samples received	06/04/2022
Schedules received	06/04/2022
Project Started	07/04/2022
Date Tested	14/04/2022

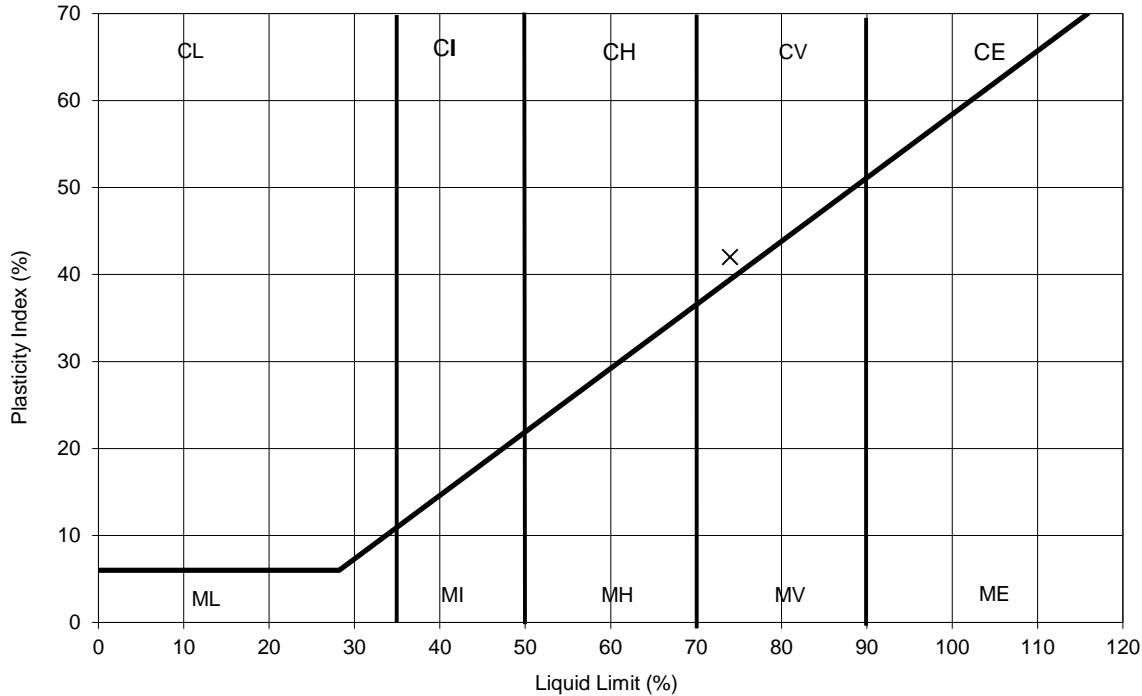
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	Dark grey silty CLAY		



NATURAL MOISTURE CONTENT	26	%
% PASSING 425µm SIEVE	100	%
LIQUID LIMIT	74	%
PLASTIC LIMIT	32	%
PLASTICITY INDEX	42	%

**Remarks**

## PLASTICITY INDEX



<b>TEST METHOD</b>	BS1377: Part 2 :Clause 4.3 : 1990 Determination of the liquid limit by the cone penetrometer method
	BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index
	BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying method
	Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU
	Tel: 01923 711 288 Email: James@k4soils.com
2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

<b>Checked and Approved</b>
Initials: J.P
Date: 20/04/2022
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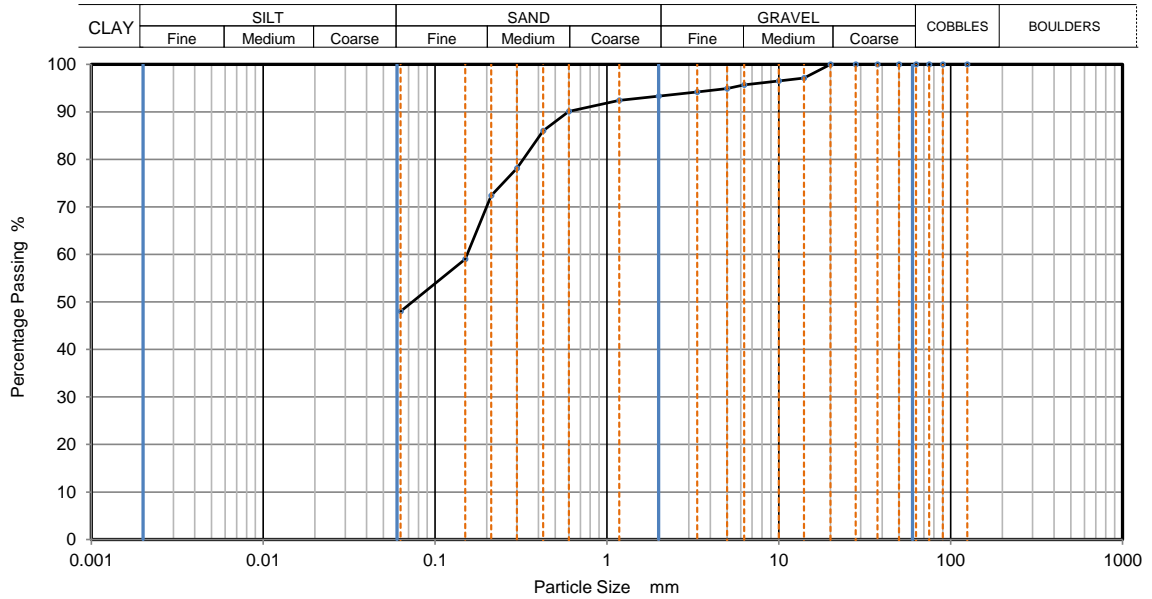




## PARTICLE SIZE DISTRIBUTION

		Job Ref	31666
		Borehole/Pit No.	BH1
Site Name	Richmond Inn Hotel	Sample No.	-
Project No.	J22097	Client	GEA
		Depth Top	2.00 m
Soil Description	Brown slightly mottled grey slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)	Depth Base	- m
		Sample Type	B
		Samples received	06/04/2022
		Schedules received	06/04/2022
Test Method	BS1377:Part 2: 1990, clause 9.0	Project started	07/04/2022
		Date tested	14/04/2022

*These results only apply to the items tested*



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	97		
10	97		
6.3	96		
5	95		
3.35	94		
2	93		
1.18	92		
0.6	90		
0.425	86		
0.3	78		
0.212	72		
0.15	59		
0.063	48		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	6.7
Sand	45.3
Fines <0.063mm	48.0

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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 <b>UKAS</b> TESTING	<b>K4 Soils Laboratory</b> Unit 8, Olds Close, Watford, Herts, WD18 9RU Email: james@k4soils.com Tel: 01923 711288	<b>Checked and Approved</b> Initials: J.P Date: 20/04/2022	
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)	MSF-5-R3



**Unconsolidated Undrained Triaxial Compression tests without measurement of pore pressure  
Summary of Results**

**Tests carried out in accordance with BS1377:Part 7 : 1990 clause 8 or 9 as appropriate to test**

Job No. 31666	Project Name Richmond Inn Hotel	Programme	
		Samples received	06/04/2022
Project No. J22097	Client GEA	Schedule received	06/04/2022
		Project started	07/04/2022
		Testing Started	11/04/2022

Hole No.	Sample				Soil Description	Test Type	Density		w %	Length mm	Diameter mm	$\sigma_3$ kPa	At failure				Remarks
	Ref	Top m	Base m	Type			bulk Mg/m <sup>3</sup>	dry					Axial strain %	$\sigma_1 - \sigma_3$ kPa	cu kPa	Mode	
BH1	-	3.00	-	U	Very low strength brown mottled orangish brown slightly gravelly slightly sandy silty CLAY (gravel is fm and sub-angular)	UU	2.12	1.71	24	198	102	60	20	34	17	P	
BH1	-	5.00	-	U	Low strength brown mottled orangish brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)	UU	2.20	1.87	18	198	102	100	20	54	27	C	
BH1	-	7.50	-	U	High strength dark grey slightly fine sandy silty CLAY	UU	2.00	1.54	30	198	102	150	16	201	100	C	
BH1	-	10.50	-	U	High strength dark grey silty CLAY with occasional pockets of black fine sand	UU	1.96	1.55	26	198	102	210	9.6	265	132	C	
BH1	-	13.50	-	U	High strength dark grey silty CLAY	UU	2.03	1.60	27	198	102	270	4.5	299	149	B	

Legend	UU - single stage test (single and multiple specimens)	$\sigma_3$ Cell pressure	Mode of failure ;	B - Brittle
	UUM - Multistage test on a single specimen	$\sigma_1 - \sigma_3$ Maximum corrected deviator stress		P - Plastic
	suffix R - remoulded or recompacted	cu Undrained shear strength, $\frac{1}{2}(\sigma_1 - \sigma_3)$		C - Compound

	<b>Test Report by K4 SOILS LABORATORY</b> Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU Tel: 01923 711 288 Email: james@k4soils.com	<b>Checked and Approved</b> Initials: J.P Date: 20/04/2022
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

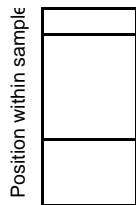


**Unconsolidated Undrained Triaxial  
Compression Test without measurement of  
pore pressure - single specimen**

Job Ref	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	3.00 m
Depth Base	- m
Sample Type	U
Samples received	06/04/2022
Schedules received	06/04/2022
Date of test	11/04/2022

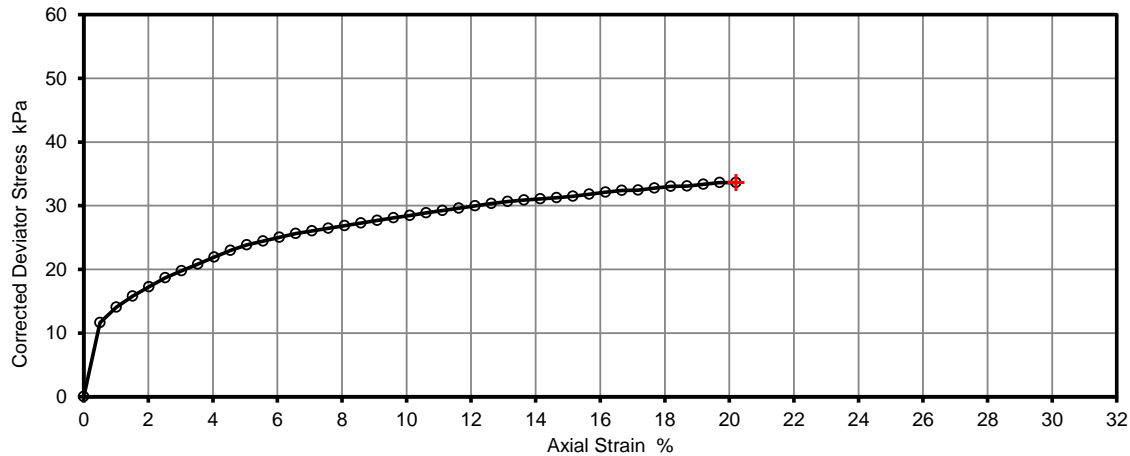
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	Very low strength brown mottled orangish brown slightly gravelly slightly sandy silty CLAY (gravel is fm and sub-angular)		
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen		

**Remarks**

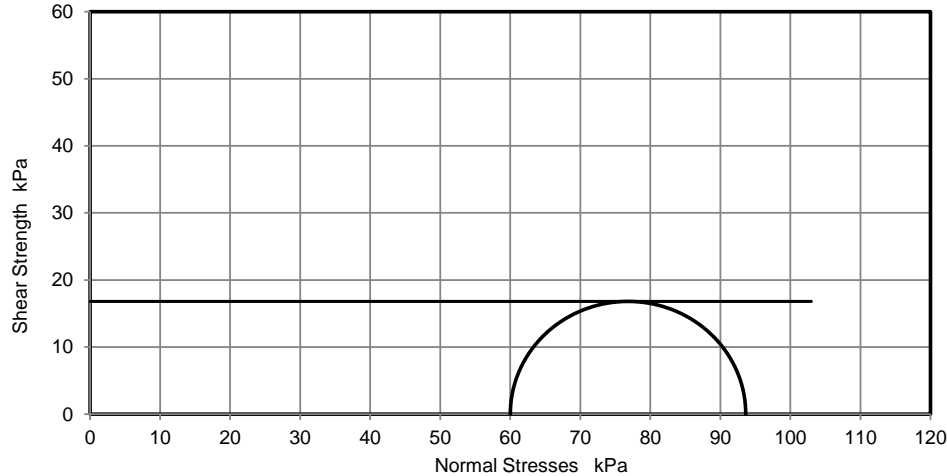


Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	2.12	Mg/m3
Moisture Content	24	%
Dry Density	1.71	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	60	kPa
Axial Strain	20	%
Deviator Stress, ( $\sigma_1 - \sigma_3$ ) f	34	kPa
Undrained Shear Strength, cu	17	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Mode of Failure	Plastic	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.



Test Report by **K4 SOILS LABORATORY**  
 Unit 8 Olds Close Olds Approach  
 Watford Herts WD18 9RU  
 Tel: 01923 711 288  
 Email: James@k4soils.com

**Checked and Approved**  
 Initials: J.P  
 Date 20/04/2022

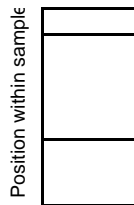


**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**

Job Ref	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	5.00 m
Depth Base	- m
Sample Type	U
Samples received	06/04/2022
Schedules received	06/04/2022
Date of test	11/04/2022

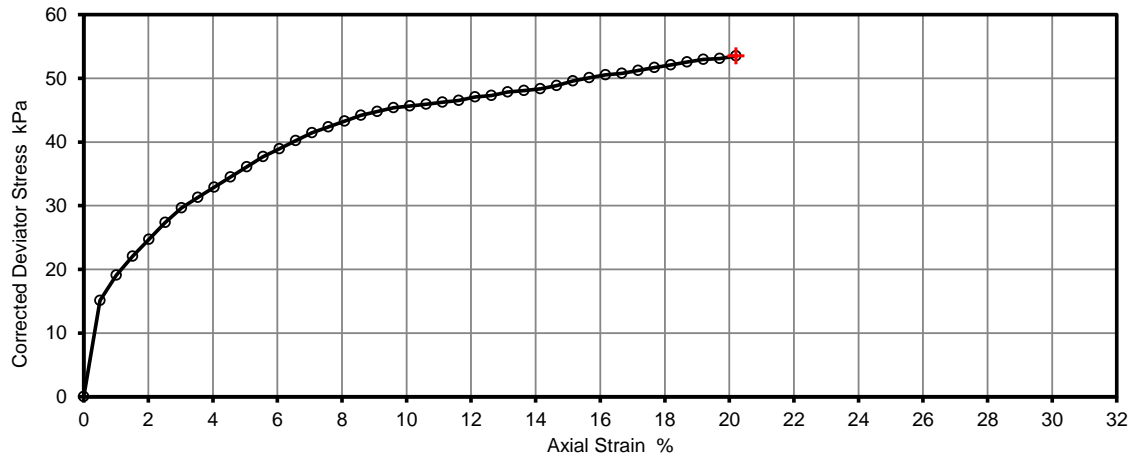
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	Low strength brown mottled orangish brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)		
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen		

**Remarks**

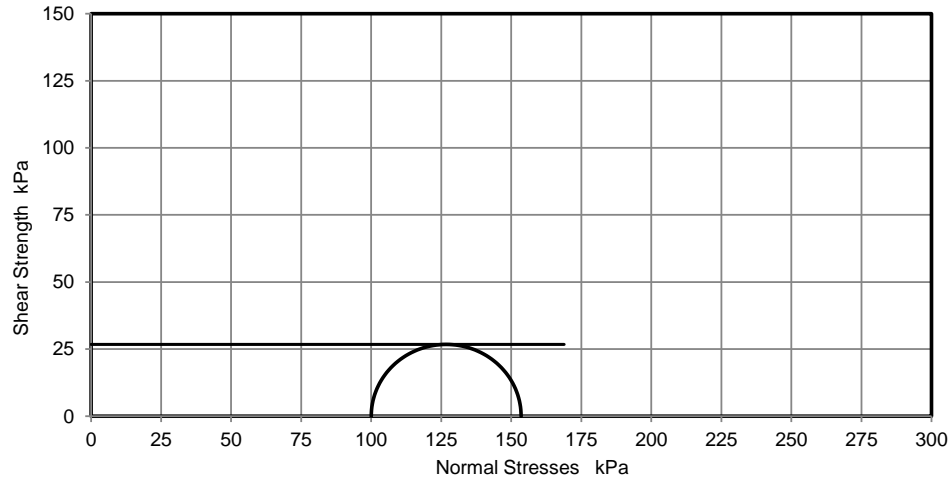


Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	2.20	Mg/m3
Moisture Content	18	%
Dry Density	1.87	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	100	kPa
Axial Strain	20	%
Deviator Stress, ( $\sigma_1 - \sigma_3$ ) f	54	kPa
Undrained Shear Strength, cu	27	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Mode of Failure	Compound	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.



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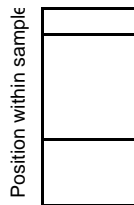


**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**

Job Ref	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	7.50 m
Depth Base	- m
Sample Type	U
Samples received	06/04/2022
Schedules received	06/04/2022
Date of test	11/04/2022

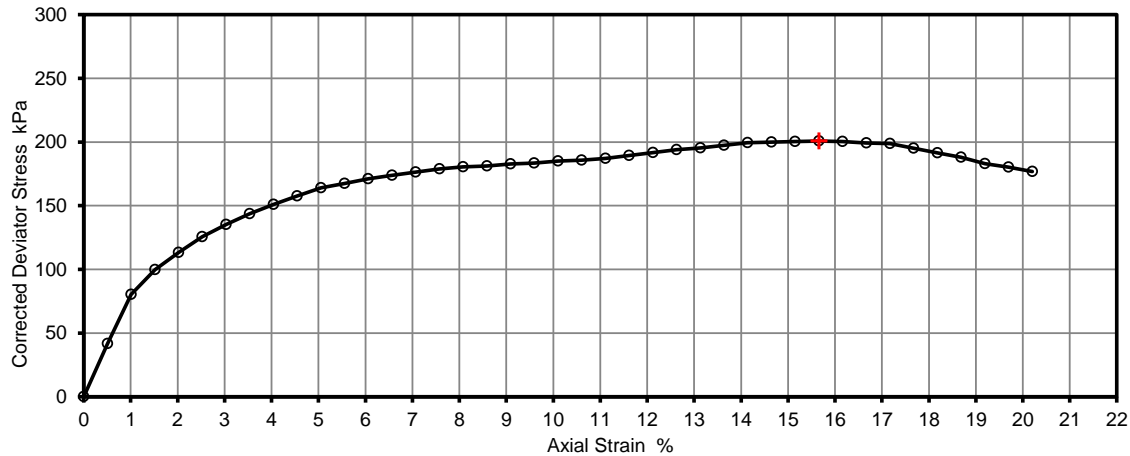
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	High strength dark grey slightly fine sandy silty CLAY		
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen		

**Remarks**

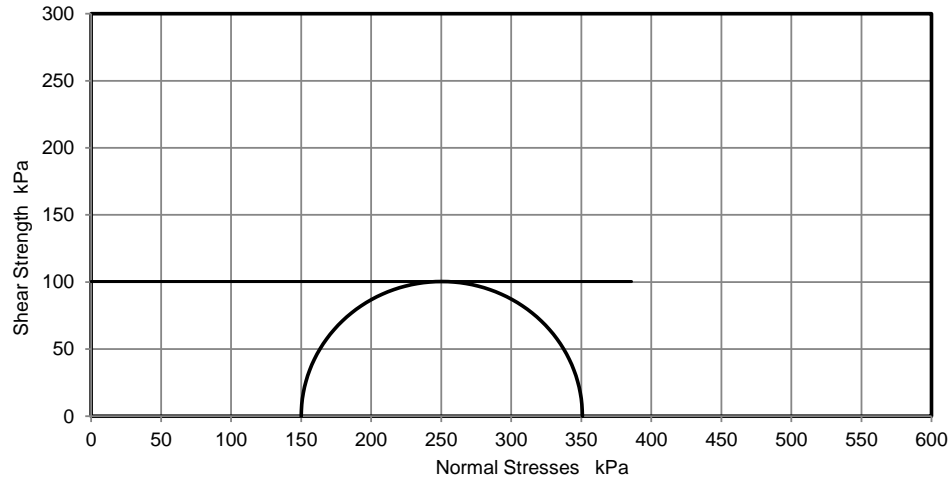


Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	2.00	Mg/m3
Moisture Content	30	%
Dry Density	1.54	Mg/m3
Rate of Strain	2.0	%/min
Cell Pressure	150	kPa
Axial Strain	16	%
Deviator Stress, ( $\sigma_1 - \sigma_3$ ) f	201	kPa
Undrained Shear Strength, cu	100	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Mode of Failure	Compound	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.



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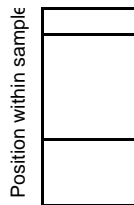
Checked and Approved  
 Initials: J.P.  
 Date: 20/04/2022



**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**

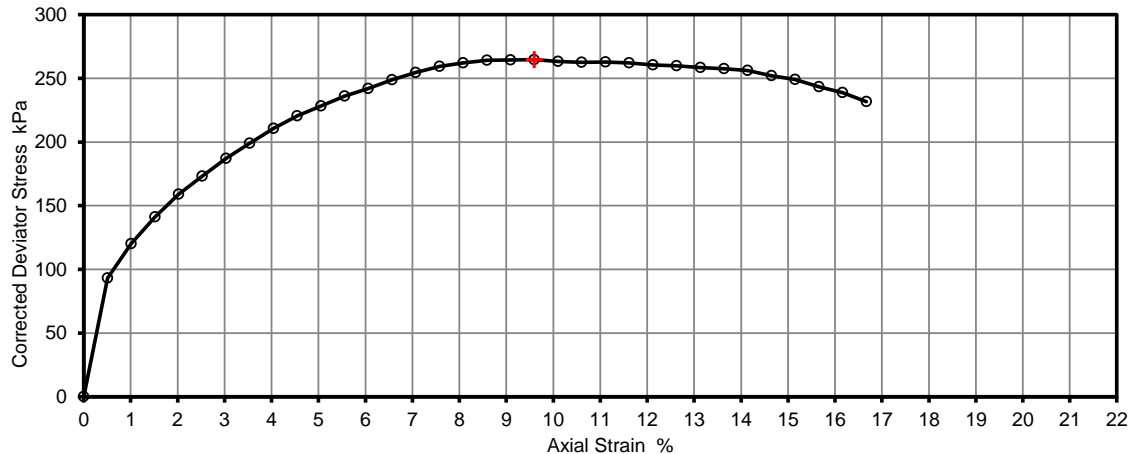
Job Ref	31666		
Borehole/Pit No.	BH1		
Site Name	Richmond Inn Hotel		
Sample No.	-		
Project No.	J22097	Client	GEA
Depth Top	10.50 m		
Depth Base	- m		
Soil Description	High strength dark grey silty CLAY with occasional pockets of black fine sand		
Sample Type	U		
Samples received	06/04/2022		
Schedules received	06/04/2022		
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen		Date of test
			11/04/2022

**Remarks**

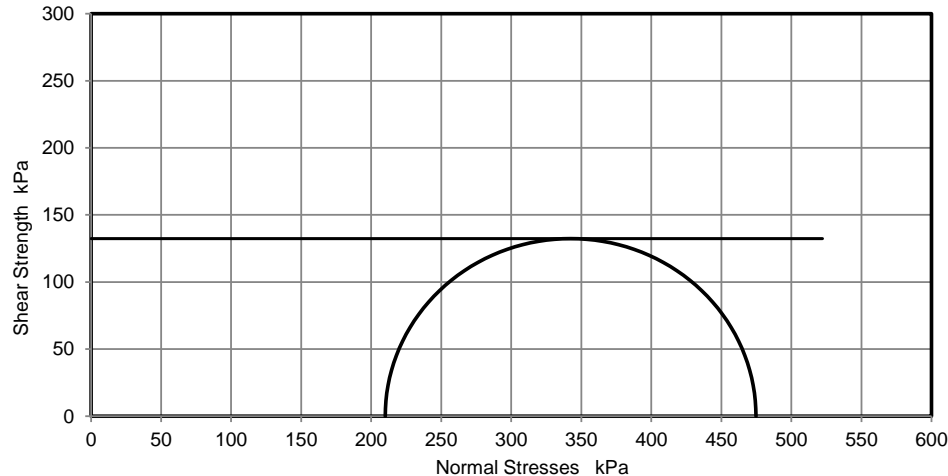


Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	1.96	Mg/m <sup>3</sup>
Moisture Content	26	%
Dry Density	1.55	Mg/m <sup>3</sup>
Rate of Strain	2.0	%/min
Cell Pressure	210	kPa
Axial Strain	9.6	%
Deviator Stress, ( $\sigma_1 - \sigma_3$ )f	265	kPa
Undrained Shear Strength, cu	132	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)$ f
Mode of Failure	Compound	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.



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 Unit 8 Olds Close Olds Approach  
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**Checked and Approved**  
 Initials: J.P.  
 Date 20/04/2022

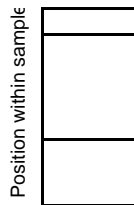


**Unconsolidated Undrained Triaxial  
Compression Test without measurement of  
pore pressure - single specimen**

Job Ref	31666
Borehole/Pit No.	BH1
Sample No.	-
Depth Top	13.50 m
Depth Base	- m
Sample Type	U
Samples received	06/04/2022
Schedules received	06/04/2022
Date of test	11/04/2022

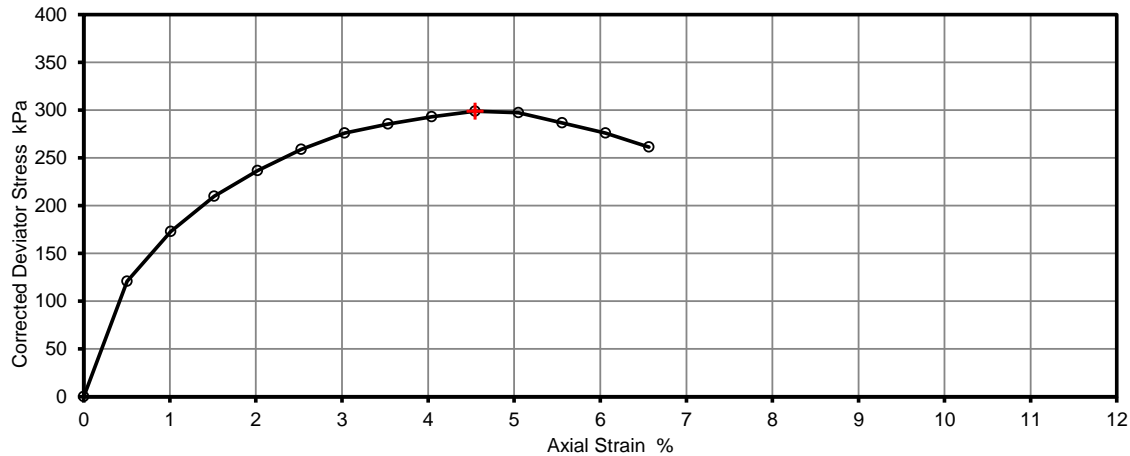
Site Name	Richmond Inn Hotel		
Project No.	J22097	Client	GEA
Soil Description	High strength dark grey silty CLAY		
Test Method	BS1377 : Part 7 : 1990, clause 8, single specimen		

**Remarks**

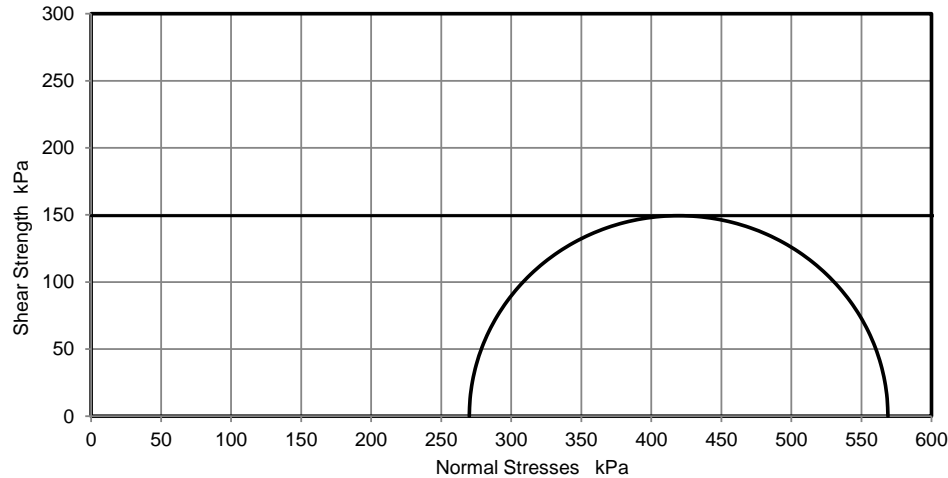


Test Number	1	
Length	198.0	mm
Diameter	102.0	mm
Bulk Density	2.03	Mg/m <sup>3</sup>
Moisture Content	27	%
Dry Density	1.60	Mg/m <sup>3</sup>
Rate of Strain	2.0	%/min
Cell Pressure	270	kPa
Axial Strain	4.5	%
Deviator Stress, (σ <sub>1</sub> - σ <sub>3</sub> ) f	299	kPa
Undrained Shear Strength, c <sub>u</sub>	149	kPa ½(σ <sub>1</sub> - σ <sub>3</sub> ) f
Mode of Failure	Brittle	

**Deviator Stress v Axial Strain**



**Mohr Circles**



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.



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 Watford Herts WD18 9RU  
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 Email: James@k4soils.com

**Checked and Approved**  
 Initials: J.P.  
 Date: 20/04/2022



**Sulphate Content (Gravimetric Method) for 2:1 Soil: Water Extract and pH Value - Summary of Results**  
 Tested in accordance with BS1377 : Part 3 : 2018, Clause 7.6 & Clause 12

Job No. 31666	Project Name Richmond Inn Hotel	Programme	
		Samples received	06/04/2022
Project No. J22097	Client GEA	Schedule received	06/04/2022
		Project started	07/04/2022
		Testing Started	13/04/2022

Hole No.	Sample				Soil description	Dry Mass passing 2mm %	SO4 Content mg/l	pH	Remarks
	Ref	Top m	Base m	Type					
BH1	-	3.50	-	D	Orangish brown slightly gravelly sandy silty CLAY (gravel is fm and sub-angular)	97	180	7.34	
BH1	-	8.00	-	D	Dark brown silty CLAY	100	240	7.40	

	<b>Test Report by K4 SOILS LABORATORY</b> Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU Tel: 01923 711 288 Email: James@k4soils.com <small>These results only apply to the items tested</small> <small>NOTE: The report shall not be reproduced except in full without authority of the laboratory</small>	Checked and Approved Initials      J.P  Date:      20/04/2022
	<small>Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)</small>	<small>MSF-5-R29</small>
2519		





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## **Analytical Report Number : 22-50113**

<b>Project / Site name:</b>	Richmond Inn Hotel	<b>Samples received on:</b>	05/04/2022
<b>Your job number:</b>	J22097	<b>Samples instructed on/ Analysis started on:</b>	06/04/2022
<b>Your order number:</b>		<b>Analysis completed by:</b>	13/04/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/04/2022
<b>Samples Analysed:</b>	1 soil sample		

  
**Signed:**

Adam Fenwick  
Technical Reviewer  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-50113  
Project / Site name: Richmond Inn Hotel

<b>Lab Sample Number</b>				2229012
<b>Sample Reference</b>				BH1
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				0.30
<b>Date Sampled</b>				06/04/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	6.2
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	2800
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.66
Sulphide	mg/kg	1	MCERTS	16
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	21
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.44
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.1
Pyrene	mg/kg	0.05	MCERTS	1.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.76
Chrysene	mg/kg	0.05	MCERTS	0.57
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.81
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.42
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.92
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.43
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.5

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	7.06
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Analytical Report Number: 22-50113  
Project / Site name: Richmond Inn Hotel

<b>Lab Sample Number</b>				2229012
<b>Sample Reference</b>				BH1
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				0.30
<b>Date Sampled</b>				06/04/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	

**Heavy Metals / Metalloids**

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140

**Petroleum Hydrocarbons**

TPH C10 - C40 <sub>EH, CU, ID, TOTAL</sub>	mg/kg	10	MCERTS	11
TPH (C8 - C10) <sub>HS, ID, TOTAL</sub>	mg/kg	0.1	MCERTS	< 0.1
TPH (C10 - C12) <sub>EH, CU, ID, TOTAL</sub>	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) <sub>EH, CU, ID, TOTAL</sub>	mg/kg	4	MCERTS	< 4.0
TPH (C16 - C21) <sub>EH, CU, ID, TOTAL</sub>	mg/kg	1	MCERTS	3
TPH (C21 - C35) <sub>EH, CU, ID, TOTAL</sub>	mg/kg	1	MCERTS	8.2
TPH Total C8 - C35 <sub>EH, CU+HS, ID, TOTAL</sub>	mg/kg	10	MCERTS	11

U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 22-50113**  
**Project / Site name: Richmond Inn Hotel**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2229012	BH1	None Supplied	0.3	Brown clay and sand with vegetation and gravel

**Analytical Report Number : 22-50113**  
**Project / Site name: Richmond Inn Hotel**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 22-50113  
 Project / Site name: Richmond Inn Hotel

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Information in Support of Analytical Results**

**List of HWOL Acronyms and Operators**

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

<b>Site</b>	Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG	<b>Job Number</b> J22097
<b>Client</b>	Bridges Property Alternatives Investments Fund V LP	
<b>Engineer</b>	Elliott Wood	<b>Sheet</b> 1 / 2

**Proposed End Use Commercial**
**Soil Organic Matter content % 1.0**

Contaminant	Screening Value mg/kg	Data Source	Contaminant	Screening Value mg/kg	Data Source
<b>Metals</b>			<b>Hydrocarbons</b>		
Arsenic	640	C4SL	Banded TPH (8-10)	5385	Calc1
Cadmium	410	C4SL	Banded TPH (10-12)	24615	Calc1
Chromium (III)	8600	S4UL	Banded TPH (12-16)	55385	Calc1
Chromium (VI)	49	C4SL	Banded TPH (16-21)	43077	Calc1
Copper	68,000	S4UL	Banded TPH (21-35)	43077	Calc1
Lead	2330	C4SL	Benzene	27	C4SL
Elemental Mercury	26	S4UL	Toluene	870	SGV
Inorganic Mercury	1100	S4UL	Ethyl Benzene	48000	SGV
Nickel	980	S4UL	Xylene	475	SGV
Selenium	13000	SGV	Aliphatic C5-C6	3200	S4UL
Zinc	730,000	S4UL	Aliphatic C6-C8	7800	S4UL
<b>Anions</b>			Aliphatic C8-C10	2000	S4UL
Soluble Sulphate	500 mg/l	Structures	Aliphatic C10-C12	9700	S4UL
Sulphide	50	Structures	Aliphatic C12-C16	59000	S4UL
Chloride	400	Structures	Aliphatic C16-C35	1,600,000	S4UL
<b>Others</b>			Aromatic C6-C7	See Benzene	S4UL
Organic Carbon (%)	10	Methanogenic potential	Aromatic C7-C8	See Toluene	S4UL
Total Cyanide	12000	WRAS	Aromatic C8-C10	3500	S4UL
Total Mono Phenols	3200	SGV	Aromatic C10-C12	16000	S4UL
<b>PAH</b>			Aromatic C12-C16	36000	S4UL
Naphthalene	190.00	S4UL	Aromatic C16-C21	28000	S4UL
Acenaphthylene	83,000	S4UL	Aromatic C21-C35	28000	S4UL
Acenaphthene	84,000	S4UL	PRO (C <sub>5</sub> -C <sub>10</sub> )	17397	Calc2
Fluorene	63,000	S4UL	DRO (C <sub>12</sub> -C <sub>28</sub> )	1,723,000	Calc2
Phenanthrene	22,000	S4UL	Lube Oil (C <sub>28</sub> -C <sub>44</sub> )	1,628,000	Calc2
Anthracene	520,000	S4UL	<b>TPH</b>	<b>750</b>	Trigger to consider speciated testing
Fluoranthene	23,000	S4UL	<b>Chlorinated Solvents</b>		
Pyrene	54,000	S4UL	1,1,1 trichloroethane (TCA)	660	S4UL
Benzo(a)anthracene	170.0	S4UL	tetrachloroethane (PCA)	110	S4UL
Chrysene	350	S4UL	tetrachloroethene (PCE)	19	S4UL
Benzo(b)fluoranthene	44.0	S4UL	trichloroethene (TCE)	1.2	S4UL
Benzo(k)fluoranthene	1,200.0	S4UL	1,2-dichloroethane (DCA)	0.67	S4UL
Benzo(a)pyrene	42.00	C4SL	vinyl chloride (Chloroethene)	0.059	S4UL
Indeno(1 2 3 cd)pyrene	500.0	S4UL	tetrachloromethane (Carbon tetra	2.9	S4UL
Dibenz(a h)anthracene	3.50	S4UL	trichloromethane (Chloroform)	99	S4UL
Benzo (g h i)perylene	3,900	S4UL			
<b>Total PAH Screen</b>	<b>600.0</b>	B(a)P / 0.15			

**Notes**

Concentrations measured below these screening values may be considered to represent 'uncontaminated conditions' which pose a 'LOW' risk to human health. Concentrations measured in excess of these values indicate a potential risk which require further, site specific risk assessment.

C4SL - Defra Category 4 Screening value based on Low Level of Toxicological Risk

SGV - Soil Guideline Value, derived from the CLEA model and published by Environment Agency 2009 - where not superseded by C4SL

S4UL - LQM/CIEH Suitable for use Level (2015) based on 'minimal' level of risk

Calc1 - sum of thresholds for Ali &amp; Aro fractions - assuming a 35% Aro:65% Ali ratio as is commonly encountered in the soil

Calc2 - sum of nearest available carbon range specified including BTEX for PRO fraction

Total PAH based on B(a)P / 0.15 - GEA experience indicates that Benzo(a) pyrene rarely exceeds 15% of the total PAH concentration



<b>Site</b>	Richmond Inn Hotel, 50-56 Sheen Road, Richmond TW9 1UG	<b>Job Number</b> J22097
<b>Client</b>	Bridges Property Alternatives Investments Fund V LP	<b>Sheet</b> 2 / 2
<b>Engineer</b>	Elliott Wood	

Proposed End Use **Commercial**

**The key generic assumptions for this end use are as follows;**

- that groundwater will not be a critical risk receptor;
- that the critical receptor for human health will be a working female aged 16 to 65 years old;
- that the exposure duration will be 49 years;
- that the building type equates to a three-storey office.
- that the critical exposure pathways will be direct soil and indoor dust ingestion, skin contact with soils and dust, and inhalation of dust and vapours;

Where contaminant concentrations are measured at concentrations below the generic screening value it is considered that they pose an acceptable level of risk and thus further consideration of these contaminant concentrations is not required. However, where concentrations are measured in excess of the generic screening value there is considered to be a potential that they could pose an unacceptable risk and thus further action will be required which could include:

- additional testing to zone the extent of the contaminated material and thus reduce the uncertainty with regard to its potential risk;
- site specific risk assessment to refine the assessment criteria and allow an assessment to be made as to whether the concentration present would pose an unacceptable risk at this site; or
- soil remediation or risk management to mitigate the risk posed by the contaminant to a degree that it poses an acceptable risk.





## appendix c

### Desk Study

Envirocheck Extracts  
Historical Maps  
Preliminary UXO Risk Assessment

## Envirocheck<sup>®</sup> Report:

### Datasheet

#### Order Details:

**Order Number:**

293276828\_1\_1

**Customer Reference:**

J22097

**National Grid Reference:**

518340, 175020

**Slice:**

A

**Site Area (Ha):**

0.14

**Search Buffer (m):**

1000

#### Site Details:

The Richmond Inn Hotel, 50-56

Sheen Road

RICHMOND

TW9 1UG

#### Client Details:

Mr S Branch

GEA Ltd

Widbury Barn

Widbury Hill

Ware

Herts

SG12 7QE



Report Section	Page Number
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Agency & Hydrological	1
Waste	14
Hazardous Substances	15
Geological	16
Industrial Land Use	21
Sensitive Land Use	47
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**Introduction**

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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**Report Version v53.0**

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1		Yes		n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				7
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 2			4	4
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3				Yes
Pollution Incidents to Controlled Waters	pg 4				10
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 5				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 5				1 (*21)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 11	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information		1	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 12				12

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 14	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 14				1
Potentially Infilled Land (Water)	pg 14			2	
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)	pg 15				1
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 15				1
Planning Hazardous Substance Consents	pg 15				1
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 16	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry					
BGS Recorded Mineral Sites	pg 16				1
BGS Urban Soil Chemistry	pg 16		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 19	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 19				1
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 19	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 20	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 20	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 20	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 21		23	75	96
Fuel Station Entries	pg 37			1	2
Points of Interest - Commercial Services	pg 37			4	15
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 39		4	9	27
Points of Interest - Public Infrastructure	pg 42		1	9	28
Points of Interest - Recreational and Environmental	pg 45		4		6
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Sensitive Land Use</b>					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves	pg 47				1
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest	pg 47				1
Special Areas of Conservation	pg 47				1
Special Protection Areas					
World Heritage Sites	pg 47			1	1

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	6	1	518337 175050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (W)	117	1	518200 175000
1	<b>Discharge Consents</b> Operator: Haslemere Estates (Development) Ltd. Property Type: Undefined Or Other Location: Richmond Riverside Development, Richmond, Surrey. Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CTWC.0101 Permit Version: 1 Effective Date: 25th June 1985 Issued Date: 25th June 1985 Revocation Date: 4th December 1998 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Saline Estuary Environment: Receiving Water: River Thames Tidal <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	742	2	517710 174590
2	<b>Discharge Consents</b> Operator: Thames Water Utilities Limited. Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Petersham Road Cso Riverside . St Margarets Richmond Upon Thames Tw10 6uj Authority: Environment Agency, Thames Region Catchment Area: Not Given Reference: CSAB.0525 Permit Version: 1 Effective Date: 5th October 1987 Issued Date: 5th October 1987 Revocation Date: 6th May 2021 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Saline Estuary Environment: Receiving Water: R.Thames ( Tidal ) <b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	749	2	517890 174390
2	<b>Discharge Consents</b> Operator: Thames Water Utilities Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Petersham Road Cso Riverside . St Margarets Richmond Upon Thames Tw10 6uj Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Csab.0525 Permit Version: 2 Effective Date: 7th May 2021 Issued Date: 7th May 2021 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Saline Estuary Environment: Receiving Water: River Thames <b>Status: Varied under EPR 2010</b> Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	771	2	517880 174370
3	<b>Discharge Consents</b> Operator: Frank Hodgson And Associates Property Type: Undefined Or Other Location: Cholomondely Walk, Richmond, Surrey Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Ctwc.2560 Permit Version: 1 Effective Date: 22nd June 1988 Issued Date: 22nd June 1988 Revocation Date: 8th May 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Saline Estuary Environment: Receiving Water: R. Thames: Port Of London Dock <b>Status: Authorisation revoked</b> Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	764	2	517650 174650



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	<p><b>Discharge Consents</b></p> <p>Operator: Leander Estates Ltd.  Property Type: OTHER MANUFACTURING/JEWELLERY/MUSICAL INST/SPORTS GOODS  Location: Richmond Slipways, 1 Ducks Walk, East Twickenham, Middlesex  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CTWC.2604  Permit Version: 1  Effective Date: 30th June 1988  Issued Date: 30th June 1988  Revocation Date: 2nd December 1999  Discharge Type: Discharge Of Other Matter-Surface Water  Discharge: Saline Estuary  Environment:  Receiving Water: River Thames  <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A7NW (SW)	934	2	517460 174650
5	<p><b>Discharge Consents</b></p> <p>Operator: Bg Properties Plc.  Property Type: SUB-STATION/ELECTRICITY/GAS/AIR CONDITIONING SUPPLY  Location: Depot &amp; Gas Holder Station, Manor Road, Richmond  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CATM.3197  Permit Version: 1  Effective Date: 14th April 1998  Issued Date: 14th April 1998  Revocation Date: 5th November 1999  Discharge Type: Miscellaneous Discharges - Mine / Groundwater As Raised  Discharge: Underground Water  Environment:  Receiving Water: River Terrace Gravels  <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A19SE (NE)	938	2	519080 175620
6	<p><b>Discharge Consents</b></p> <p>Operator: Sports-Drome Ltd.  Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA  Location: Clevedon Road, Twickenham, Middx  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Ctmr.0071  Permit Version: 1  Effective Date: 1st August 1976  Issued Date: 1st August 1976  Revocation Date: 18th February 1992  Discharge Type: Trade Discharges - Cooling Water  Discharge: Saline Estuary  Environment:  Receiving Water: Thames  <b>Status: Authorisation revoked</b>  Positional Accuracy: Manually corrected supplier location</p>	A7SE (SW)	939	2	517700 174300
7	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Ducane Dry Cleaners  Location: 2 Westminster House, Kew Road, Richmond, Tw9 2nd  Authority: London Borough of Richmond upon Thames, Environmental Health Department  Permit Reference: LBRUT/DC/09  Dated: 1st April 2007  Process Type: Local Authority Pollution Prevention and Control  Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>  Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	304	3	518069 175213
8	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: The Clean Machine  Location: 18 Eton Street, Richmond, Tw9 1ee  Authority: London Borough of Richmond upon Thames, Environmental Health Department  Permit Reference: LBRUT/DC/04  Dated: 1st April 2007  Process Type: Local Authority Pollution Prevention and Control  Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>  Positional Accuracy: Manually positioned to the address or location</p>	A13SW (SW)	307	3	518045 174881



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Vip Dry Cleaners            Location: 21 Lower Richmond Road, Richmond, Tw9 2lp            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: Not Supplied            Dated: 17th May 2013            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SW (N)	367	3	518294 175408
10	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Pristine Laundries            Location: 90 Kew Road, Richmond, Tw9 2pq            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: LBRUT/DC/21            Dated: 1st April 2007            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SW (N)	435	3	518315 175478
11	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Black Horse Service Station            Location: 174-176 Sheen Road, RICHMOND, Surrey, TW9 1XD            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: 13/PVR            Dated: 31st December 1998            Process Type: Local Authority Pollution Prevention and Control            Description: PG1/14 Petrol filling station  <b>Status: Permitted</b>            Positional Accuracy: Automatically positioned to the address</p>	A14NW (E)	603	3	518961 175063
12	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Regency Of Richmond            Location: 18 Hill Street, Richmond, Tw9 1tn            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: 20            Dated: 29th March 2007            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Authorisation revoked</b>            Positional Accuracy: Manually positioned to the address or location</p>	A12SE (SW)	614	3	517786 174714
13	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Richmond Hill Dry Cleaners            Location: 21 Friars Stile Road, Richmond, Tw10 6nh            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: LBRUT/DC/38            Dated: 4th April 2012            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A8SE (S)	663	3	518430 174338
14	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Bp Express Shopping            Location: Lower Mortlake Road, RICHMOND, Surrey, TW9 4LU            Authority: London Borough of Richmond upon Thames, Environmental Health Department            Permit Reference: 04/PVR            Dated: 31st December 1998            Process Type: Local Authority Pollution Prevention and Control            Description: PG1/14 Petrol filling station  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19NW (NE)	918	3	518973 175709
	<p><b>Nearest Surface Water Feature</b></p>	A14SW (E)	653	-	519008 174916



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Richmond Slipway            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 17th February 1989            Incident Reference: SE890068            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A12SE (SW)	608	2	517800 174700
16	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Unknown Sewage            Note: Confirmed As A Pollution Incident            Incident Date: 1st September 1991            Incident Reference: SE910253            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	657	2	517900 174500
17	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Richmond Bridge            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Not Supplied            Incident Date: 28th August 1990            Incident Reference: SE900246            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	727	2	517800 174500
17	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Not Supplied            Incident Date: 18th December 1998            Incident Reference: THSE1998041565            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	730	2	517800 174495
18	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 24th March 1992            Incident Reference: SE920099            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	745	2	517700 174600
18	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Under Bridge, RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Not Supplied            Incident Date: Not Supplied            Incident Reference: SE960458            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	748	2	517700 174595



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: River Lane            Authority: Environment Agency, Thames Region            Pollutant: Miscellaneous - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: Not Supplied            Incident Reference: SE940437            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A7NE (SW)	785	2	517820 174400
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Unknown Sewage            Note: Confirmed As A Pollution Incident            Incident Date: 19th August 1991            Incident Reference: SE910234            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A12SW (SW)	786	2	517600 174700
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 19th February 1995            Incident Reference: SE950071            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A12SW (SW)	788	2	517600 174695
21	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Petersham Road, RICHMOND            Authority: Environment Agency, Thames Region            Pollutant: Storm Sewage            Note: Confirmed incident            Incident Date: 14th February 1999            Incident Reference: THSE1999041983            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	925	2	518100 174100
	<p><b>River Quality</b></p> <p>Name: Not Supplied            GQA Grade: Unclassified Tidal River            Reach: Not Supplied            Estimated Distance (km): Not Supplied            Flow Rate: Not Supplied            Flow Type: Not Supplied            Year: 1995</p>	A7NE (SW)	776	2	517760 174470
22	<p><b>Water Abstractions</b></p> <p>Operator: Richmond Athletics Assoc Ltd            Licence Number: 28/39/35/0009            Permit Version: 100            Location: Gravel At Richmond Athletics Ground, Kew Foot Road, Richmond            Authority: Environment Agency, Thames Region            Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): 75            Yearly Rate (m3): 15911            Details: Gravel At Richmond Athletics Ground, Kew Foot Road, Richmond, Surrey            Authorised Start: 01 April            Authorised End: 31 October            Permit Start Date: 1st April 2008            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	804	2	517800 175650



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Kier Construction Limited  Licence Number: Th/039/0034/003  Permit Version: 1  Location: River Gravels At Twickenham - Point C  Authority: Environment Agency, Thames Region  Abstraction: Construction: Transfer between sources  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Not Supplied  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 23rd April 2018  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	1038	2	517521 174347
	<p><b>Water Abstractions</b></p> <p>Operator: Kier Construction Limited  Licence Number: Th/039/0034/003  Permit Version: 1  Location: River Gravels At Twickenham - Point B  Authority: Environment Agency, Thames Region  Abstraction: Construction: Transfer between sources  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Not Supplied  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 23rd April 2018  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	1041	2	517490 174383
	<p><b>Water Abstractions</b></p> <p>Operator: Royal Mid Surrey Golf Club  Licence Number: 28/39/35/0006  Permit Version: 100  Location: Borehole B Gravel At Royal Mid Surrey Golf Club, Richmond  Authority: Environment Agency, Thames Region  Abstraction: Golf Courses: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Gravel At Royal Mid Surrey Golf Club, Old Deer Park, Twickenham Road, Richmond, Surrey  Authorised Start: 01 March  Authorised End: 31 October  Permit Start Date: 28th March 1996  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A17NW (NW)	1092	2	517450 175700
	<p><b>Water Abstractions</b></p> <p>Operator: Kier Construction Limited  Licence Number: Th/039/0034/003  Permit Version: 1  Location: River Gravels At Twickenham - Point A  Authority: Environment Agency, Thames Region  Abstraction: Construction: Transfer between sources  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Not Supplied  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 23rd April 2018  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	1094	2	517448 174350



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Kier Construction Limited            Licence Number: Th/039/0034/003            Permit Version: 1            Location: River Gravels At Twickenham - Point D            Authority: Environment Agency, Thames Region            Abstraction: Construction: Transfer between sources            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Not Supplied            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 23rd April 2018            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A7SW (SW)	1094	2	517480 174308
	<p><b>Water Abstractions</b></p> <p>Operator: Royal Mid Surrey Golf Club            Licence Number: 28/39/35/0006            Permit Version: 100            Location: Borehole A Gravel At Royal Mid Surrey Golf Club, Richmond            Authority: Environment Agency, Thames Region            Abstraction: Golf Courses: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): 480            Yearly Rate (m3): 43000            Details: Gravel At Royal Mid Surrey Golf Club, Old Deer Park, Twickenham Road, Richmond, Surrey            Authorised Start: 01 March            Authorised End: 31 October            Permit Start Date: 28th March 1996            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A17NW (NW)	1115	2	517460 175750
	<p><b>Water Abstractions</b></p> <p>Operator: The Trustees Of Royal Mid-Surrey Golf Club            Licence Number: 28/39/35/0006            Permit Version: Not Supplied            Location: Royal Mid-Surrey Golf Club, Old Deer Park, Twickenham Road, RICHMOND            Authority: Environment Agency, Thames Region            Abstraction: Spray Irrigation            Abstraction Type: Not Supplied            Source: Groundwater            Daily Rate (m3): 480            Yearly Rate (m3): 43000            Details: Not Supplied            Authorised Start: Not Supplied            Authorised End: Not Supplied            Permit Start Date: Not Supplied            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A17NW (NW)	1115	2	517460 175750
	<p><b>Water Abstractions</b></p> <p>Operator: D G Tilles &amp; R H Tilles            Licence Number: 28/39/34/0008            Permit Version: 103            Location: The Exiles Ground, Twickenham- Borehole A            Authority: Environment Agency, Thames Region            Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: The Exiles Ground, Twickenham            Authorised Start: 01 October            Authorised End: 30 September            Permit Start Date: 24th April 2003            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A2NE (SW)	1238	2	517840 173860



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: D.G.Tilles &amp; R.H.Tilles  Licence Number: 28/39/34/0008  Permit Version: 102  Location: Borehole At The Exiles Ground, Twickenham  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: The Exiles Ground, Twickenham  Authorised Start: 01 October  Authorised End: 30 September  Permit Start Date: 14th September 2001  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A2NE (SW)	1238	2	517840 173860
	<p><b>Water Abstractions</b></p> <p>Operator: Threadneedle Property Part.  Licence Number: 28/39/34/0008  Permit Version: 101  Location: Borehole At The Exiles Ground, Twickenham  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: The Exiles Ground, Twickenham  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 31st March 2000  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A2NE (SW)	1238	2	517840 173860
	<p><b>Water Abstractions</b></p> <p>Operator: Cable &amp; Wireless (Meadowbank) Ltd  Licence Number: 28/39/34/0008  Permit Version: 100  Location: Borehole At The Exiles Ground, Twickenham  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): 56  Yearly Rate (m3): 5300  Details: The Exiles Ground, Twickenham  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 15th October 1996  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A2NE (SW)	1238	2	517840 173860
	<p><b>Water Abstractions</b></p> <p>Operator: St Margarets Res Grounds  Licence Number: 28/39/34/0006  Permit Version: 100  Location: Borehole At St. Margaret'S Lake, Twickenham  Authority: Environment Agency, Thames Region  Abstraction: Private Non-Industrial Amenity: Lake And Pond Throughflow  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): 20  Yearly Rate (m3): 7168  Details: St. Margaret'S Lake, Twickenham  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 8th October 1982  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A6NW (W)	1573	2	516800 174600



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Petersham Nurseries Limited            Licence Number: 28/39/35/0004            Permit Version: 102            Location: Gravels At 143 Petersham Road, Richmond, Surrey            Authority: Environment Agency, Thames Region            Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Petersham Nurseries, Petersham Road, Richmond, Surrey            Authorised Start: 01 October            Authorised End: 30 September            Permit Start Date: 15th May 2008            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1694	2	518080 173320
	<p><b>Water Abstractions</b></p> <p>Operator: Petersham Nurseries Limited            Licence Number: 28/39/35/0004            Permit Version: 101            Location: Gravels At 143 Petersham Road, Richmond, Surrey            Authority: Environment Agency, Thames Region            Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Gravels At 143 Petersham Road, Richmond, Surrey            Authorised Start: 01 April            Authorised End: 30 September            Permit Start Date: 11th November 2001            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1694	2	518080 173320
	<p><b>Water Abstractions</b></p> <p>Operator: Petersham Nurseries Limited            Licence Number: 28/39/35/0004            Permit Version: 101            Location: Gravels At 143 Petersham Road, Richmond, Surrey            Authority: Environment Agency, Thames Region            Abstraction: Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Gravels At 143 Petersham Road, Richmond, Surrey            Authorised Start: 01 October            Authorised End: 30 September            Permit Start Date: 11th November 2001            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(S)	1694	2	518080 173320
	<p><b>Water Abstractions</b></p> <p>Operator: Petersham Nurseries Limited            Licence Number: 28/39/35/0004            Permit Version: 100            Location: Gravels At 143 Petersham Road, Richmond, Surrey            Authority: Environment Agency, Thames Region            Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Groundwater            Daily Rate (m3): 27            Yearly Rate (m3): 227            Details: Gravels At 143 Petersham Road, Richmond, Surrey            Authorised Start: 01 April            Authorised End: 30 September            Permit Start Date: 9th July 1973            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	(S)	1711	2	518100 173300



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Petersham Nurseries Limited  Licence Number: 28/39/35/0004  Permit Version: 100  Location: Gravels At 143 Petersham Road, Richmond, Surrey  Authority: Environment Agency, Thames Region  Abstraction: Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Gravels At 143 Petersham Road, Richmond, Surrey  Authorised Start: 01 October  Authorised End: 30 September  Permit Start Date: 9th July 1973  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(S)	1711	2	518100 173300
	<p><b>Water Abstractions</b></p> <p>Operator: Trustees Of Ham Polo Club  Licence Number: 28/39/35/0008  Permit Version: 102  Location: River Thames At Ham Polo Club, Petersham, Surrey  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Ham Polo Club - Petersham Surrey  Authorised Start: 01 April  Authorised End: 31 October  Permit Start Date: 28th January 2015  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(SW)	1978	2	517329 173290
	<p><b>Water Abstractions</b></p> <p>Operator: Trustees Of Ham Polo Club  Licence Number: 28/39/35/0008  Permit Version: 101  Location: River Thames At Ham Polo Club, Petersham, Surrey  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Ham Polo Club - Petersham Surrey  Authorised Start: 01 May  Authorised End: 31 October  Permit Start Date: 23rd June 2004  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(SW)	1978	2	517329 173290
	<p><b>Water Abstractions</b></p> <p>Operator: Trustees Of Ham Polo Club  Licence Number: 28/39/35/0008  Permit Version: 101  Location: River Thames At Ham Polo Club, Petersham, Surrey  Authority: Environment Agency, Thames Region  Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Ham Polo Club - Petersham Surrey  Authorised Start: 01 April  Authorised End: 31 October  Permit Start Date: 23rd June 2004  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(SW)	1978	2	517329 173290

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Trustees Of Ham Polo Club            Licence Number: 28/39/35/0008            Permit Version: 100            Location: River Thames At Ham Polo Club, Petersham, Surrey            Authority: Environment Agency, Thames Region            Abstraction: Sports Grounds/Facilities: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a single point            Source: Tidal            Daily Rate (m3): 227            Yearly Rate (m3): 3410            Details: River Thames At Ham Polo Club, Petersham, Surrey            Authorised Start: 01 May            Authorised End: 30 September            Permit Start Date: 1st October 1981            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	(SW)	1978	2	517330 173290
	<p><b>Groundwater Vulnerability Map</b></p> <p>Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability            Combined Vulnerability: Medium            Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer            Pollutant Speed: Intermediate            Bedrock Flow: Mixed            Dilution: 300-550 mm/year            Baseflow Index: &gt;70%            Superficial: &gt;90%            Patchiness: Superficial 3-10m            Thickness: Superficial High            Recharge:</p>	A13NW (N)	0	4	518332 175033
	<p><b>Groundwater Vulnerability Map</b></p> <p>Combined Classification: Unproductive Aquifer (may have productive aquifer beneath)            Combined Vulnerability: Unproductive            Combined Aquifer: Unproductive Bedrock Aquifer, No Superficial Aquifer            Pollutant Speed: Intermediate            Bedrock Flow: Mixed            Dilution: 300-550 mm/year            Baseflow Index: &gt;70%            Superficial: &gt;90%            Patchiness: Superficial 3-10m            Thickness: Superficial High            Recharge:</p>	A13SE (N)	0	4	518337 175018
	<p><b>Groundwater Vulnerability Map</b></p> <p>Combined Classification: Unproductive Aquifer (may have productive aquifer beneath)            Combined Vulnerability: Unproductive            Combined Aquifer: Unproductive Bedrock Aquifer, No Superficial Aquifer            Pollutant Speed: Low            Bedrock Flow: Mixed            Dilution: 300-550 mm/year            Baseflow Index: 40-70%            Superficial: &lt;90%            Patchiness: Superficial 3-10m            Thickness: Superficial No Data            Recharge:</p>	A13SE (S)	0	4	518337 175000
	<p><b>Groundwater Vulnerability - Soluble Rock Risk</b></p> <p>None</p>				
	<p><b>Bedrock Aquifer Designations</b></p> <p>Aquifer Designation: Unproductive Strata</p>	A13SE (S)	0	4	518337 175000
	<p><b>Bedrock Aquifer Designations</b></p> <p>Aquifer Designation: Unproductive Strata</p>	A13SE (N)	0	4	518337 175018
	<p><b>Superficial Aquifer Designations</b></p> <p>Aquifer Designation: Secondary Aquifer - A</p>	A13NW (N)	0	4	518332 175033



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Extreme Flooding from Rivers or Sea without Defences</b> None				
	<b>Flooding from Rivers or Sea without Defences</b> None				
	<b>Areas Benefiting from Flood Defences</b> None				
	<b>Flood Water Storage Areas</b> None				
	<b>Flood Defences</b> None				
23	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 87.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SE (E)	659	5	519016 174935
24	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 302.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SE (E)	666	5	519025 174955
25	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 585.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SE (E)	668	5	519016 174877
26	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 954.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Thames Catchment Name: Thames Primacy: 1	A7NE (SW)	770	5	517756 174484
27	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 242.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Thames Catchment Name: Thames Primacy: 1	A7NW (SW)	786	5	517661 174587
28	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 261.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Thames Catchment Name: Thames Primacy: 2	A7NE (SW)	801	5	517665 174550
29	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 1034.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Thames Catchment Name: Thames Primacy: 1	A12SW (W)	893	5	517487 174689



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 557.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SE (E)	922	5	519282 174994
31	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 62.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14SE (E)	922	5	519282 174994
32	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1669.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NE (E)	953	5	519312 175048
33	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 333.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NE (E)	953	5	519312 175048
34	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 50.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SE (SE)	992	5	519052 174293



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Local Authority Landfill Coverage</b> Name: London Borough of Richmond Upon Thames - Has no landfill data to supply		0	6	518337 175018
35	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14SW (E)	686	-	519007 174775
36	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1871	A13SE (SE)	389	-	518615 174710
37	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1871	A8NE (SE)	411	-	518613 174680



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	<b>Control of Major Accident Hazards Sites (COMAH)</b> Name: Transco Plc Location: Manor Road, RICHMOND, Surrey, TW9 4QH Reference: Not Supplied Type: Lower Tier Status: <b>Active</b> Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	932	7	519093 175593
39	<b>Notification of Installations Handling Hazardous Substances (NIHHS)</b> Name: Transco Location: Richmond Holder Station, Manor Road, RICHMOND, Surrey, TW9 4OB Status: <b>Not Active</b> Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	929	7	519093 175588
40	<b>Planning Hazardous Substance Consents</b> Name: British Gas North Thames Location: Richmond Holder Station, Manor Road, Richmond, TW9 4QB Authority: London Borough of Richmond upon Thames Application Ref: 92/1926/Hs Hazardous Substance: Liquefied extremely flammable gas (including LPG) and natural gas (whether liquefied or not) Maximum Quantity: 115 Application date: 18th November 1992 Decision: <b>Deemed Consent Granted</b> Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	950	6	519104 175608

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS 1:625,000 Solid Geology</b> Description: Thames Group	A13SE (N)	0	1	518337 175018
	<b>BGS Estimated Soil Chemistry</b> No data available				
41	<b>BGS Recorded Mineral Sites</b> Site Name: Pesthouse Common Gravel Pit Location: Richmond, Surrey Source: British Geological Survey, National Geoscience Information Service Reference: 164156 Type: Opencast <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Palaeogene Geology: London Clay Formation Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A14SE (E)	691	1	519012 174776
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 518300, 174805 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 14.40 mg/kg Concentration: Cadmium Measured 0.40 mg/kg Concentration: Chromium Measured 53.60 mg/kg Concentration: Lead Measured 319.00 mg/kg Concentration: Nickel Measured 17.60 mg/kg Concentration:	A13SW (S)	193	1	518300 174805
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 518150, 175250 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 14.40 mg/kg Concentration: Cadmium Measured 1.10 mg/kg Concentration: Chromium Measured 83.70 mg/kg Concentration: Lead Measured 178.30 mg/kg Concentration: Nickel Measured 23.70 mg/kg Concentration:	A13NW (NW)	273	1	518150 175250
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 518725, 174855 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured 16.80 mg/kg Concentration: Cadmium Measured 0.50 mg/kg Concentration: Chromium Measured 57.60 mg/kg Concentration: Lead Measured 200.70 mg/kg Concentration: Nickel Measured 19.30 mg/kg Concentration:	A14SW (SE)	394	1	518725 174855



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518820, 175217            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 17.80 mg/kg            Concentration:            Cadmium Measured 2.90 mg/kg            Concentration:            Chromium Measured 96.10 mg/kg            Concentration:            Lead Measured 287.00 mg/kg            Concentration:            Nickel Measured 33.30 mg/kg            Concentration:</p>	A14NW (E)	507	1	518820 175217
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 517702, 174887            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 20.20 mg/kg            Concentration:            Cadmium Measured 0.40 mg/kg            Concentration:            Chromium Measured 56.70 mg/kg            Concentration:            Lead Measured 367.60 mg/kg            Concentration:            Nickel Measured 26.10 mg/kg            Concentration:</p>	A12SE (W)	627	1	517702 174887
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518164, 175649            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 15.00 mg/kg            Concentration:            Cadmium Measured 1.00 mg/kg            Concentration:            Chromium Measured 69.50 mg/kg            Concentration:            Lead Measured 96.50 mg/kg            Concentration:            Nickel Measured 18.70 mg/kg            Concentration:</p>	A18SW (N)	631	1	518164 175649
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 517720, 175300            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 16.70 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 56.60 mg/kg            Concentration:            Lead Measured 218.20 mg/kg            Concentration:            Nickel Measured 17.90 mg/kg            Concentration:</p>	A12NE (NW)	651	1	517720 175300
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518799, 175617            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 20.10 mg/kg            Concentration:            Cadmium Measured 1.40 mg/kg            Concentration:            Chromium Measured 88.90 mg/kg            Concentration:            Lead Measured 389.60 mg/kg            Concentration:            Nickel Measured 39.70 mg/kg            Concentration:</p>	A19SW (NE)	734	1	518799 175617





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518310, 174225            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 27.30 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 50.70 mg/kg            Concentration:            Lead Measured 351.50 mg/kg            Concentration:            Nickel Measured 18.80 mg/kg            Concentration:</p>	A8SW (S)	770	1	518310 174225
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 519109, 175261            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 16.80 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 51.30 mg/kg            Concentration:            Lead Measured 287.90 mg/kg            Concentration:            Nickel Measured 19.30 mg/kg            Concentration:</p>	A14NE (E)	792	1	519109 175261
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518761, 174264            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 11.00 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 42.30 mg/kg            Concentration:            Lead Measured 79.40 mg/kg            Concentration:            Nickel Measured 13.00 mg/kg            Concentration:</p>	A9SW (SE)	842	1	518761 174264
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 518841, 175735            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 16.60 mg/kg            Concentration:            Cadmium Measured 0.30 mg/kg            Concentration:            Chromium Measured 59.90 mg/kg            Concentration:            Lead Measured 194.20 mg/kg            Concentration:            Nickel Measured 18.60 mg/kg            Concentration:</p>	A19NW (NE)	854	1	518841 175735
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 517623, 175601            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 14.30 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 49.00 mg/kg            Concentration:            Lead Measured 63.60 mg/kg            Concentration:            Nickel Measured 12.30 mg/kg            Concentration:</p>	A17SW (NW)	895	1	517623 175601



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 517675, 174285 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 22.00 mg/kg Cadmium Measured Concentration: 1.00 mg/kg Chromium Measured Concentration: 63.80 mg/kg Lead Measured Concentration: 569.10 mg/kg Nickel Measured Concentration: 23.40 mg/kg	A7SE (SW)	967	1	517675 174285
	<b>BGS Urban Soil Chemistry Averages</b> Source: British Geological Survey, National Geoscience Information Service Sample Area: London Count Id: 7209 Arsenic Minimum Concentration: 1.00 mg/kg Arsenic Average Concentration: 17.00 mg/kg Arsenic Maximum Concentration: 161.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 0.90 mg/kg Cadmium Maximum Concentration: 165.20 mg/kg Chromium Minimum Concentration: 13.00 mg/kg Chromium Average Concentration: 79.00 mg/kg Chromium Maximum Concentration: 2094.00 mg/kg Lead Minimum Concentration: 11.00 mg/kg Lead Average Concentration: 280.00 mg/kg Lead Maximum Concentration: 10000.00 mg/kg Nickel Minimum Concentration: 2.00 mg/kg Nickel Average Concentration: 28.00 mg/kg Nickel Maximum Concentration: 506.00 mg/kg	A13SE (N)	0	1	518337 175018
	<b>Coal Mining Affected Areas</b> In an area that might not be affected by coal mining				
	<b>Man-Made Mining Cavities</b> Easting: 517700 Northing: 174700 Distance: 696 Quadrant Reference: A12 Quadrant Reference: SE Bearing Ref: SW Cavity Type: Water Collection Shaft with 2 Galleries Commodity: Water Solid Geology Detail: London Clay, Lambeth Group, Thanet Sand Formation, Upper Chalk Formation Superficial Geology Detail: Kempton Park Gravels	A12SE (SW)	696	8	517700 174700
	<b>Non Coal Mining Areas of Great Britain</b> No Hazard				
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	0	1	518332 175033
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	74	1	518246 175000
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 175000
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	216	1	518098 175054
	<b>Radon Potential - Radon Affected Areas</b> Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Radon Potential - Radon Affected Areas</b> Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 174999
	<b>Radon Potential - Radon Protection Measures</b> Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	518337 175018
	<b>Radon Potential - Radon Protection Measures</b> Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	518337 174999



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Great Projects            Location: 62, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Engineers - General  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (E)	18	-	518375 175016
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Simpson Drewett &amp; Co Ltd            Location: 70, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	44	-	518386 175051
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: White Hart            Location: 78, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	59	-	518410 175035
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Flavoi Edible Oils            Location: St Davids House,15 Worple Way, Richmond, Surrey, TW10 6DG            Classification: Oils - Edible  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (E)	80	-	518439 175015
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Wingas            Location: Burleigh House, 73, Sheen Road, Richmond, TW9 1YJ            Classification: Gas Suppliers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	96	-	518454 175025
42	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Village Dry Cleaning            Location: 94, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Dry Cleaners  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	107	-	518455 175055
43	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Action Graphics Ltd            Location: Dunstable Rd, Richmond, Surrey, TW9 1UH            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NE (NE)	69	-	518382 175098
44	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Nations Petroleum            Location: Worple Way, Richmond, Surrey, TW10 6AG            Classification: Oil &amp; Gas Exploration Supplies &amp; Services  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13SE (E)	103	-	518463 175007
45	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Rapid Clear            Location: 96, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Rubbish Clearance  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	127	-	518472 175065
45	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Spaceist Ltd            Location: 85, Sheen Road, Richmond, Surrey, TW9 1YJ            Classification: Office Furniture &amp; Equipment  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	129	-	518486 175032
45	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Method Products            Location: 85, Sheen Road, Richmond, Surrey, TW9 1YJ            Classification: Cleaning Materials &amp; Equipment  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NE (E)	129	-	518486 175032
45	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Air &amp; Sea Excess Luggage Worldwide Movers Ltd            Location: 102-104, Sheen Road, Richmond, Surrey, TW9 1UF            Classification: Boxes &amp; Cartons  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	145	-	518488 175072



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bettaprint Ltd            Location: 9, Lichfield Terrace, Sheen Road, Richmond, Surrey, TW9 1AS            Classification: Copying &amp; Duplicating Services            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	177	-	518152 174957
46	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Devi Khakhria Designs            Location: 9, Lichfield Terrace, Sheen Road, Richmond, Surrey, TW9 1AS            Classification: Stained Glass Designers &amp; Producers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	177	-	518152 174957
46	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Lifetime Shutters &amp; Windows Ltd            Location: 7, Lichfield Terrace, Sheen Road, Richmond, TW9 1AS            Classification: Blinds, Awnings &amp; Canopies            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	192	-	518134 174960
46	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: American Dry Cleaning            Location: 4, Lichfield Terrace, Sheen Road, Richmond, Surrey, TW9 1AS            Classification: Dry Cleaners            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	208	-	518116 174964
47	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Alpha            Location: Maisonette First and Second Floor, 107, Sheen Road, Richmond, TW9 1YJ            Classification: Rubbish Clearance            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	191	-	518546 175050
48	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Global Ethics Ltd The One Brand            Location: 13-17 Princes Road, Richmond, Surrey, TW10 6DQ            Classification: Soft Drinks - Manufacturers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (E)	193	-	518551 174978
48	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: William Mehornay            Location: 17, Princes Road, Richmond, Surrey, TW10 6DQ            Classification: China &amp; Glassware Manufacturers &amp; Repairs            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (E)	194	-	518552 174972
49	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Quickprint            Location: 114, Sheen Road, Richmond, Surrey, TW9 1UR            Classification: Printers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	194	-	518537 175085
49	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Cleaners Of Richmond            Location: 120a, Sheen Road, Richmond, Surrey, TW9 1UR            Classification: Carpet, Curtain &amp; Upholstery Cleaners            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	208	-	518552 175086
49	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: A Dunn            Location: 128, Sheen Road, Richmond, Surrey, TW9 1UR            Classification: Antiques - Repairing &amp; Restoring            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to an adjacent address or location</p>	A13NE (E)	233	-	518577 175091
50	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: All Timber Infestation &amp; Consultancy Services Ltd            Location: Gainsborough House, 2 Sheen Road, Richmond, Surrey, TW9 1AE            Classification: Damp &amp; Dry Rot Control            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A13NW (W)	221	-	518096 175076
51	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Johnsons The Cleaners            Location: 4, Sheen Road, Richmond, TW9 1AE            Classification: Dry Cleaners            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (W)	253	-	518060 175019



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Atics            Location: Gainsborough House, 2, Sheen Road, Richmond, TW9 1AE            Classification: Damp &amp; Dry Rot Control            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	280	-	518038 174976
52	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Deeez Services Ltd            Location: 58, SHEEN PARK, RICHMOND, TW9 1UP            Classification: Carpet, Curtain &amp; Upholstery Cleaners            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	255	-	518513 175231
53	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Newport Industries            Location: Second Floor Spencer House, 23 Sheen Road, Richmond, Surrey, TW9 1BN            Classification: Chemicals - Distributors &amp; Wholesalers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (W)	262	-	518078 174914
53	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Montblanc Uk            Location: Richmond, Surrey, Tw9 1eg            Classification: Stationery Manufacturers            Status: <b>Active</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A13SW (SW)	287	-	518066 174883
53	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Kall Kwik            Location: 12B Eton Street, Richmond, Surrey, TW9 1EE            Classification: Printers            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13SW (W)	290	-	518053 174902
53	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Clean Machine            Location: 18, Eton Street, Richmond, Surrey, TW9 1EE            Classification: Dry Cleaners            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (SW)	307	-	518045 174882
53	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Fast Stitch            Location: First Floor Flat, 18, Eton Street, Richmond, TW9 1EE            Classification: Dry Cleaners            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (SW)	308	-	518044 174881
54	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ats Euromaster Ltd            Location: Kings Road, Richmond, Surrey, TW10 6EG            Classification: Tyre Dealers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SE (E)	264	-	518624 175011
55	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Vectra Ltd            Location: Process House, 36, Paradise Road, Richmond, TW9 1SE            Classification: Manufacturers            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (SW)	271	-	518094 174865
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Robert Dyas Ltd            Location: 27b, The Quadrant, Richmond, Surrey, TW9 1DN            Classification: Hardware            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	280	-	518072 175174
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Commuterclean            Location: Richmond Railway Station, Kew Road, Richmond, Surrey, TW9 2NA            Classification: Dry Cleaners            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	280	-	518072 175174
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ducane Dry Cleaners            Location: 2 Westminster House, Kew Road, Richmond, TW9 2ND            Classification: Dry Cleaners            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	302	-	518070 175211



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ducane Dry Cleaners            Location: 2 Westminster House, Kew Road, Richmond, TW9 2ND            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	302	-	518070 175211
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ducane Dry Cleaners            Location: 2, Westminster House, Kew Road, Richmond, Surrey, TW9 2ND            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	304	-	518069 175213
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Du Cane            Location: 2, Westminster House, Kew Road, Richmond, Surrey, TW9 2ND            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	304	-	518069 175213
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Eauzone            Location: Westminster House, Kew Rd, Richmond, Surrey, TW9 2ND            Classification: Toiletries  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	305	-	518078 175225
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Cardooo            Location: Unit 313, Parkshot House, 5, Kew Road, Richmond, TW9 2PR            Classification: Greeting Card Publishers &amp; Wholesalers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	346	-	518022 175219
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Carte Blanche Greetings            Location: Second Floor Front Right, Parkshot House, 5, Kew Road, Richmond, TW9 2PR            Classification: Greeting Card Publishers &amp; Wholesalers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	346	-	518022 175219
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Foehn Ltd            Location: Marcar House, Parkshot, Richmond, Surrey, TW9 2RG            Classification: Telecommunications Equipment &amp; Systems  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	353	-	518033 175246
56	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Marcar Steel &amp; Engineering Ltd            Location: Marcar House, Parkshot, Richmond, Surrey, TW9 2RG            Classification: Engineers - General  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	353	-	518033 175246
57	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Consilient Health            Location: Thames Link House, 1, Church Road, RICHMOND, Surrey, TW9 2QE            Classification: Chemists' &amp; Pharmacists' Suppliers &amp; Wholesalers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	294	-	518117 175251
58	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Klopman International            Location: 34, The Quadrant, Richmond, Surrey, TW9 1DN            Classification: Textile Manufacturing  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (W)	299	-	518017 175071
58	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Snappy Snaps            Location: 40, The Quadrant, Richmond, Surrey, TW9 1DN            Classification: Photographic Processors  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (W)	309	-	518004 175039



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
58	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Services Richmond Location: 23, The Quadrant, Richmond, Surrey, TW9 1BP Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	333	-	517988 175104
58	<b>Contemporary Trade Directory Entries</b> Name: Coors Brewing International Ltd Location: 22, The Quadrant, Richmond, Surrey, TW9 1BP Classification: Brewers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	337	-	517980 175089
59	<b>Contemporary Trade Directory Entries</b> Name: Car Garage Service Richmond Location: 32-36, Kew Road, Richmond, TW9 2NA Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13NW (N)	314	-	518220 175334
60	<b>Contemporary Trade Directory Entries</b> Name: Call Print Ltd Location: 61, Kew Road, Richmond, Surrey, TW9 2NQ Classification: Printers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	340	-	518125 175314
60	<b>Contemporary Trade Directory Entries</b> Name: Pepsico International Ltd Location: 63, Kew Road, Richmond, Surrey, TW9 2QL Classification: Soft Drinks - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	368	-	518112 175339
61	<b>Contemporary Trade Directory Entries</b> Name: Pro Cleaners Richmond Location: 13, Quadrant Road, Richmond, Surrey, TW9 1DH Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	342	-	517971 175042
62	<b>Contemporary Trade Directory Entries</b> Name: E Cover Uk Ltd Location: 1, Eton Street, Richmond, Surrey, TW9 1AG Classification: Cleaning Materials & Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	349	-	517982 174919
62	<b>Contemporary Trade Directory Entries</b> Name: Supasnaps Location: 5, Lower George Street, Richmond, Surrey, TW9 1HU Classification: Photographic Processors <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	349	-	517982 174919
62	<b>Contemporary Trade Directory Entries</b> Name: Sketchley Retail Ltd Location: 5, Lower George Street, Richmond, Surrey, TW9 1HU Classification: Dry Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	349	-	517982 174919
62	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Services Richmond Location: Richmond, Surrey, Tw9 1bp Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	357	-	517963 174959
63	<b>Contemporary Trade Directory Entries</b> Name: Hotch Potch Ltd Location: Parkshot House,5 Kew Road, Richmond, Surrey, TW9 2PR Classification: Stationery Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	352	-	518020 175227
63	<b>Contemporary Trade Directory Entries</b> Name: Interno Design Location: 5, KEW ROAD, RICHMOND, TW9 2PR Classification: Kitchen Furniture Manufacturers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	352	-	518020 175227





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Elite Textile Care            Location: 21, Kew Road, Richmond, TW9 2NQ            Classification: Dry Cleaners  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	363	-	518008 175229
63	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Selclene            Location: 5, Kew Road, Richmond, Surrey, TW9 2PR            Classification: Cleaning Services - Domestic  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	363	-	518008 175229
63	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Realtime            Location: 5, Kew Road, Richmond, TW9 2PR            Classification: Computer Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NW (NW)	363	-	518008 175229
63	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: European Network Management            Location: 5, Kew Road, Richmond, Surrey, TW9 2PR            Classification: Telecommunications Equipment &amp; Systems  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	363	-	518008 175229
63	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: 24 Hr Pest Control            Location: 5, Kew Road, Richmond, Surrey, TW9 2PR            Classification: Pest &amp; Vermin Control  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A13NW (NW)	363	-	518008 175229
64	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: William Grant &amp; Sons            Location: 7 MEREVALE HOUSE, PARKSHOT, RICHMOND, TW9 2RG            Classification: Distilleries  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A12NE (NW)	355	-	517990 175179
65	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D R C Bifold Uk            Location: Alexander Laroche Court,100 Kings Road, Richmond, Surrey, TW10 6EE            Classification: Door Manufacturers - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14SW (E)	367	-	518727 175003
66	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Richmond Cleaners            Location: 2, Quadrant Road, Richmond, Surrey, TW9 1DH            Classification: Carpet, Curtain &amp; Upholstery Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	370	-	517946 174979
66	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Richmond Cleaners            Location: 2, Quadrant Road, Richmond, Surrey, TW9 1DH            Classification: Carpet, Curtain &amp; Upholstery Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	370	-	517946 174979
66	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Richmond Man And Van            Location: 3,Duke Street, Richmond, Surrey, TW9 1HP            Classification: Carpet, Curtain &amp; Upholstery Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	413	-	517903 174978
67	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Clearance Unlimited            Location: A, 47, Lower Mortlake Road, Richmond, Surrey, TW9 2LW            Classification: Waste Disposal Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (N)	388	-	518347 175432
68	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Rubbish Lads Ltd            Location: 100, Church Road, Richmond, Surrey, TW10 6LW            Classification: Waste Disposal Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8NE (S)	394	-	518491 174631



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	<b>Contemporary Trade Directory Entries</b> Name: Flambeau Location: 111, Kew Road, Richmond, Surrey, TW9 2PN Classification: Fireplaces & Mantelpieces <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18SW (N)	399	-	518218 175423
70	<b>Contemporary Trade Directory Entries</b> Name: Wastedge Ltd Location: Cobden House, Park Lane, Richmond, Surrey, TW9 2RA Classification: Computer Recycling & Disposal <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	405	-	517932 175171
71	<b>Contemporary Trade Directory Entries</b> Name: Hugo Austin Location: 129, Kew Road, Richmond, Surrey, TW9 2PN Classification: Antiques - Repairing & Restoring <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SW (N)	427	-	518254 175462
71	<b>Contemporary Trade Directory Entries</b> Name: H Frederick & Co Ltd Location: 143-145, Kew Road, Richmond, Surrey, TW9 2PN Classification: Bathroom Fixtures - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SW (N)	459	-	518281 175499
72	<b>Contemporary Trade Directory Entries</b> Name: Richmond Cleaners Location: Richmond, Surrey, Tw9 1dh Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Manually positioned within the geographical locality	A12SE (W)	428	-	517885 175018
73	<b>Contemporary Trade Directory Entries</b> Name: Alex Location: 90, Kew Road, Richmond, Surrey, TW9 2PQ Classification: Dry Cleaners <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18SW (N)	433	-	518316 175476
73	<b>Contemporary Trade Directory Entries</b> Name: Pestroy Preservation (Richmond) Ltd Location: 92-94 Kew Rd, Richmond, Surrey, TW9 2PQ Classification: Damp & Dry Rot Control <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18SW (N)	441	-	518324 175484
73	<b>Contemporary Trade Directory Entries</b> Name: Interiors Of Richmond Ltd Location: 98, Kew Road, Richmond, Surrey, TW9 2PQ Classification: Office Furniture & Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SE (N)	459	-	518343 175502
73	<b>Contemporary Trade Directory Entries</b> Name: Surrey Cleaning Services Location: 98, Kew Road, Richmond, Surrey, TW9 2PQ Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18SE (N)	459	-	518343 175502
74	<b>Contemporary Trade Directory Entries</b> Name: Jack Wills Location: 6, Church Court, Richmond, Surrey, TW9 1JL Classification: Leisure & Sportswear Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	436	-	517905 174877
74	<b>Contemporary Trade Directory Entries</b> Name: Currys Location: 51-52, George Street, Richmond, Surrey, TW9 1HJ Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	452	-	517875 174916
74	<b>Contemporary Trade Directory Entries</b> Name: Sharp Printing Location: 8, The Green, Richmond, Surrey, TW9 1PL Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	474	-	517847 174945



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	<b>Contemporary Trade Directory Entries</b> Name: Alexander Chantrain Ltd Location: 8, The Green, Richmond, Surrey, TW9 1PL Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	474	-	517847 174945
74	<b>Contemporary Trade Directory Entries</b> Name: Richmond Heating Location: Brewers La, Richmond, Surrey, TW9 1HH Classification: Boilers - Servicing, Replacements & Repairs <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	485	-	517843 174909
74	<b>Contemporary Trade Directory Entries</b> Name: Proctor'S Shirts & Ties Location: 11, Brewers Lane, Richmond, Surrey, TW9 1HH Classification: Shirt Makers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	490	-	517835 174919
75	<b>Contemporary Trade Directory Entries</b> Name: Flower Maid Location: 1, Church Terrace, Richmond, Surrey, TW10 6SE Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	442	-	517955 174764
75	<b>Contemporary Trade Directory Entries</b> Name: London Boys Scrap Yards In Richmond Location: 30, Red Lion Street, Richmond, Surrey, TW9 1RB Classification: Car Breakers & Dismantlers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	470	-	517922 174765
75	<b>Contemporary Trade Directory Entries</b> Name: Little Champ Location: 30, Red Lion Street, Richmond, TW9 1RB Classification: Toys, Games & Sporting Goods - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	471	-	517921 174764
75	<b>Contemporary Trade Directory Entries</b> Name: Select Cleaning Location: 30, Red Lion Street, Richmond, TW9 1RB Classification: Commercial Cleaning Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	471	-	517921 174764
75	<b>Contemporary Trade Directory Entries</b> Name: Carpet Bright Location: 30, Red Lion Street, Richmond, TW9 1RB Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	471	-	517921 174764
75	<b>Contemporary Trade Directory Entries</b> Name: Office Machine Company Location: 28a-30a, Red Lion Street, Richmond, TW9 1RB Classification: Office Furniture & Equipment <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	471	-	517918 174769
75	<b>Contemporary Trade Directory Entries</b> Name: Bang & Olufsen Of Richmond London Location: 22, Red Lion Street, Richmond, TW9 1RW Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	492	-	517900 174758
75	<b>Contemporary Trade Directory Entries</b> Name: L & E Richmond Property Services Location: 12a, Red Lion Street, Richmond, Surrey, TW9 1RW Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	519	-	517873 174751
76	<b>Contemporary Trade Directory Entries</b> Name: Plastered Location: 115, Church Road, Richmond, TW10 6LS Classification: Damp & Dry Rot Control <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	469	-	518462 174542



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Barilla UK Ltd            Location: Rosedale House, 2a, Rosedale Road, Richmond, Surrey, TW9 2SZ            Classification: Food Products - Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SW (N)	474	-	518161 175483
77	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Mijoy Co Ltd            Location: Rosedale House, 2a, Rosedale Road, Richmond, Surrey, TW9 2SZ            Classification: Commercial Cleaning Services  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SW (N)	474	-	518161 175483
78	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Distillers Ltd            Location: 84, Lower Mortlake Road, Richmond, Surrey, TW9 2HS            Classification: Distilleries  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SE (NE)	494	-	518601 175463
78	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Quality Spirits International Ltd            Location: 84 Lower Mortlake Road, Richmond, Surrey, TW9 2HS            Classification: Distilleries  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (NE)	494	-	518601 175463
78	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Dantec Design Ltd            Location: 96, Lower Mortlake Road, Richmond, Surrey, TW9 2JG            Classification: Car Customizing Specialists  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (NE)	525	-	518643 175473
79	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: A E S Electric Ltd            Location: 37-39, Kew Foot Road, Richmond, Surrey, TW9 2SS            Classification: Electricity Generating &amp; Distributing Equipment  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SW (NW)	501	-	518111 175489
79	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Your Energy            Location: 37-39, Kew Foot Road, Richmond, Surrey, TW9 2SS            Classification: Windmills &amp; Wind Power Equipment  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SW (NW)	501	-	518111 175489
79	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bandai UK Ltd            Location: 37-39 Kew Foot Road, Richmond, Surrey, TW9 2SS            Classification: Toys, Games &amp; Sporting Goods - Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A18SW (NW)	511	-	518101 175496
80	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Stable Motors            Location: Richmond, TW9 2JJ            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (NE)	506	-	518655 175439
81	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Laxton Rice Transport            Location: 1, Dee Road, Richmond, Surrey, TW9 2JN            Classification: Distribution Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A19SW (NE)	512	-	518742 175361
81	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Perfect Clean            Location: 1, Dee Road, Richmond, Surrey, TW9 2JN            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19SW (NE)	512	-	518742 175361
81	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Trident Construction            Location: Clarence Court, 5, Dee Road, Richmond, TW9 2JN            Classification: Builders' Merchants  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A19SW (NE)	539	-	518766 175373



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	<b>Contemporary Trade Directory Entries</b> Name: Renoir Location: 157, Kew Road, Richmond, Surrey, TW9 2PN Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SE (N)	521	-	518340 175565
83	<b>Contemporary Trade Directory Entries</b> Name: Laytek Engineering Location: 17, The Green, Richmond, Surrey, TW9 1QB Classification: Engineers - General <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	524	-	517808 174892
83	<b>Contemporary Trade Directory Entries</b> Name: Redstone Vehicle Management Location: 17, The Green, Richmond, Surrey, TW9 1QB Classification: Commercial Vehicle Bodybuilders & Repairers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	524	-	517808 174892
84	<b>Contemporary Trade Directory Entries</b> Name: Concreteclub Location: 4, The Vineyard, Richmond, TW10 6AQ Classification: Concrete Contractors <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (SW)	535	-	518001 174575
85	<b>Contemporary Trade Directory Entries</b> Name: Boiler Repair Location: 9, GRENA GARDENS, RICHMOND, TW9 1XP Classification: Boilers - Servicing, Replacements & Repairs <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	537	-	518875 175157
86	<b>Contemporary Trade Directory Entries</b> Name: Richmond Royal Hospital Location: Kew Foot Road, Richmond, Surrey, TW9 2TE Classification: Hospitals <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SW (N)	552	-	518154 175563
87	<b>Contemporary Trade Directory Entries</b> Name: Kwik Fit Location: 48, Sheendale Road, Richmond, TW9 2JJ Classification: Tyre Dealers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	564	-	518676 175497
87	<b>Contemporary Trade Directory Entries</b> Name: Hora'S Hardware Location: 203, Lower Mortlake Road, Richmond, Surrey, TW9 2LP Classification: Hardware <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A18SE (NE)	594	-	518664 175542
88	<b>Contemporary Trade Directory Entries</b> Name: Snapple Europe Ltd Location: 1, Castle Yard, Richmond, Surrey, TW10 6TF Classification: Soft Drinks - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	567	-	517837 174718
88	<b>Contemporary Trade Directory Entries</b> Name: Regency Of Richmond Location: 18, Hill Street, Richmond, Surrey, TW9 1TN Classification: Dry Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	606	-	517792 174718
88	<b>Contemporary Trade Directory Entries</b> Name: Brand Managers Ltd Location: A, 22, Hill Street, Richmond, Surrey, TW9 1TW Classification: Toiletries <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	613	-	517794 174701
88	<b>Contemporary Trade Directory Entries</b> Name: Space Nk Location: 34, Hill Street, Richmond, Surrey, TW9 1TW Classification: Toiletries <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	616	-	517813 174664



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
89	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Shell            Location: Blackhorse Garage, 174, Sheen Road, Richmond, TW9 1XE            Classification: Petrol Filling Stations  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A14NW (E)	591	-	518949 175050
89	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Shell Blackhorse            Location: 174, Sheen Road, Richmond, Surrey, TW9 1XD            Classification: Petrol Filling Stations  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14NW (E)	603	-	518961 175063
89	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Rontce            Location: 174, Sheen Road, Richmond, Surrey, TW9 1XD            Classification: Petrol Filling Stations  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14NW (E)	603	-	518961 175063
89	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Total            Location: 174-176 Sheen Rd, Richmond, Surrey, TW9 1XD            Classification: Petrol Filling Stations  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A14NW (E)	603	-	518961 175063
90	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Crabtree &amp; Evelyn            Location: 2-2a, George Street, Richmond, Surrey, TW9 1JY            Classification: Toiletries  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (SW)	597	-	517774 174774
91	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Fiberweb Plc            Location: 1, Victoria Villas, Richmond, Surrey, TW9 2GW            Classification: Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A19SW (NE)	597	-	518791 175435
92	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Richmond Hill Garage            Location: 2a, The Vineyard, Richmond, Surrey, TW10 6AQ            Classification: Garage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	607	-	517960 174515
92	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Hamilton Weston Wallpapers Ltd            Location: 2, Richmond Hill, Richmond, Surrey, TW10 6QX            Classification: Wallpapers &amp; Wall Coverings  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	616	-	517969 174498
92	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Teddington Cheese            Location: 74 Hill Rise, Richmond, Surrey, TW10 6UB            Classification: Cheese Makers &amp; Suppliers  <b>Status: Active</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NE (SW)	621	-	517936 174517
92	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Michael Collins Ltd            Location: 12, Richmond Hill, Richmond, Surrey, TW10 6QX            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	624	-	517986 174476
93	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Featherstone Leigh Commercial            Location: Holbrooke House, 34-38, Hill Rise, Richmond, Surrey, TW10 6UA            Classification: Hardware  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	608	-	517904 174564
93	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Farrow &amp; Ball            Location: 30, Hill Rise, Richmond, Surrey, TW10 6UA            Classification: Painting &amp; Decorating Supplies  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	617	-	517887 174568



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: William Curley            Location: 10, Paved Court, Richmond, Surrey, TW9 1LZ            Classification: Confectionery Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	609	-	517738 174829
94	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Celine Collection Ltd            Location: 11, Paved Court, Richmond, Surrey, TW9 1LZ            Classification: Jewellery Manufacturers &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	616	-	517728 174837
94	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Technik Uk Ltd            Location: 6, Wickham House, 14, King Street, Richmond, TW9 1ND            Classification: Railway Equipment Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	649	-	517704 174805
94	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: A A Wasps Exterminator Richmond Upon Thames            Location: 14 King Street, Richmond, Surrey, TW9 1ND            Classification: Pest &amp; Vermin Control  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	651	-	517703 174804
95	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: V I P Dry Cleaners            Location: 211, Lower Mortlake Road, RICHMOND, Surrey, TW9 2LP            Classification: Dry Cleaners  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A19SW (NE)	612	-	518683 175550
95	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Abate Graffiti Solutions Ltd            Location: 211, Lower Mortlake Road, Richmond, Surrey, TW9 2LP            Classification: Graffiti Removers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A19SW (NE)	612	-	518683 175550
95	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Gone Potty            Location: 213, Lower Mortlake Road, Richmond, Surrey, TW9 2LN            Classification: Pottery Manufacturers &amp; Suppliers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A19SW (NE)	628	-	518701 175558
96	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Cleaners Richmond            Location: Victoria Villas, Richmond, Surrey, TW9 2JX            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A19SW (NE)	621	-	518770 175492
96	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Original Poster Co Ltd            Location: Victoria Villas, Richmond, Surrey, TW9 2JX            Classification: Greeting Card Publishers &amp; Wholesalers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned in the proximity of the address</p>	A19SW (NE)	621	-	518770 175492
97	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Lucy White Cleaners            Location: 22, Richmond Hill, Richmond, Surrey, TW10 6QX            Classification: Dry Cleaners  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A8NW (SW)	626	-	518006 174461
98	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Fracture Technologies Ltd            Location: 5, Queens Rise, Richmond, Surrey, TW10 6HL            Classification: Oil &amp; Gas Extraction  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NW (SE)	658	-	518727 174457
99	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Penspen            Location: Darpen House, 3, Water Lane, Richmond, Surrey, TW9 1TJ            Classification: Oil &amp; Gas Exploration Supplies &amp; Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (SW)	659	-	517727 174729



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Zynetix            Location: Whittaker House,Whittaker Av, Richmond, Surrey, TW9 1EH            Classification: Telecommunications Equipment &amp; Systems  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A12SE (SW)	690	-	517715 174684
100	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Richmond Hill Dry Cleaners            Location: 21, Friars Stile Road, Richmond, Surrey, TW10 6NH            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	659	-	518425 174341
100	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Brooks Service Group            Location: 48, Friars Stile Road, Richmond, Surrey, TW10 6NQ            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	699	-	518448 174304
100	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: L A Customs            Location: 48, Friars Stile Road, Richmond, Surrey, TW10 6NQ            Classification: Car Customizing Specialists  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	699	-	518448 174304
100	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Cleaning Services (Richmond)            Location: 8, Marlborough Road, Richmond, Surrey, TW10 6JR            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	714	-	518482 174294
100	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Wood Finishes            Location: 46a, Friars Stile Road, Richmond, Surrey, TW10 6NQ            Classification: Painting &amp; Decorating Supplies  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	715	-	518437 174286
101	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Philip Services (Europe) Ltd            Location: Bridge House, 3, Heron Square, Richmond, Surrey, TW9 1EN            Classification: Industrial Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	662	-	517793 174610
101	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: The Locker            Location: Bridge Boat Houses,Riverside, Richmond, Surrey, TW9 1TH            Classification: Chandlers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NE (SW)	663	-	517792 174609
101	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Richmond Bridge Boathouses            Location: 1-3 Bridge Boathouses,Riverside, Richmond, Surrey, TW9 1TH            Classification: Boatbuilders &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NE (SW)	666	-	517790 174608
101	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Lubrizol Ltd            Location: Palm Court, 4, Heron Square, Richmond, Surrey, TW9 1EW            Classification: Chemical Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	689	-	517768 174598
101	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bill Colley            Location: Flat 4, Bridge Boat House, Riverside, RICHMOND, Surrey, TW9 1TH            Classification: Boatbuilders &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	689	-	517768 174598
102	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Rayonier Advanced Materials            Location: Richmond Place,15 Petersham Road, Richmond, Surrey, TW10 6TP            Classification: Wood Products, Except Furniture - Manufacturers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NE (SW)	668	-	517878 174505





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102	<b>Contemporary Trade Directory Entries</b> Name: Bazooka Candy Brands International Ltd Location: 15 Petersham Road, Richmond, Surrey, TW10 6TP Classification: Confectionery Manufacturers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	668	-	517878 174505
103	<b>Contemporary Trade Directory Entries</b> Name: Currys Location: 86, Manor Road, Richmond, Surrey, TW9 1YB Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	672	-	518885 175437
104	<b>Contemporary Trade Directory Entries</b> Name: Richmond Architectural Location: 22, Castlegate, Richmond, Surrey, TW9 2HJ Classification: Road Haulage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	683	-	518726 175607
105	<b>Contemporary Trade Directory Entries</b> Name: F & Team Cleaning Services Location: 26, Norfolk House, Courtlands, Sheen Road, Richmond, Surrey, TW10 5AT Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	688	-	519047 174973
106	<b>Contemporary Trade Directory Entries</b> Name: Traders Builders Merchants Location: 8-14, Bardolph Road, Richmond, Surrey, TW9 2LH Classification: Builders' Merchants <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	712	-	518882 175506
106	<b>Contemporary Trade Directory Entries</b> Name: Tankcoat Ltd Location: 8-14, Bardolph Road, Richmond, Surrey, TW9 2LH Classification: Tank Cleaning & Repairing <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	712	-	518882 175506
106	<b>Contemporary Trade Directory Entries</b> Name: Travis Perkins Location: 8-14, Bardolph Road, Richmond, Surrey, TW9 2LH Classification: Builders' Merchants <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	712	-	518882 175506
106	<b>Contemporary Trade Directory Entries</b> Name: Travis Perkins Plc Location: 8-10, Bardolph Road, Richmond, TW9 2LH Classification: Builders' Merchants <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	714	-	518882 175508
107	<b>Contemporary Trade Directory Entries</b> Name: Dunne & Dusted Location: Old Deer Park, Kew Road, Richmond, TW9 2AZ Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A18NW (N)	719	-	518319 175762
108	<b>Contemporary Trade Directory Entries</b> Name: Cu-Ni-Crft Location: Trinity Rd, Richmond, Surrey, TW9 2LD Classification: Powder Coatings <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A19SW (NE)	722	-	518848 175556
108	<b>Contemporary Trade Directory Entries</b> Name: James Bros Location: 1, Trinity Road, Richmond, Surrey, TW9 2LD Classification: Tyre Dealers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	736	-	518863 175562
109	<b>Contemporary Trade Directory Entries</b> Name: Kew Gardeners Location: 148, Kew Road, Richmond, Surrey, TW9 2AU Classification: Waste Disposal Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18NE (N)	745	-	518554 175757



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	<b>Contemporary Trade Directory Entries</b> Name: J R Boilers Location: 15, Topiary Square, Richmond, TW9 2DB Classification: Boilers - Servicing, Replacements & Repairs <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A18NE (NE)	758	-	518650 175735
111	<b>Contemporary Trade Directory Entries</b> Name: Foxprint Location: 16, Bardolph Road, Richmond, Surrey, TW9 2LH Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	786	-	518922 175573
111	<b>Contemporary Trade Directory Entries</b> Name: M S George Location: 13, St. Georges Road, Richmond, Surrey, TW9 2LE Classification: Cosmetic Manufacturers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	786	-	518922 175573
111	<b>Contemporary Trade Directory Entries</b> Name: Td Tom Davies Ltd Location: 28, Bardolph Road, Richmond, Surrey, TW9 2LH Classification: Optical Goods - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	786	-	518922 175573
112	<b>Contemporary Trade Directory Entries</b> Name: Coys Location: 237, Lower Mortlake Road, Richmond, Surrey, TW9 2LL Classification: Classic Car Specialists <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	809	-	518869 175656
113	<b>Contemporary Trade Directory Entries</b> Name: Reheat Location: 29, Greville Road, Richmond, Surrey, TW10 6HR Classification: Boilers - Servicing, Replacements & Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9NW (SE)	815	-	518904 174397
114	<b>Contemporary Trade Directory Entries</b> Name: G T Garage Services Ltd Location: Rear Of, 63-65, Raleigh Road, Richmond, Surrey, TW9 2DU Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned in the proximity of the address	A19NW (NE)	863	-	518897 175702
115	<b>Contemporary Trade Directory Entries</b> Name: Allport Ltd Location: London House, 243-253, Lower Mortlake Road, Richmond, Surrey, TW9 2LS Classification: Office Furniture & Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	864	-	518918 175686
115	<b>Contemporary Trade Directory Entries</b> Name: Grander Water Location: London House, 243-253, Lower Mortlake Road, Richmond, Surrey, TW9 2LL Classification: Water Softeners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	864	-	518918 175686
115	<b>Contemporary Trade Directory Entries</b> Name: B P Express Location: Lower Mortlake Road, Richmond, Surrey, TW9 2LL Classification: Petrol Filling Stations - 24 Hour <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19NW (NE)	909	-	518962 175707
115	<b>Contemporary Trade Directory Entries</b> Name: Network Connectors Ltd Location: Lower Mortlake Road, Richmond, Surrey, TW9 2LL Classification: Cable & Wire Equipment Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19NW (NE)	909	-	518962 175707
115	<b>Contemporary Trade Directory Entries</b> Name: B P Service Station Location: LOWER MORTLAKE ROAD, RICHMOND, TW9 2LL Classification: Petrol Filling Stations <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19NW (NE)	916	-	518969 175709



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	<b>Contemporary Trade Directory Entries</b> Name: Colin Ferns Location: Rear of 63-65, Raleigh Road, Richmond, TW9 2DU Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19NW (NE)	922	-	518966 175720
116	<b>Contemporary Trade Directory Entries</b> Name: Abacus Horology Location: 2, Dickson House, 3, Grove Road, Richmond, Surrey, TW10 6SP Classification: Clocks & Watches - Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A8SE (S)	889	-	518662 174166
116	<b>Contemporary Trade Directory Entries</b> Name: Richmond Glass Studio Location: Dickson House, Cambrian Rd, Richmond, Surrey, TW10 6JQ Classification: Stained Glass Designers & Producers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A8SE (S)	889	-	518662 174166
117	<b>Contemporary Trade Directory Entries</b> Name: The Fine Art Company Location: 11, Isabella Court, Kingsmead, Richmond, Surrey, TW10 6JD Classification: Picture & Picture Frame Renovating & Restoring <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A9SW (SE)	934	-	518774 174168
118	<b>Contemporary Trade Directory Entries</b> Name: London Borough Of Richmond Location: The Lodge, Kings Ride Gate, Richmond, TW10 5BJ Classification: Cemeteries & Crematoria <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	935	-	519291 174917
119	<b>Contemporary Trade Directory Entries</b> Name: Gasconsult L N G Location: 5 Leicester Court, 24 Clevedon Road, Twickenham, Middlesex, TW1 2TB Classification: Chemical Engineers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7SE (SW)	936	-	517745 174266
119	<b>Contemporary Trade Directory Entries</b> Name: Waste No Time Ltd Location: 23, Cambridge Road, Twickenham, TW1 2HN Classification: Waste Disposal Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7SE (SW)	943	-	517705 174291
120	<b>Contemporary Trade Directory Entries</b> Name: Sainsbury'S Petrol Station Location: Lower Richmond Road, Richmond, TW9 4LT Classification: Petrol Filling Stations <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A19SE (NE)	943	-	519120 175573
121	<b>Contemporary Trade Directory Entries</b> Name: Eat Yer Greens Location: Willoughby House, 439 Richmond Rd, Twickenham, Middlesex, TW1 2AG Classification: Children & Babywear - Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	943	-	517575 174432
121	<b>Contemporary Trade Directory Entries</b> Name: L Box Communications Location: 419, Richmond Road, Twickenham, TW1 2EX Classification: Distribution Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NW (SW)	983	-	517548 174403
121	<b>Contemporary Trade Directory Entries</b> Name: All Round Cleaning Services Location: Richmond Bridge House, 419, Richmond Road, Twickenham, TW1 2EX Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NW (SW)	983	-	517548 174403
121	<b>Contemporary Trade Directory Entries</b> Name: Richmond Bridge M O T Centre Location: 415, Richmond Road, Twickenham, TW1 2EF Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7NW (SW)	986	-	517530 174422



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
122	<b>Contemporary Trade Directory Entries</b> Name: Pro Cleaners Richmond Park Location: 36, King George Square, Richmond, Surrey, TW10 6LG Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9SW (SE)	947	-	518831 174182
123	<b>Contemporary Trade Directory Entries</b> Name: Fara Kids Charity Shop Location: 416, Richmond Road, Twickenham, TW1 2EB Classification: Mechanical Engineers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NW (SW)	961	-	517598 174375
124	<b>Contemporary Trade Directory Entries</b> Name: At Your Disposal Location: 18, Reynolds Place, RICHMOND, Surrey, TW10 6JZ Classification: Waste Disposal Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	980	-	518631 174059
125	<b>Fuel Station Entries</b> Name: Empire Filling Station Location: 2-4, Lower Mortlake Road , , Richmond, Outer London, TW9 2JA Brand: Obsolete Premises Type: Not Applicable <b>Status: Obsolete</b> Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	286	-	518208 175297
126	<b>Fuel Station Entries</b> Name: Shell Blackhorse Location: 174-176, Sheen Road Grena Road, , Richmond, Outer London, TW9 1XD Brand: Shell Premises Type: Petrol Station <b>Status: Open</b> Positional Accuracy: Manually positioned to the address or location	A14NW (E)	592	-	518950 175058
127	<b>Fuel Station Entries</b> Name: Beacon Filling Station Location: Lower Mortlake Road Sandycombe Road, , Richmond, Outer London, TW9 2LL Brand: BP Premises Type: Petrol Station <b>Status: Open</b> Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	909	-	518961 175707
128	<b>Points of Interest - Commercial Services</b> Name: The Orange Square Company Location: Third Floor 26-28, Paradise Road, Richmond, TW9 1SE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SW (SW)	299	9	518067 174856
129	<b>Points of Interest - Commercial Services</b> Name: Car Garage Service Richmond Location: 32-36 Kew Road, Richmond, TW9 2NA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NW (N)	314	9	518220 175334
130	<b>Points of Interest - Commercial Services</b> Name: Hand Car Wash Location: 47a Lower Mortlake Road, Richmond, TW9 2LW Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18SE (N)	387	9	518347 175431
131	<b>Points of Interest - Commercial Services</b> Name: Thameside Shipping Location: 69 Onslow Road, Richmond, TW10 6QA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (S)	470	9	518178 174551
132	<b>Points of Interest - Commercial Services</b> Name: Stable Motors Location: 5 Sheendale Road, Richmond, TW9 2JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	512	9	518662 175442



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	<b>Points of Interest - Commercial Services</b> Name: Stable Motors Location: 6 Sheendale Road, Richmond, TW9 2JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	513	9	518662 175442
132	<b>Points of Interest - Commercial Services</b> Name: Kwik-Fit (GB) Limited Location: 48 Sheendale Road, Richmond, TW9 2JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	564	9	518676 175497
132	<b>Points of Interest - Commercial Services</b> Name: Kwik-Fit (GB) Limited Location: 48 Sheendale Road, Richmond, TW9 2JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	564	9	518676 175497
133	<b>Points of Interest - Commercial Services</b> Name: Laxton Rice Transport Location: Argyle House, Dee Road, Richmond, TW9 2JN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
134	<b>Points of Interest - Commercial Services</b> Name: Soif (UK) Ltd Location: 1 Castle Yard, Richmond, TW10 6TF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SE (SW)	567	9	517837 174718
134	<b>Points of Interest - Commercial Services</b> Name: SOIF UK Ltd Location: 1 Castle Yard, Richmond, TW10 6TF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SE (SW)	567	9	517837 174718
135	<b>Points of Interest - Commercial Services</b> Name: A A Wasps Exterminator Richmond upon Thames Location: 14 King Street, Richmond, TW9 1ND Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A12SE (W)	651	9	517703 174804
136	<b>Points of Interest - Commercial Services</b> Name: Coys Location: 237 Lower Mortlake Road, Richmond, TW9 2LL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	809	9	518869 175656
136	<b>Points of Interest - Commercial Services</b> Name: Allport Ltd Location: London House 243-253, Lower Mortlake Road, Richmond, TW9 2LS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	864	9	518918 175686
137	<b>Points of Interest - Commercial Services</b> Name: Rexpo London Ltd Location: Asgill Lodge, Old Palace Lane, Richmond, TW9 1PQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SW (W)	837	9	517479 174959
138	<b>Points of Interest - Commercial Services</b> Name: Colin Ferns Ltd Location: 65 Raleigh Road, Richmond, TW9 2DU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	914	9	518942 175732
138	<b>Points of Interest - Commercial Services</b> Name: Colin Ferns Location: Rear of 63-65, Raleigh Road, Richmond, TW9 2DU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	922	9	518966 175720



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	<b>Points of Interest - Commercial Services</b> Name: Richmond Bridge MOT Centre Location: 415 Richmond Road, Twickenham, TW1 2EF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	984	9	517532 174422
139	<b>Points of Interest - Commercial Services</b> Name: Richmond Bridge M O T Centre Location: 415 Richmond Road, Twickenham, TW1 2EF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	987	9	517529 174421
140	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	45	9	518389 175047
141	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW9 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13SW (SW)	90	9	518283 174920
141	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	91	9	518283 174919
142	<b>Points of Interest - Manufacturing and Production</b> Name: A-Z 1st Freeofficefinder.Com Location: 2 Sheen Rd, Richmond Upon Thames, Richmond, Surrey, TW10 5AW Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SW (W)	218	9	518104 174968
142	<b>Points of Interest - Manufacturing and Production</b> Name: Regus Location: Gainsborough House 2, Sheen Road, Richmond, TW9 1AE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SW (W)	283	9	518037 174966
142	<b>Points of Interest - Manufacturing and Production</b> Name: Regus Location: Gainsborough House 2, Sheen Road, Richmond, TW9 1AE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SW (W)	283	9	518037 174966
142	<b>Points of Interest - Manufacturing and Production</b> Name: Regus Plc Location: Gainsborough House 2, Sheen Road, Richmond, TW9 1AE Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SW (W)	283	9	518037 174966
143	<b>Points of Interest - Manufacturing and Production</b> Name: Mwb Business Exchange Location: 5 Kew Road, Richmond, TW9 2PR Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13NW (NW)	363	9	518008 175229
143	<b>Points of Interest - Manufacturing and Production</b> Name: M W B Business Exchange Location: 5 Kew Road, Richmond, TW9 2PR Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13NW (NW)	363	9	518008 175229
144	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A8NW (S)	403	9	518214 174610



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
144	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	405	9	518214 174608
145	<b>Points of Interest - Manufacturing and Production</b> Name: Rosedale House Ltd Location: Rosedale House 2a, Rosedale Road, Richmond, TW9 2SZ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A18SW (N)	474	9	518161 175483
145	<b>Points of Interest - Manufacturing and Production</b> Name: Rosedale House Ltd Location: Rosedale House 2a, Rosedale Road, Richmond, TW9 2SZ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A18SW (N)	474	9	518161 175483
145	<b>Points of Interest - Manufacturing and Production</b> Name: A E S Wind Generation Location: 37-39 Kew Foot Road, Richmond, TW9 2SS Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to address or location	A18SW (NW)	501	9	518111 175489
146	<b>Points of Interest - Manufacturing and Production</b> Name: Argyle House Location: 1 Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: Property Solutions Ltd Location: 1 Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: A-Z 1st Freeofficefinder.Com Location: Argyle House, Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: MIs Business Centres Location: 1 Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: Richmond International Business Centre Location: 1 Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: Serviced Offices Management Location: 1 Dee Road, Richmond, TW9 2JN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	512	9	518742 175361
146	<b>Points of Interest - Manufacturing and Production</b> Name: Richmond International Business Centre Location: TW9 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	529	9	518751 175377
147	<b>Points of Interest - Manufacturing and Production</b> Name: Burgess Properties Location: 19-22 Victoria Villas, Richmond, TW9 2JX Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	620	9	518769 175491



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
147	<b>Points of Interest - Manufacturing and Production</b> Name: Cliveden Business Centre Location: Cliveden House, 19-22 Victoria Villas, Richmond, Surrey, TW9 2JX Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	621	9	518769 175492
148	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	627	9	518828 175437
148	<b>Points of Interest - Manufacturing and Production</b> Name: Tank Location: TW9 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	630	9	518821 175451
148	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW9 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19SW (NE)	630	9	518831 175438
148	<b>Points of Interest - Manufacturing and Production</b> Name: Burgess Properties Location: Aaron House 6, Bardolph Road, Richmond, TW9 2LH Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	672	9	518861 175468
148	<b>Points of Interest - Manufacturing and Production</b> Name: Aaron House Location: 2-6 Bardolph Road, Richmond, TW9 2LH Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A19SW (NE)	672	9	518861 175468
149	<b>Points of Interest - Manufacturing and Production</b> Name: Fracture Technologies Ltd Location: 5 Queens Rise, Richmond, TW10 6HL Category: Extractive Industries Class Code: Oil and Gas Extraction, Refinery and Product Manufacture Positional Accuracy: Positioned to address or location	A9NW (SE)	658	9	518726 174457
150	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	680	9	517686 174768
150	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW9 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	680	9	517686 174768
151	<b>Points of Interest - Manufacturing and Production</b> Name: Serviced Office Group Location: Hill House 2, Heron Square, Richmond, TW9 1EP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A7NE (SW)	692	9	517738 174640
152	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	724	9	517981 174362
152	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A7NE (SW)	726	9	517982 174359





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: TW10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A8SW (SW)	739	9	518029 174322
152	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SW (SW)	740	9	518028 174321
153	<b>Points of Interest - Manufacturing and Production</b> Name: Tank Location: TW10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	758	9	518913 174486
154	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	772	9	518912 175562
155	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: TW9 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	858	9	518915 175680
155	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	861	9	518918 175682
156	<b>Points of Interest - Public Infrastructure</b> Name: Rapid Clear Location: 96 Sheen Road, Richmond, TW9 1UF Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A13NE (E)	127	9	518472 175065
157	<b>Points of Interest - Public Infrastructure</b> Name: Richmond (London) Rail Station Location: The Quadrant, TW9 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13NW (NW)	280	9	518071 175173
157	<b>Points of Interest - Public Infrastructure</b> Name: Richmond NII Rail Station Location: The Quadrant, TW9 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13NW (NW)	280	9	518071 175173
157	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Station Location: The Quadrant, TW9 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13NW (NW)	280	9	518071 175173
158	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Police Station Location: 18-20 Kew Road, Richmond, TW9 Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A13NW (NW)	305	9	518136 175279
159	<b>Points of Interest - Public Infrastructure</b> Name: Graveyard Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	347	9	518078 174759



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
159	<b>Points of Interest - Public Infrastructure</b> Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	355	9	518107 174721
159	<b>Points of Interest - Public Infrastructure</b> Name: Graveyard Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	359	9	518101 174720
160	<b>Points of Interest - Public Infrastructure</b> Name: Rubbish Lads Ltd Location: 100 Church Road, Richmond, TW10 6LW Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A8NE (S)	394	9	518491 174631
161	<b>Points of Interest - Public Infrastructure</b> Name: Tesco Petrol Filling Station Location: 29 George Street, Richmond, TW9 1HY Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12SE (W)	411	9	517922 174904
162	<b>Points of Interest - Public Infrastructure</b> Name: Bus Station Location: TW9 Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	505	9	517898 174735
162	<b>Points of Interest - Public Infrastructure</b> Name: Bus Station Location: TW9 Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A12SE (SW)	524	9	517875 174737
162	<b>Points of Interest - Public Infrastructure</b> Name: Richmond (Surrey) Police Station Location: 8 Red Lion Street, Richmond, TW9 1RW Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A12SE (SW)	532	9	517859 174750
162	<b>Points of Interest - Public Infrastructure</b> Name: Metropolitan Police Service Location: 8 Red Lion Street, Richmond, TW9 1RW Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A12SE (SW)	532	9	517859 174750
162	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Police Station Location: 8 Red Lion Street, Richmond, TW9 1RW Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A12SE (SW)	532	9	517859 174750
163	<b>Points of Interest - Public Infrastructure</b> Name: Shell Location: 174-176 Sheen Road, Richmond, TW9 1XD Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14NW (E)	592	9	518950 175059
163	<b>Points of Interest - Public Infrastructure</b> Name: Shell Blackhorse Location: 174 Sheen Road, Richmond, TW9 1XD Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14NW (E)	603	9	518960 175062
163	<b>Points of Interest - Public Infrastructure</b> Name: Tcs Blackhorse Location: 174 Sheen Road, Richmond, TW9 1XD Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14NW (E)	603	9	518961 175063



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
163	<b>Points of Interest - Public Infrastructure</b> Name: TCS Blackhorse Location: 174 Sheen Road, Richmond, TW9 1XD Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14NW (E)	603	9	518961 175063
164	<b>Points of Interest - Public Infrastructure</b> Name: Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	747	9	518973 174577
165	<b>Points of Interest - Public Infrastructure</b> Name: Bus Station Location: TW9 Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	823	9	518966 175578
166	<b>Points of Interest - Public Infrastructure</b> Name: Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	837	9	518926 174387
166	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	909	9	518951 174313
167	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	845	9	519091 174579
168	<b>Points of Interest - Public Infrastructure</b> Name: North Sheen Rail Station Location: Manor Grove, TW9 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A19SE (NE)	874	9	519122 175434
168	<b>Points of Interest - Public Infrastructure</b> Name: North Sheen Station Location: Manor Grove, TW9 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A19SE (NE)	874	9	519122 175434
169	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	877	9	519032 174440
169	<b>Points of Interest - Public Infrastructure</b> Name: Richmond Cemetery Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	891	9	519050 174441
170	<b>Points of Interest - Public Infrastructure</b> Name: BP Express Location: Lower Mortlake Road, Richmond, TW9 2LL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19NW (NE)	908	9	518961 175706
170	<b>Points of Interest - Public Infrastructure</b> Name: BP Service Station Location: Lower Mortlake Road, Richmond, TW9 2LL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19NW (NE)	908	9	518961 175706



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
170	<b>Points of Interest - Public Infrastructure</b> Name: Beacon Filling Station Location: Lower Mortlake Road, Richmond, TW9 2LL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19NW (NE)	909	9	518962 175707
170	<b>Points of Interest - Public Infrastructure</b> Name: Beacon Filling Station Location: Lower Mortlake Road, Sandycombe Road, Richmond, TW9 2LL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19NW (NE)	909	9	518961 175707
170	<b>Points of Interest - Public Infrastructure</b> Name: BP Express Location: Lower Mortlake Road, Richmond, TW9 2LL Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19NW (NE)	918	9	518973 175709
171	<b>Points of Interest - Public Infrastructure</b> Name: London Borough of Richmond Location: The Lodge, Kings Ride Gate, Richmond, TW10 5BJ Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to address or location	A14SE (E)	933	9	519289 174920
172	<b>Points of Interest - Public Infrastructure</b> Name: Waste No Time Ltd Location: 23 Cambridge Road, Twickenham, TW1 2HN Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A7SE (SW)	943	9	517705 174291
173	<b>Points of Interest - Public Infrastructure</b> Name: At Your Disposal Location: 18 Reynolds Place, Richmond, TW10 6JZ Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A8SE (S)	980	9	518631 174059
174	<b>Points of Interest - Public Infrastructure</b> Name: East Sheen Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	982	9	519291 174690
175	<b>Points of Interest - Public Infrastructure</b> Name: Cemetery Location: TW10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	999	9	519202 174467
176	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: TW10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	129	9	518489 175001
176	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	129	9	518489 175002
176	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Albany Road, TW10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13SE (E)	136	9	518496 174994
176	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Albany Road, TW10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	155	9	518515 174993





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
177	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Play Area            Location: TW9            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A17SW (NW)	815	9	517588 175404
178	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Play Area            Location: TW1            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A7NE (SW)	841	9	517799 174344
179	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Playground            Location: Raleigh Road, TW9            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A19NW (NE)	886	9	518866 175757
179	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Playground            Location: Not Supplied            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A19NW (NE)	887	9	518866 175758
179	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Playground            Location: Not Supplied            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A19NW (NE)	903	9	518887 175762
180	<p><b>Points of Interest - Recreational and Environmental</b></p> <p>Name: Playground            Location: Not Supplied            Category: Recreational            Class Code: Playgrounds            Positional Accuracy: Positioned to an adjacent address or location</p>	A12NW (W)	951	9	517371 175162



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
181	<p><b>National Nature Reserves</b></p> <p>Name: Richmond Park            Multiple Areas: N            Total Area (m2): 8464322.92            Source: Natural England            Reference: 1007634            Designation Date: Not Supplied</p>	A9SE (SE)	991	10	519018 174263
182	<p><b>Sites of Special Scientific Interest</b></p> <p>Name: Richmond Park            Multiple Areas: N            Total Area (m2): 8464322.93            Source: Natural England            Reference: 1002388            Designation Details: National Nature Reserve            Designation Date: 4th March 1992            Date Type: Notified            Designation Details: Special Area Of Conservation            Designation Date: 4th March 1992            Date Type: Notified            Designation Details: Site Of Special Scientific Interest            Designation Date: 4th March 1992            Date Type: Notified</p>	A9SE (SE)	991	10	519018 174263
183	<p><b>Special Areas of Conservation</b></p> <p>Name: Richmond Park            Multiple Areas: N            Total Area (m2): 8464322.93            Source: Natural England            Reference: UK0030246            Status: Designated</p>	A9SE (SE)	991	10	519018 174263
184	<p><b>World Heritage Sites</b></p> <p>Name: Royal Botanic Gardens, Kew            Reference: 1000102            Area(m²): 3453565.18            Source: Historic England            Designation Date: 1st January 2003</p>	A18SW (N)	356	11	518209 175374
185	<p><b>World Heritage Sites</b></p> <p>Name: Royal Botanic Gardens, Kew            Reference: 1000102            Area(m²): 1365103.99            Source: Historic England            Designation Date: 1st January 2003</p>	A18NE (N)	967	11	518418 176008

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 <b>British Geological Survey</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Centre for Ecology and Hydrology	 <b>Centre for Ecology &amp; Hydrology</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	







Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	<b>Environment Agency - National Customer Contact Centre (NCCC)</b> PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	<b>London Borough of Richmond upon Thames - Environmental Health Department</b> 4 Waldegrave Road, Teddington, Middlesex, TW11 8EN	Telephone: 020 8891 1411 Fax: 020 8891 7702 Website: www.richmond.gov.uk
4	<b>Environment Agency - Head Office</b> Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	<b>London Borough of Richmond upon Thames</b> Civic Centre, 44 York Street, Twickenham, Middlesex, TW1 3BZ	Telephone: 020 8891 1411 Fax: 020 8891 7702 Website: www.richmond.gov.uk
7	<b>Health and Safety Executive</b> 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
8	<b>Stantec UK Ltd</b> Caversham Bridge House, Waterman Place, Reading, RG1 8DN	Telephone: 0118 950 0761 Email: pba.reading@stantec.com Website: www.stantec.com
9	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	<b>Natural England</b> County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
11	<b>Historic England</b> 1 Waterhouse Square, 138 - 142 Holborn, London, EC1N 2ST	Telephone: 0370 333 0607 Email: customers@historicengland.org.uk Website: www.historicengland.org.uk
-	<b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b> Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.








# Geology 1:50,000 Maps Legends



## Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	WMGR	Infilled Ground	Artificial Deposit	Not Supplied - Holocene
	SLIP	Landslide Deposit	Clay, Silt and Sand	Not Supplied - Quaternary

## Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand And Peat	Not Supplied - Holocene
	KPGR	KEMPTON PARK GRAVEL MEMBER	Sand and Gravel	Not Supplied - Devensian
	LASI	Langley Silt Member	Clay and Silt	Not Supplied - Devensian
	TPGR	TAPLOW GRAVEL MEMBER	Sand and Gravel	Not Supplied - Wolstonian
	BHT	Boyn Hill Gravel Member	Sand and Gravel	Not Supplied - Hoxnian
	BPGR	Black Park Gravel Member	Sand and Gravel	Not Supplied - Anglian
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

## Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay and Silt	Not Supplied - Ypresian
		Faults		



GEA

## Geology 1:50,000 Maps

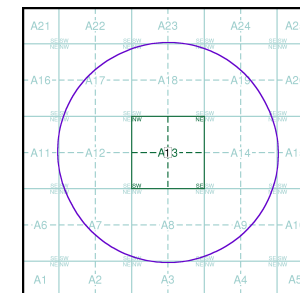
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

## Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	270
Map Name:	South London
Map Date:	1998
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Not Supplied
Landslip:	Available
Rock Segments:	Not Supplied

## Geology 1:50,000 Maps - Slice A



## Order Details:

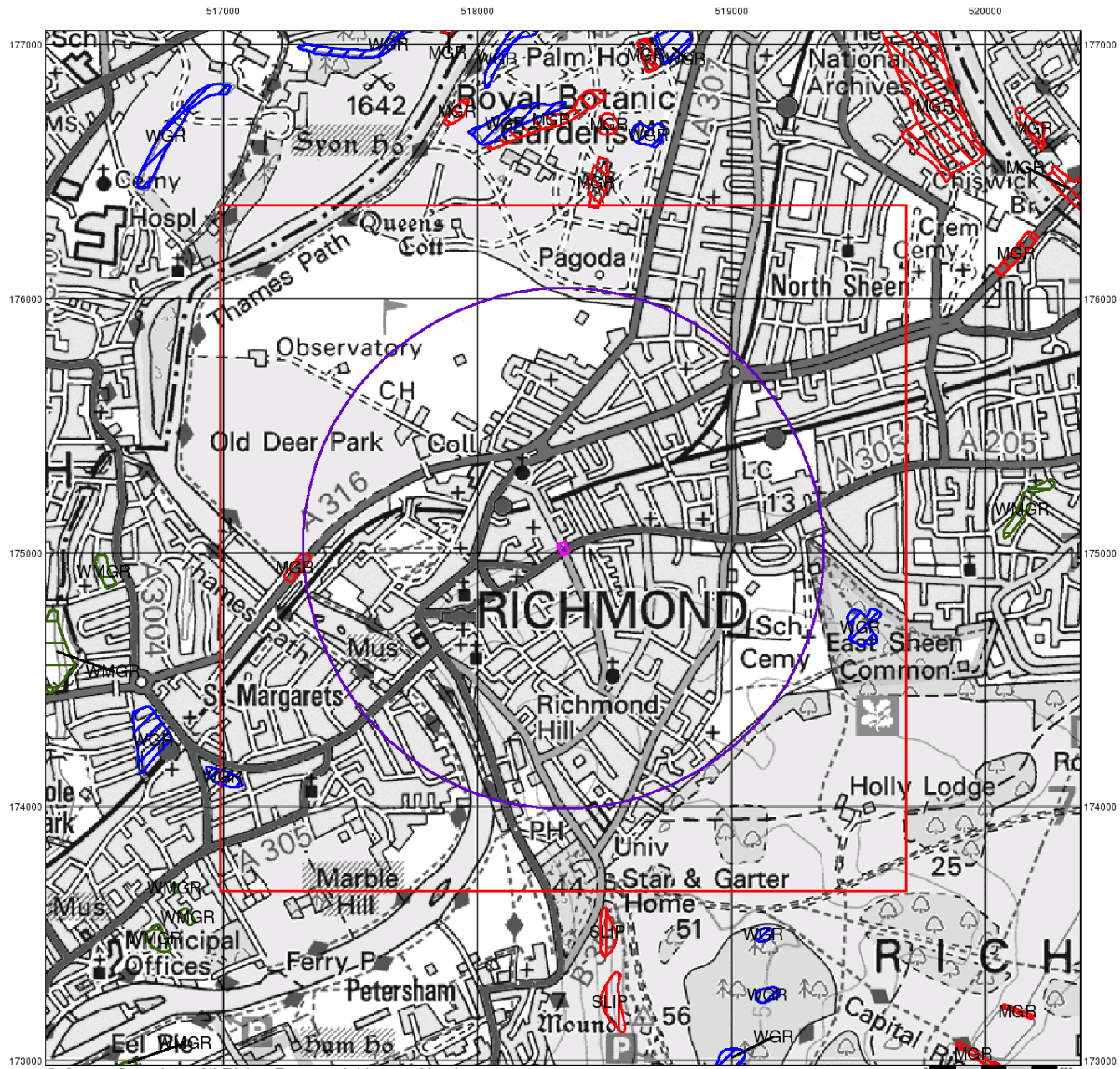
Order Number:	293276828_1_1
Customer Reference:	J22097
National Grid Reference:	518340, 175020
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	1000

## Site Details:

The Richmond Inn Hotel, 50-56, Sheen Road, RICHMOND, TW9 1UG

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: www.envirocheck.co.uk



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### Artificial Ground and Landslip

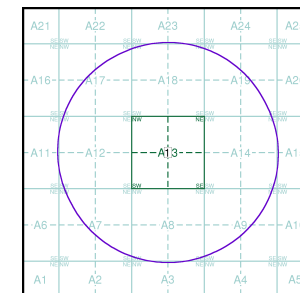
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



#### Order Details:

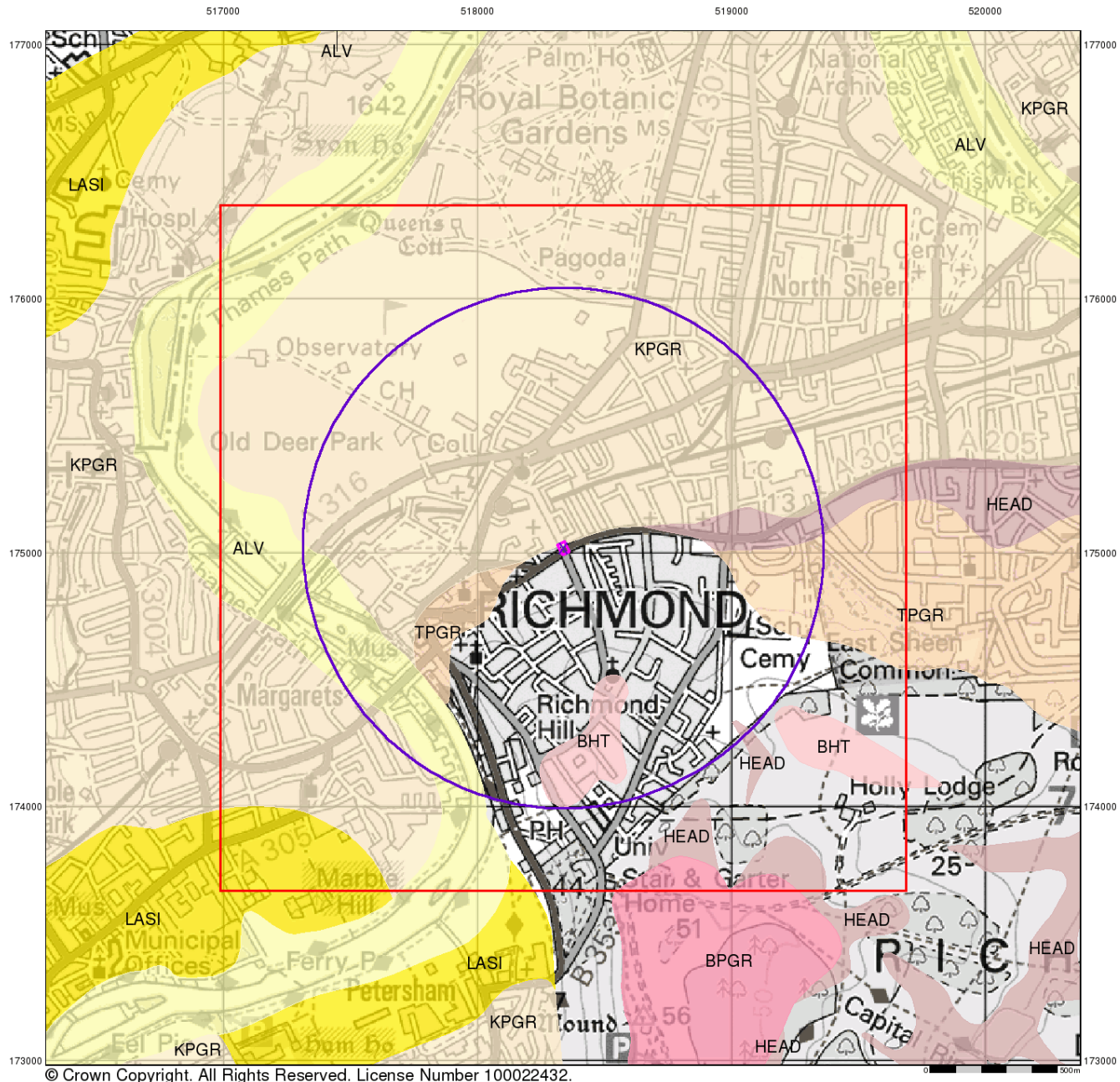
Order Number: 293276828\_1\_1  
 Customer Reference: J22097  
 National Grid Reference: 518340, 175020  
 Slice: A  
 Site Area (Ha): 0.14  
 Search Buffer (m): 1000

#### Site Details:

The Richmond Inn Hotel, 50-56, Sheen Road, RICHMOND, TW9 1UG



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



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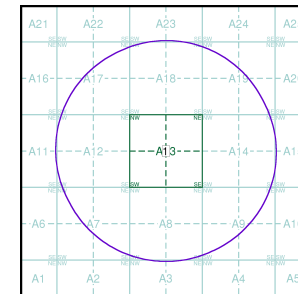
### Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

### Superficial Geology Map - Slice A



### Order Details:

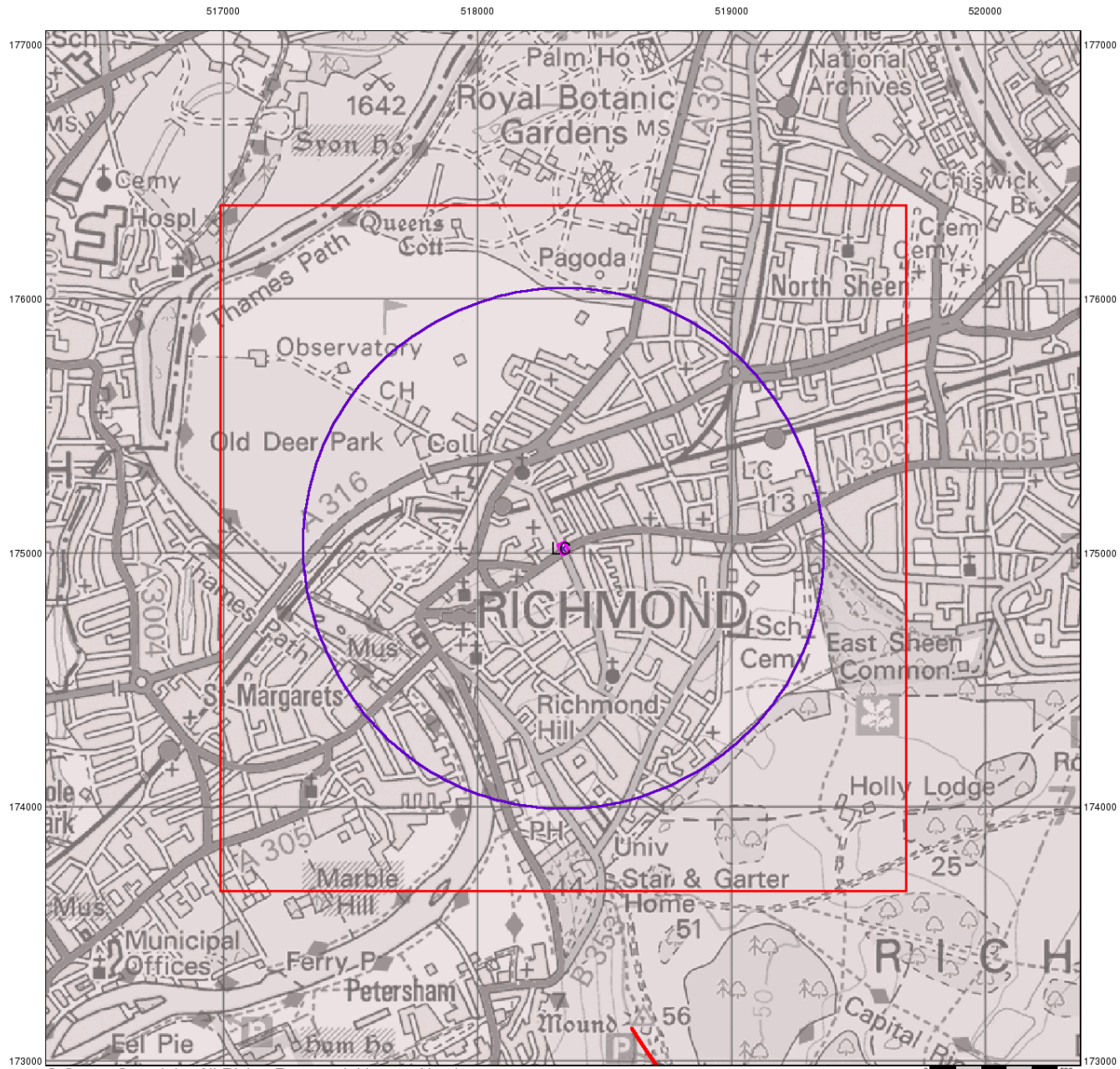
Order Number: 293276828\_1\_1  
 Customer Reference: J22097  
 National Grid Reference: 518340, 175020  
 Slice: A  
 Site Area (Ha): 0.14  
 Search Buffer (m): 1000

### Site Details:

The Richmond Inn Hotel, 50-56, Sheen Road, RICHMOND, TW9 1UG



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



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### Bedrock and Faults

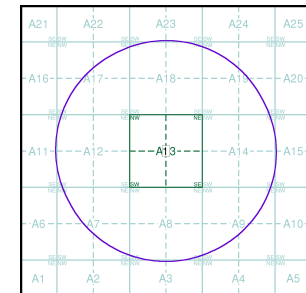
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

### Bedrock and Faults Map - Slice A



### Order Details:

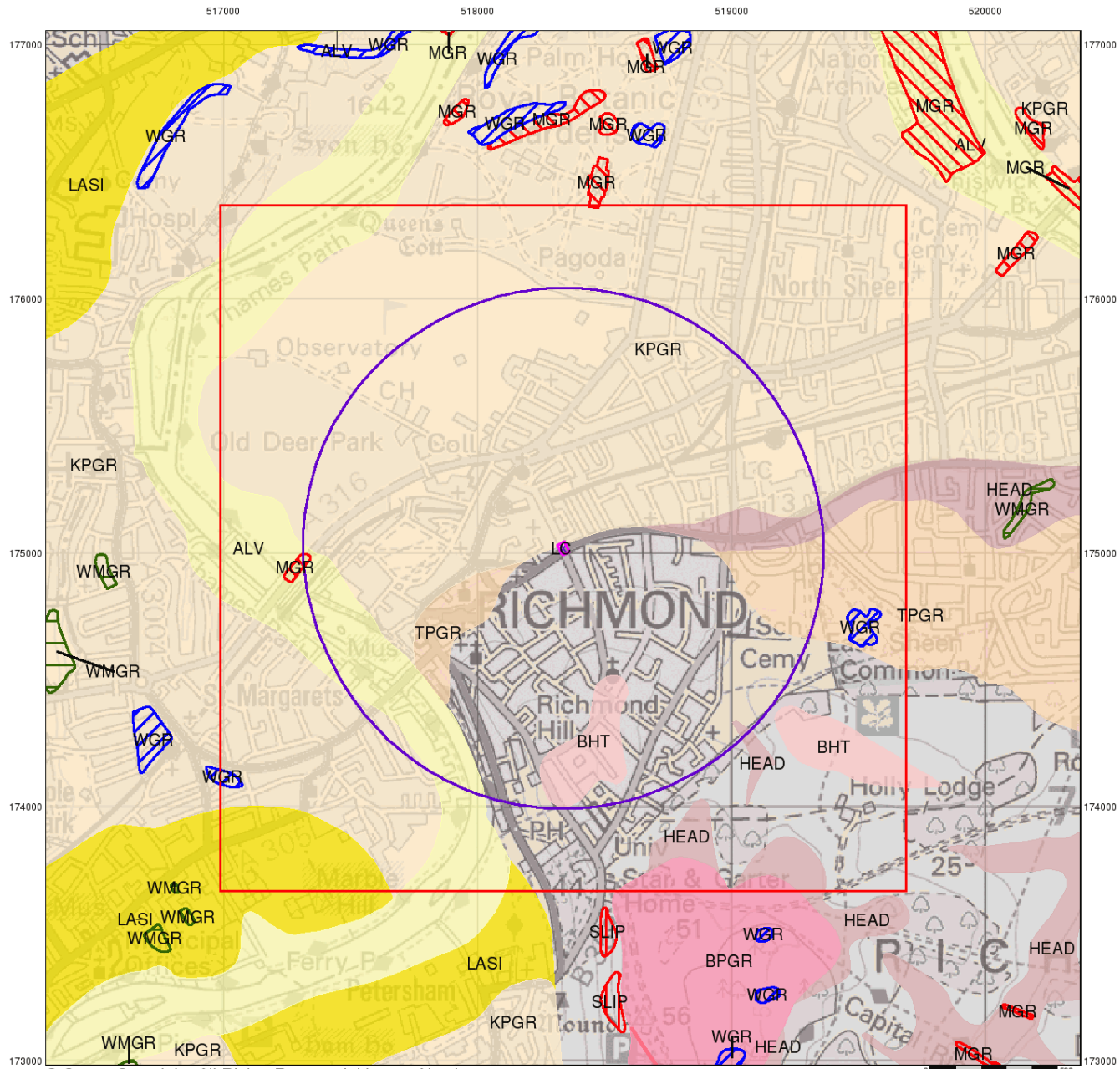
Order Number: 293276828\_1\_1  
 Customer Reference: J22097  
 National Grid Reference: 518340, 175020  
 Slice: A  
 Site Area (Ha): 0.14  
 Search Buffer (m): 1000

### Site Details:

The Richmond Inn Hotel, 50-56, Sheen Road, RICHMOND, TW9 1UG



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### Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

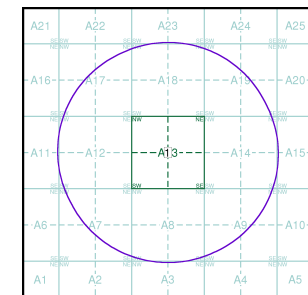
### Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

### Contact

British Geological Survey  
 Kingsley Dunham Centre  
 Keyworth  
 Nottingham  
 NG12 5GG  
 Telephone: 0115 936 3143  
 Fax: 0115 936 3276  
 email: enquiries@bgs.ac.uk  
 website: www.bgs.ac.uk

### Combined Geology Map - Slice A



### Order Details:

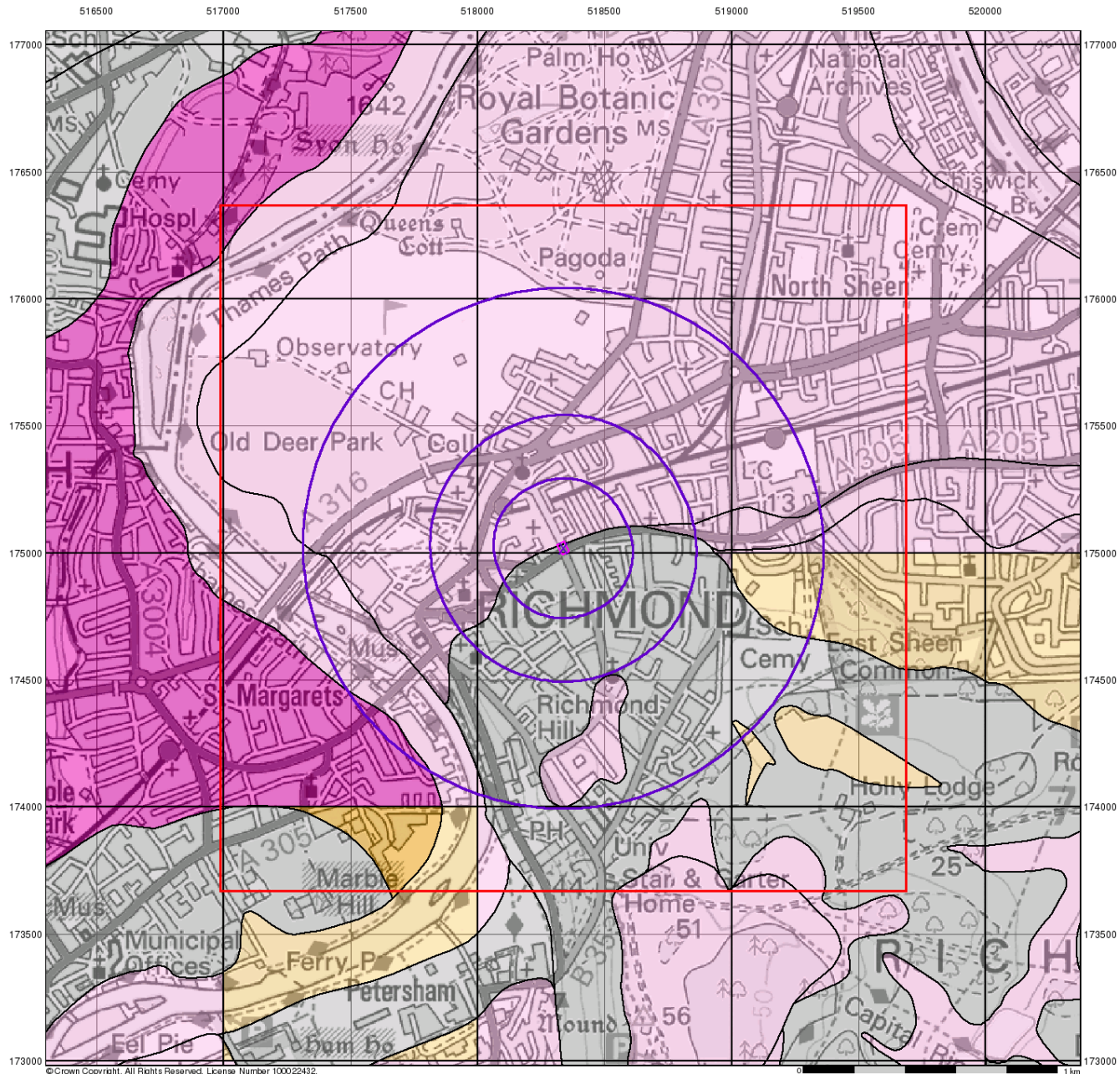
Order Number: 293276828\_1\_1  
 Customer Reference: J22097  
 National Grid Reference: 518340, 175020  
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## Groundwater Vulnerability

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

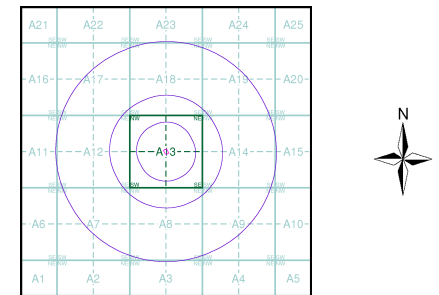
#### Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer
- Unproductive Aquifer
- Soluble Rock

#### Superficial Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

### Site Sensitivity Context Map - Slice A



### Order Details

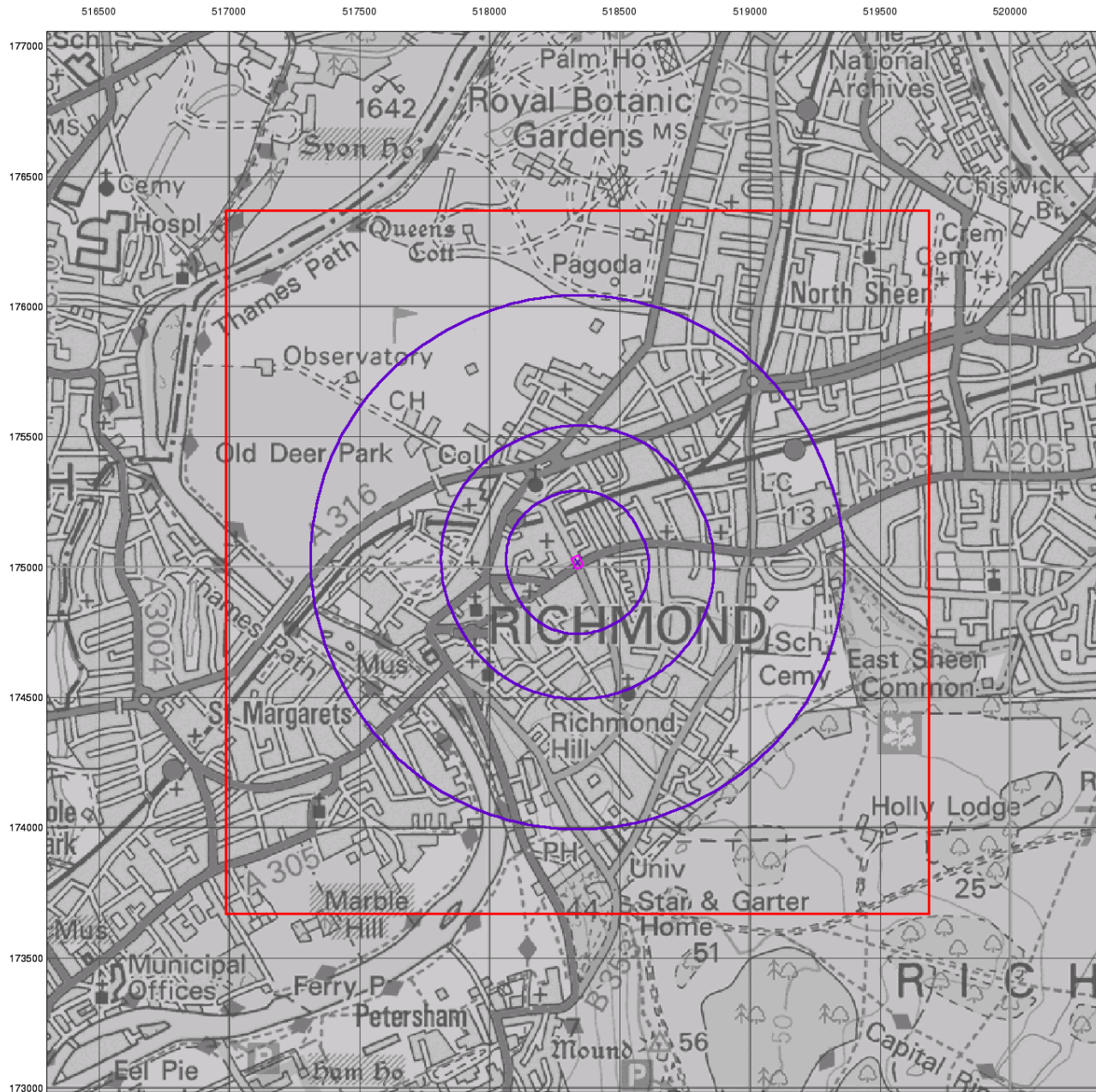
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 Customer Ref: J22097  
 National Grid Reference: 518340, 175020  
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## Bedrock Aquifer Designation

### General

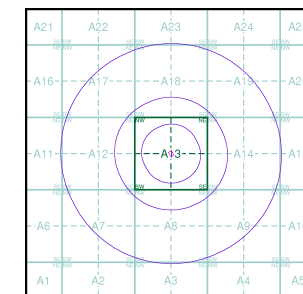
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

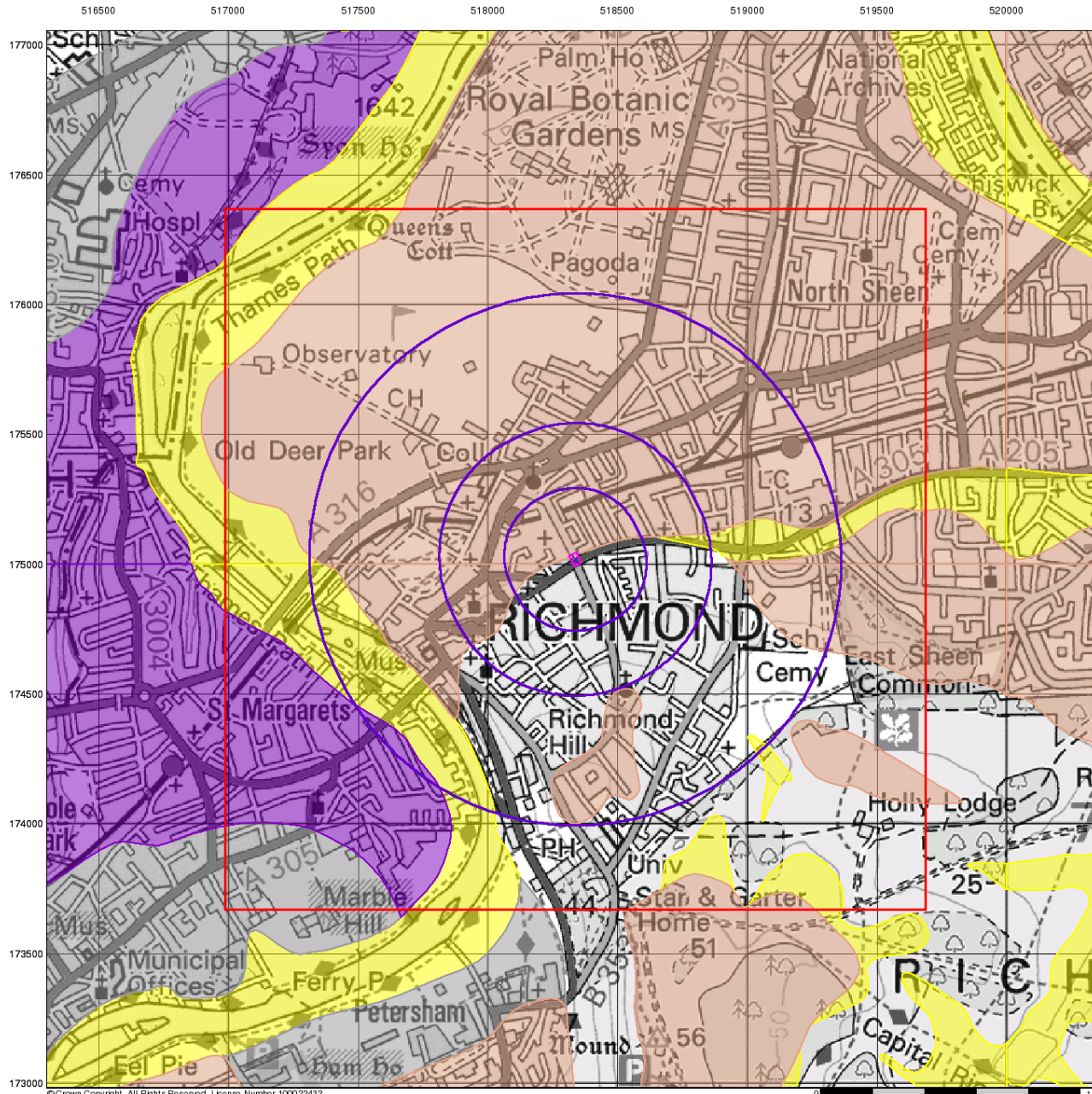
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 Customer Ref: J22097  
 National Grid Reference: 518340, 175020  
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GEA

## Superficial Aquifer Designation

### General

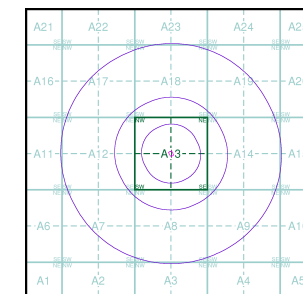
- ◆ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- Slice
- B Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 293276828\_1\_1  
 Customer Ref: J22097  
 National Grid Reference: 518340, 175020  
 Slice: A  
 Site Area (Ha): 0.14  
 Search Buffer (m): 1000

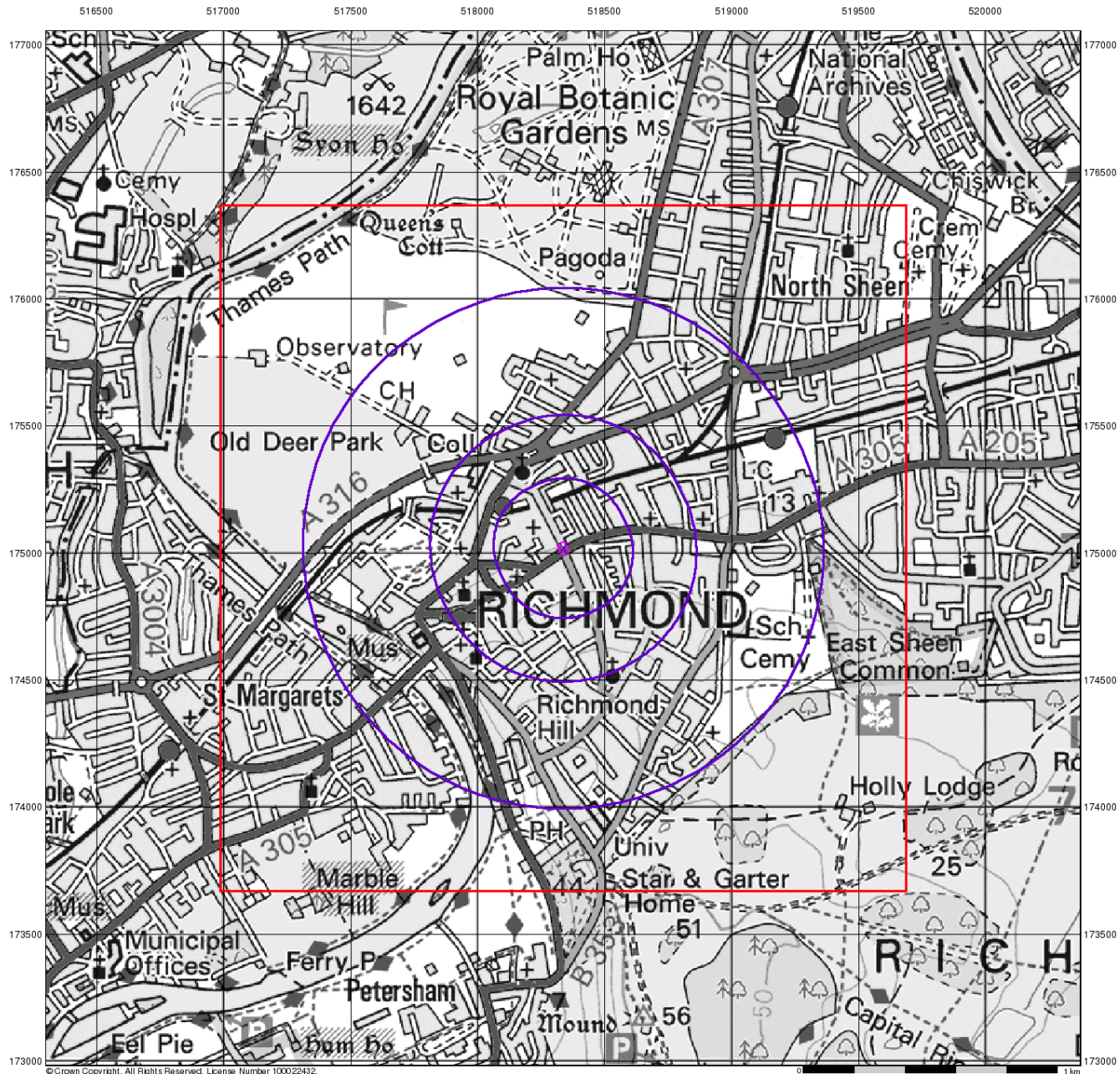
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## Source Protection Zones

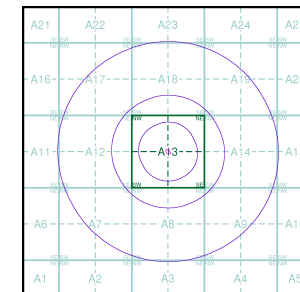
### General

- ◆ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

### Site Sensitivity Context Map - Slice A



### Order Details

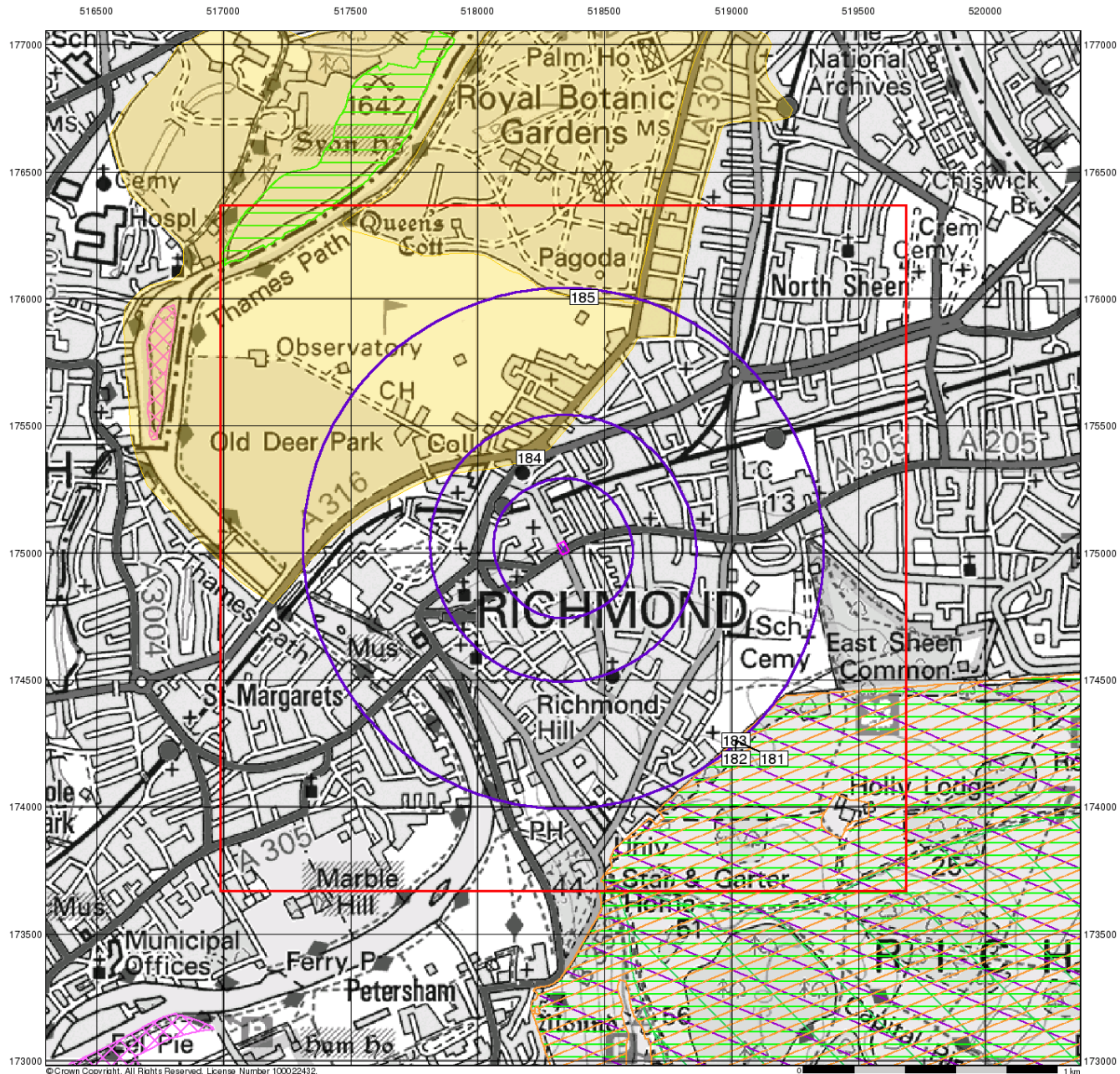
Order Number: 293276828\_1\_1  
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## Sensitive Land Uses

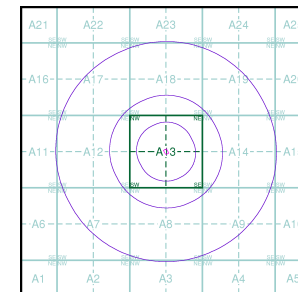
### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

### Site Sensitivity Context Map - Slice A



### Order Details

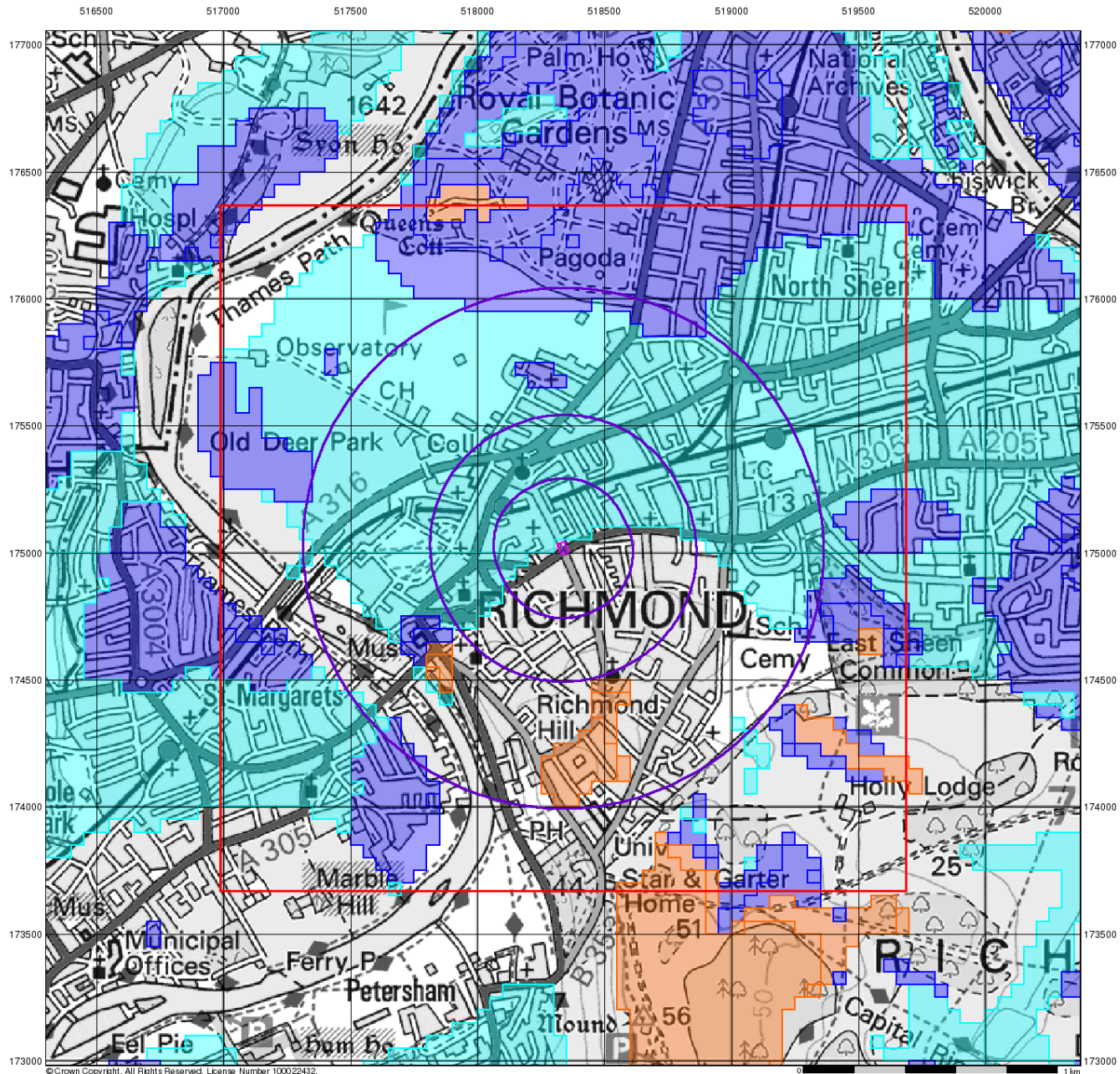
Order Number: 293276828\_1\_1  
 Customer Ref: J22097  
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### BGS Flood GFS Data

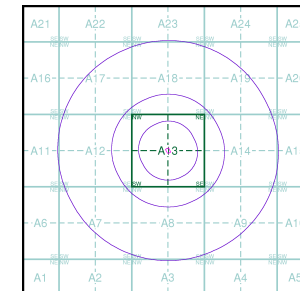
#### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

#### Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

#### Site Sensitivity Context Map - Slice A



#### Order Details

Order Number: 293276828\_1\_1  
 Customer Ref: J22097  
 National Grid Reference: 518340, 175020  
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#### Site Details

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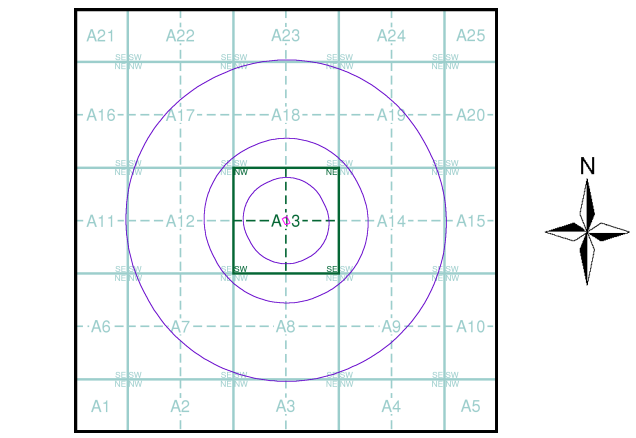


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- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Map ID
  - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
  - Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Waste**
- BGS Recorded Landfill Site (Location)
  - BGS Recorded Landfill Site
  - EA Historic Landfill (Buffered Point)
  - EA Historic Landfill (Polygon)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site
  - Registered Landfill Site (Point Buffered to 100m)
  - Registered Landfill Site (Point Buffered to 250m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - NIHNS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- BGS Recorded Mineral Site

**Site Sensitivity Map - Slice A**



**Order Details**

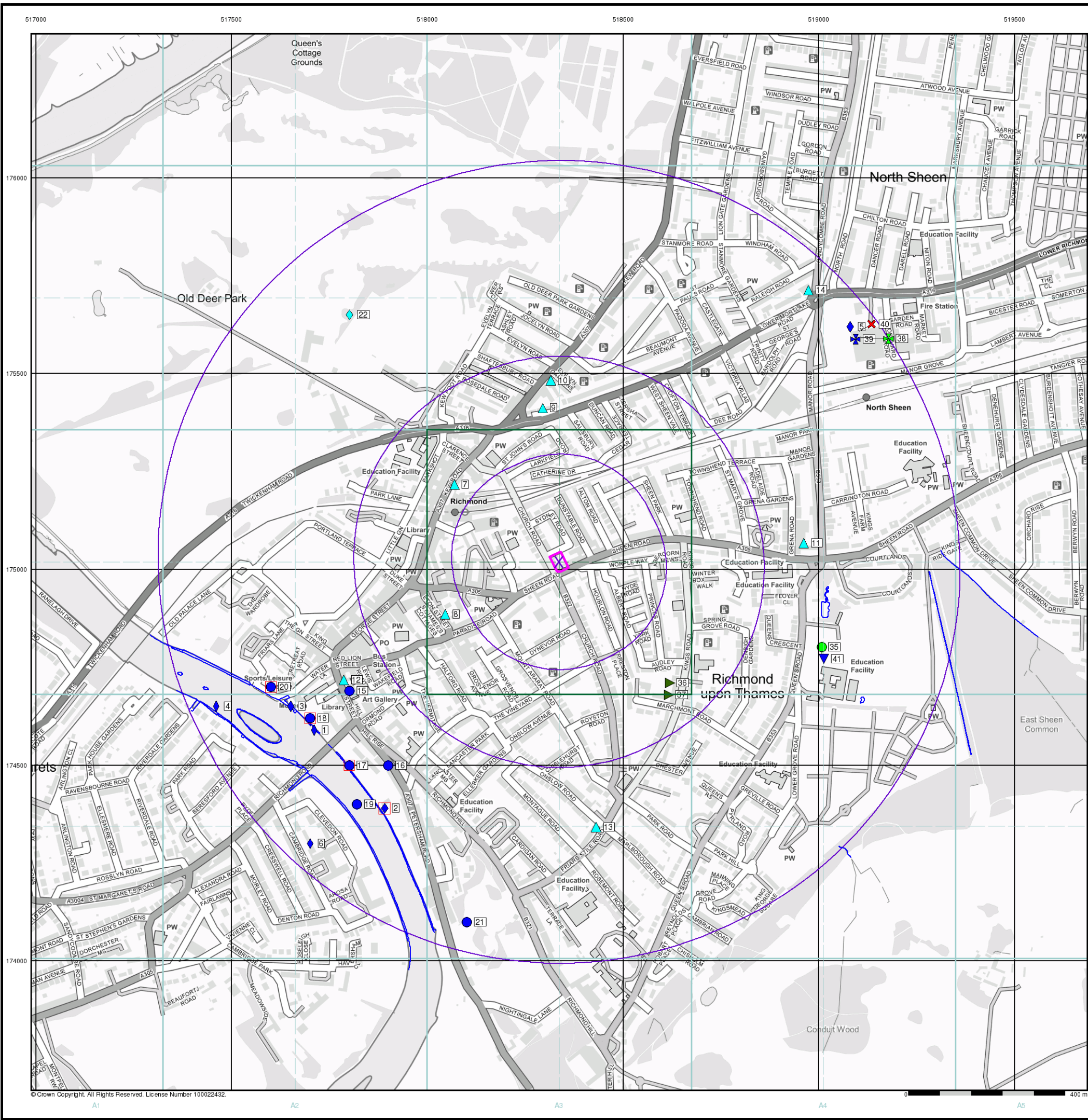
Order Number: 293276828\_1\_1  
 Customer Ref: J22097  
 National Grid Reference: 518340, 175020  
 Slice: A  
 Site Area (Ha): 0.14  
 Search Buffer (m): 1000

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**Landmark**  
 INFORMATION GROUP

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### Industrial Land Use Map

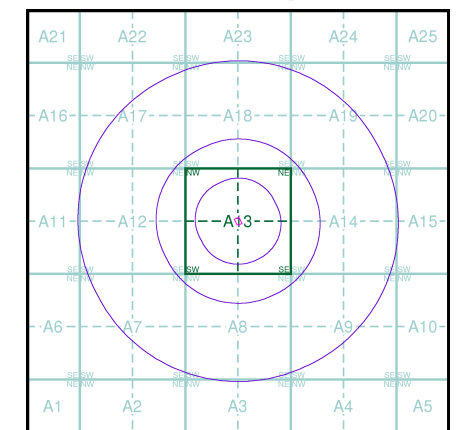
#### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

#### Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

### Industrial Land Use Map - Slice A



#### Order Details

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