32-34 Avenue Road
London
NW8 6BU

Ground Investigation & Basement Impact Assessment Report

Mrs K Massey

May 2022

J22076
Rev 2

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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 Engineers HRW, on behalf of Mrs K Massey, with respect to demolition of the existing detached building and subsequent construction of a new three-storey house over a larger footprint. The new house will include a single level basement to a depth of roughly 4.00 m below ground level (37.00 m OD) and a deeper swimming pool excavation to a depth of roughly 6.00 m below ground level (35.00 m OD). The purpose of the investigation has been to determine the ground conditions and hydrogeology, to carry out an assessment of ground movements resulting from excavation of the proposed basement, to assess the extent of any contamination and to provide information to assist with the design of the basement structure and suitable foundations. The report also includes information required to comply with London Borough of Camden Planning Guidance (CPG) Basements, relating to the requirement for a Basement Impact Assessment (BIA).

Site history

The earliest map studied, dated 1872, shows the site to be developed with two detached houses and associated gardens, which extended off the site to the northwest. The surrounding area was developed with the existing road network, which was predominantly lined with residential properties. Primrose Hill Park was located in its existing location 50 m to the northeast of the site, with two small ponds in the park shown approximately 90 m and 95 m to the north. At some time between 1954 and 1960, the houses on site were demolished, whilst a tennis court and house were built adjacent to the northeast. By 1968, the existing building had been constructed and the property occupied the existing site footprint. The site and surrounding area appeared to remain essentially unchanged until roughly 2013, when the tennis court and adjoining house to the northeast were demolished and replaced with a new house.

Ground conditions

The ground investigation generally encountered the expected ground conditions, in that beneath a surface covering of topsoil or tarmac, and a variable thickness of made ground, London Clay extended to the full depth of the investigation, of 20.00 m (21.05 m OD). In Borehole Nos 1 and 5, which were advanced through the driveway, the made ground comprised an initial layer of brick and concrete rubble to a depth of 0.60 m (40.40 m OD and 40.45 m OD). In Borehole Nos 2 to 4, which were advanced through the rear garden, topsoil was present to depths of between 0.10 m and 0.20 m, below which the made ground comprised dark brown sandy gravelly clay with fragments of extraneous material, roots and rootlets and generally extended to depths of between 0.90 m (40.32 m OD) and 1.00 m (40.00 m OD), and to a depth of 2.60 m (38.45 m OD) in Borehole No 1. The underlying London Clay comprised firm becoming stiff fissured brown mottled grey becoming brownish grey silty clay with sandy lenses, selenite crystals and mica to the full depth of the investigation, of 20.00 m (21.05 m OD).

Groundwater was only encountered in Borehole No 3 at a depth of 0.80 m (40.42 m OD), from within the made ground. A standpipe was installed in Borehole No 1, and has been monitored on two occasions to date, measuring groundwater at depths of 2.05 m (38.95 m OD) and 2.07 m (38.93 m OD). This shallow groundwater is thought to be associated with a high proportion of surface water infiltrating into the shallow soils through the garden or perched in the made ground, rather than being representative of a shallow ground water table.

Contamination testing has measured elevated concentrations of lead, benzo(b)fluoranthene, benzo(a)pyrene and dibenz(a,h)anthracene within the made ground. Additionally, fibres of chrysotile asbestos were observed in a sample of the made ground from Borehole No 2. Subsequent quantification testing found the fibres to comprise <0.001% of the sample.

Recommendations

Formation level for the proposed basement will be within the stiff clay of the London Clay. Excavations for the proposed basement structure will require temporary support to maintain stability and to prevent any excessive ground movements. A bored piled wall is understood to be the preferred foundation. A contiguous piled wall will be suitable to support the excavation in the temporary and permanent condition.

Perched water may be encountered towards the base of the made ground, but significant groundwater inflows are not anticipated. The proposed use of piles extending into the London Clay to support the new building will also be suitable. Heave protection measures will be required.

Site workers should adopt suitable precautions when handling soil and areas of new soft landscaping / planting may need to be formed with a cover thickness of imported soils.

Basement Impact Assessment

The BIA has not indicated any concerns with regard to the effects of the proposed basement on the site and surrounding area. It has been concluded that the impacts identified can be mitigated by appropriate design and standard construction practice.

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 Engineers HRW, on behalf of Mrs K Massey, to carry out a desk study, ground investigation and ground movement assessment at 32–34 Avenue Road, London NW8 6BU.

This report also forms part of a Basement Impact Assessment (BIA), which has been carried out in accordance with guidelines from the London Borough of Camden (LBC) in support of a planning application.

GEA has previously carried out a basement impact assessment and ground investigation of at No 28 Avenue Road, London NW8 6BU (report ref J20060 Issue 3, dated March 2021), and the previous findings have been referred to where appropriate.

1.1 Proposed Development

It is understood that it is proposed to demolish the existing detached building and subsequently construct a new three-storey house over a larger footprint. The new house will include a single level basement to a depth of roughly 4.00 m below ground level (37.00 m OD) and a deeper swimming pool excavation to a depth of roughly 6.00 m below ground level (35.00 m OD).

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

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 provide an assessment of the risk of encountering UXO;
- to determine the ground conditions and their engineering properties;
- to use the above information to provide recommendations with respect to the design of suitable foundations and retaining walls;
- to assess the impact of the proposed basement on the local hydrogeology, hydrology and stability of the surrounding natural and build environment;
- to provide an indication of the degree of soil contamination present; and
- to assess the risk that any such contamination may pose to the proposed development, its users or the wider environment.

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 readily available geology maps;
- a walkover survey of the site carried out in conjunction with the fieldwork; and
- a review of the previous GEA basement impact assessment and ground investigation report of the nearby site.

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

- a single borehole advanced to a depth of 20.00 m by a cable percussion rig;
- four window sampler boreholes advanced to depths of between 1.80 m and 3.10 m;
- 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 groundwater monitoring standpipe and two subsequent monitoring visits;

- 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)[1] published 8 October 2020. This involves identifying, making decisions on, and taking 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

The work carried out includes a Hydrological and Hydrogeological Assessment and Land Stability Assessment (also referred to as Slope Stability Assessment). These assessments form part of the BIA procedure specified in the London Borough of Camden (LBC) Planning Guidance CPG[2] and their Guidance for Subterranean Development[3] prepared by Arup (the "Arup report") in accordance with Policy A5 of the Camden Local Plan 2017. The aim of the work is to provide information on surface water, groundwater and land stability and 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.

1.3.2 Qualifications

The land stability element of the Basement Impact Assessment (BIA) has been carried out by Martin Cooper, a BEng in Civil Engineering, a chartered engineer (CEng), member of the Institution of Civil Engineers (MICE), and Fellow of the Geological Society (FGS) who has over 20 years' specialist experience in ground engineering. The subterranean (groundwater) flow assessment has been carried out by John Evans, MSc in Hydrogeology, Chartered Geologist (CGeol) and Fellow of the Geological Society of London (FGS). The surface water and flooding assessment has been carried out by Rupert Evans, a hydrologist with more than ten years consultancy experience in flood risk assessment, surface water drainage schemes and hydrology / hydraulic modelling. Rupert Evans is a Chartered Environmentalist, Chartered Water and Environmental Manager and a Member of CIWEM.

The assessments have been made in conjunction with Steve Branch, a BSc in Engineering Geology and Geotechnics, MSc in Geotechnical Engineering, a Chartered Geologist (CGeol) and Fellow of the Geological Society (FGS) with some 30 years' experience in geotechnical engineering and engineering geology.

All assessors meet the qualification requirements of the Council guidance.

1.4 Limitations

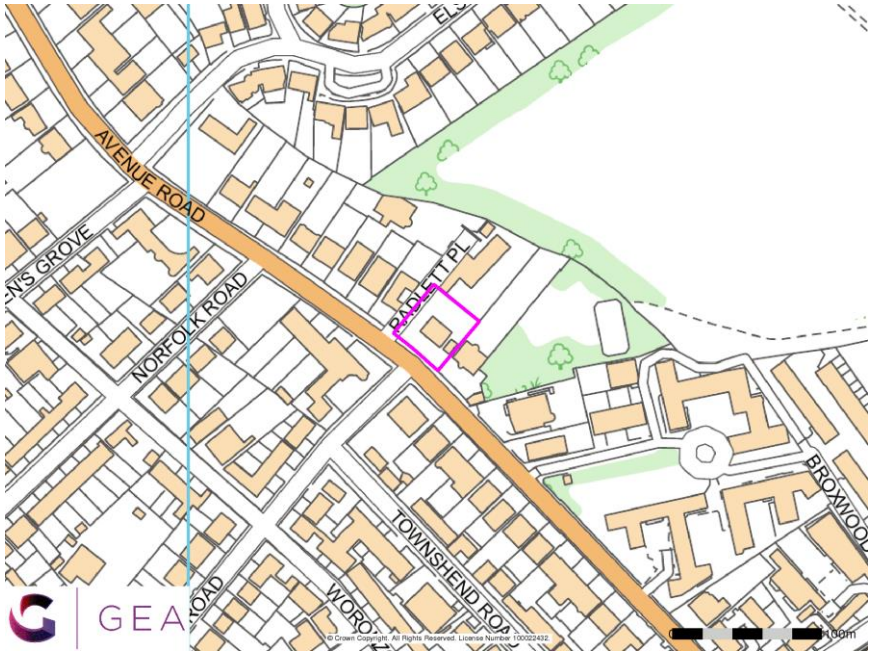
The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, 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.

1 https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm
2 London Borough of Camden Planning Guidance CPG (January 2021) *Basements*
3 Ove Arup & Partners (2010) *Camden geological, hydrogeological and hydrological study. Guidance for Subterranean Development.* For London Borough of Camden November 2010

2.0 The Site

2.1 Site Description

The site is located in London Borough of Camden, approximately 510 m northeast of St John's Wood London Underground station and 60 m southwest of Primrose Hill Park. It fronts onto and is accessed from Avenue Road to the southwest and is bounded by Radlett Place to the northwest and by detached houses with private gardens to the northeast and southeast. The site may be additionally located by National Grid Reference 527170, 183730 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 rectangular in shape and measures approximately 35 m southeast-northwest by 40 m northeast-southwest. The site is occupied by a three-storey detached house, with a garage at lower ground floor level, along the southeast elevation, a tarmac driveway and a rear garden. It has until recently also been used as a furniture store, known as Forecast Furniture Limited.

The site is essential level, apart from a slope down to the garage at lower ground floor level and a raised patio within the rear garden. Numerous trees are located around the property and within the neighbouring sites, including species such as London plane, magnolia, gum, palm, cherry, cypress, mimosa, western red cedar and willow.

2.1.1 Adjoining Structures

No 30 Avenue Road, the adjacent property to the southeast of the site, includes a partial lower ground floor level adjacent to the site boundary.

No 36 Avenue Road, beyond Radlett Place to the northwest, also has a lower ground floor level. Planning permission has also been granted for demolition of the existing house and the subsequent construction of a new property with a full basement, although construction had not commenced at the time of this investigation.

No 1 Radlett Place, the adjacent property to the northeast, was developed around 2013 and includes a large double level basement beneath the property, extending up to the site boundary.

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 1872, shows the site to be developed with two detached houses and associated gardens, which extended off the site to the northwest. The surrounding area was developed with the existing road network, which was predominately lined with residential properties. Primrose Hill Park was located in its existing location 50 m to the northeast of the site, with two small ponds in the park shown approximately 90 m and 95 m to the north.

At some time between 1954 and 1960, the houses on site were demolished, whilst a tennis court and house were built adjacent to the northeast. By 1968, the existing building had been constructed and the property occupied the existing site footprint. The site and surrounding area appeared to remain essentially unchanged until roughly 2013, when the tennis court and adjoining house to the northeast were demolished and replaced with a new house.

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 sites located within 1 km of the site and additionally, no waste management or waste transfer sites are located within 500 m of the site.

No pollution incidents to controlled waters have been recorded within 500 m of the site and the site is not located within a nitrate vulnerable zone or any other 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 Preliminary UXO Risk Assessment

A Preliminary UXO Risk Assessment has been completed by 1st Line Defence (report ref PA15381-00, dated March 2022), and the report is included in the appendix. The risk assessment has been carried out in accordance with the guidelines provided by CIRIA[4], which state that the likelihood of encountering and detonating UXO below a site should be assessed along with establishing the consequences that may arise. The first phase comprises a preliminary risk assessment, which should be undertaken at an early stage of the development planning. If such an assessment identifies a high level of risk then a detailed risk assessment should be carried out by a UXO specialist, which will identify an appropriate course of action with regard to risk mitigation.

The report indicates that, during World War II (WWII), the site was located within the Metropolitan Borough of Hampstead, which sustained a very high bomb density. At the time of WWII, the site was occupied by two houses. These properties do not appear to have been directly affected by bombing and appear to be undamaged on available post war aerial photography. Additionally, no high explosive bombs are recorded on the site although an incendiary shower is mapped over the general area. It is considered likely that the properties would have remained occupied and subject to regular post-raid checks for signs of UXO and therefore a minimal risk of encountering unexploded ordnance has been identified for the site and no further action is recommended in this respect.

2.5 Geology

The British Geological Survey (BGS) map of the area (Sheet 256) indicates the site is directly underlain by the London Clay. According to the BGS memoir, the London Clay is homogenous, slightly calcareous silty clay to very silty clay, with some beds of clayey silt grading to silty fine-grained sand. An area of Head propensity is detailed on the map within 100 m to the east of the site. According to the BGS map, dated 2006, the Head propensity is based on the geotechnical properties of the London Clay and Head may occur close to the Claygate Member / London Clay boundary. Head propensity is shown on the BGS map as areas denoted as most likely to be covered by Quaternary Head Deposits as interpreted from digital slope analysis and confirmed by borehole data.

Additionally, water-bearing granular horizons have been found in the area, possibly associated with the former course of the River Tyburn flowing nearby or comprising localised Head Deposits.

GEA has previously carried out a ground investigation at No 28 Avenue Road, located to the southeast of the site. The investigation confirmed the expected ground conditions in that, beneath a moderate thickness of made ground, London Clay was encountered and proved to the full depth of the investigation of 8.00 m. The made ground generally comprised dark brown, very gravelly sand over slightly sandy to very sandy gravel, with fine to coarse gravel of concrete, brick, flint, glass, clinker, charcoal and rare metal, and was found to extend to depths of between 0.70 m and 1.00 m. The London Clay Formation comprised firm to stiff becoming very stiff with depth, fissured, brown with orange brown, dark brown and grey mottling, silty clay and extended to the maximum depth investigated, of 8.00 m.

A search of the BGS records has identified records of a deep borehole that was drilled roughly 550 m to the southwest of the site, which found the London Clay to extend to a depth of at least 80 m, and below which, essentially incompressible soils of the underlying Lambeth Group were encountered.

4 CIRIA C681 (2009) *Unexploded ordnance (UXO) A guide for the construction industry*

2.6 Hydrology and Hydrogeology

The London Clay Formation is classified as an Unproductive Strata (formerly known as a Non-Aquifer), referring to rock layers or drift deposits with low permeability and that have negligible significance for water supply or river base flow.

As the London Clay is likely to comprise predominantly clay soils, it cannot support groundwater flow over any significant distance, nor can it be considered to support a "water table" or continuous piezometric surface. Boreholes constructed within clays do fill with water, due to the often high water content of shallow clays draining into the standpipe or by the collection of surface water drainage, which is unable to drain through the clay; however, this is not reflective of the type of groundwater flow that would occur in a porous and permeable saturated stratum.

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

Groundwater was not encountered during the drilling in the previous GEA investigation.

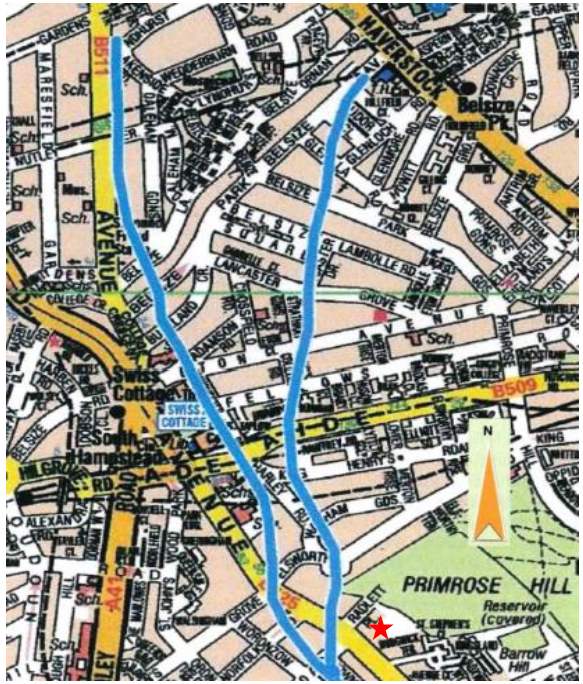
The nearest surface water feature is Regents Canal located 477 m to the southeast of the site.

The site is located within a Groundwater Source Protection Zone (SPZ) (Zone II – outer protection zone), classified as either 25% of the source area or a 400-day travel time, whichever is greater. The SPZ is likely to be associated with a public water supply from the Chalk Aquifer which is confined by the London Clay at a depth greater than 50 m. There is no hydraulic continuity between the London Clay and the Chalk aquifer at depth. The nearest water abstraction point is located 443 m to the east of the site.

The site is not listed within the London Borough of Camden report[5] as having suffered from surface water flooding in the 1975 flooding event. However, the report indicates that Avenue Road did suffer surface water flooding during the 2002 event. The site is shown on Figure 15 of the Arup report, and the EA surface water flood maps, as being in an area with a very low, low and medium risk from surface water flooding.

A site-specific flood risk assessment (FRA) has been completed by Infrastruct CS Limited (report ref 4890-AVEN-ICS-XX-RP-C-07.001, dated April 2022), which was passed on by the consulting engineers and confirms the above.

Figure 11 of the Arup report and reference to the Lost Rivers of London[6] indicates that the nearest lost river is a tributary of the River Tyburn, which formerly flowed south from its source in the Belsize Park area, crossing to the western side of Avenue Road near Radlett Place, about 15 m to the west of the site, but now flows through a culvert.



Extract from The Lost Rivers of London (2016), with the approximate location of the site highlighted by the red star and showing the location of the tributaries relative to the site.

5 London Borough of Camden (2003) *Floods in Camden, Report of the Floods Scrutiny Panel*

6 Barton, N, & Meyers, S (2016) *The Lost Rivers of London (revised and extended edition with colour maps).* Historical Publications Ltd.

The service plans obtained from Thames Water indicate that a combined sewer main runs along the centre of Avenue Road. It is known that many of the lost rivers have become part of London's sewer system, so it is considered likely that the River Tyburn and its tributary are now captured in the sewer system.

The existing garden is almost entirely covered by grass and as such, infiltration of rainwater is largely unimpeded in this area. However, the underlying clay will limit further infiltration, therefore resulting in a high proportion of runoff in this area. The front of the property is largely covered by tarmac, such that infiltration of rainwater is therefore generally restricted to surface water drains, and as such the majority of surface runoff currently drains into combined sewers in the road. As the development will only result in a marginal change to the present conditions, i.e., through a minimal loss of soft covered areas, there will not be a significant increase in runoff rate or volume into the existing sewer system, or that could have a potentially adverse impact on the surrounding area. There should not, therefore, be any requirement for any mitigation measures.

Mitigation measures are unlikely to be feasible in any case, due to little opportunity to reduce runoff rates from the site via attenuation before gradual release into the ground or rainwater harvesting. However, the FRA has suggested that temporarily retaining surface water flows before gradually releasing them into combined drains could be a suitable method of reducing the rate and amount of flow into the existing sewer system.

2.7 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.

2.7.1 Source

The desk study findings indicate that the site does not have a potentially contaminative history as it has been developed with houses and partially used as a furniture store for its entire developed history.

The buildings on site have been demolished and if asbestos was included in their construction, then fragments or fibres of asbestos, as well as heavy metals or polyaromatic hydrocarbons (PAHs) may have entered the shallow soils during demolition. As with any developed site, there is the potential for localised spillages and leakages, but this is not considered to represent a significant source of contamination.

No sources of soil gas have been identified on site or in the surrounding area.

2.7.2 Receptor

The occupants of the house will represent relatively high sensitivity receptors. Buried services are likely to come into contact with any contaminants present within the soils through which they pass, and site workers are likely to come into contact with any contaminants present during construction works.

Perched water may be present in the made ground or head deposits, particularly in the vicinity of existing foundations, although such pockets of water are likely to be localised and unlikely to form part of a general water table.

2.7.3 Pathway

Within the site, end users will be isolated from direct contact with any contaminants present within the made ground by the proposed house and surrounding hard surfacing, thus no potential contaminant exposure pathways will exist with respect to end users. Only in areas of proposed soft landscaping will end users potentially come into contact with contaminants.

There will be a potential for contaminants to move onto or off the site horizontally within the made ground, although these pathways are already in existence. A pathway for ground workers to come into contact with any contamination will exist during construction work and services will come into contact with any contamination within the soils in which they are laid.

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.

2.7.4 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. Furthermore, as there is no evidence of filled ground within the vicinity of the site and no landfill sites, there is not considered to be a significant potential for hazardous soil gas to be present on or migrating towards the site.

3.0 Screening

The Camden planning 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 Arup document and for the purposes of this report reference has been made to Appendices E1, E2 and E3 which include a series of questions within screening flowcharts for surface flow and flooding, subterranean (groundwater) flow and land stability. The flowchart questions and responses to these questions are tabulated below.

3.1.1 Subterranean (groundwater) Screening Assessment

Question	Response for 32-34 Avenue Road
1a. Is the site located directly above an aquifer?	No. The site is underlain by the London Clay which is designated as Unproductive Strata by the Environment Agency and cannot store and transmit water in sufficient quantities to support groundwater abstractions or watercourses.
1b. Will the proposed basement extend beneath the water table surface?	No. The London Clay and clay dominated Head Deposits, if present, cannot support groundwater flow and cannot therefore support a water table consistent with a permeable water bearing strata.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	*Yes. The site is located close to a former tributary of the River Tyburn. However, this tributary is no longer present at surface, having been culverted to form part of the local surface water sewer system.*
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report confirms that the site is not located within this catchment area
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	*Yes. The building and hard surfacing may cover a marginally larger proportion of the site, including areas which are currently garden. However, the low permeability of the underlying London Clay would result in a low recharge in any case and consequently there would be little or no effect on groundwater.*
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No. Given that the site is underlain by clay soils and is unlikely to be suitable for a soakaway or similar SUDS based system, the site drainage will therefore be directed to public sewer. Site drainage will therefore be designed to generally maintain the existing situation.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	No. There are no groundwater dependent ponds or spring lines present within 500 m of the site. The flow of the former Tyburn watercourse was perched on the London Clay.

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

Q2 The site is within 100 m of the former course of the culverted Tyburn stream.
Q4 The development will result in a change in the proportion of hard surface / paved areas.

3.1.2 Stability Screening Assessment

Question	Response for 32-34 Avenue Road
1. Does the existing site include slopes, natural or manmade, greater than 7°?	No, as indicated on the Slope Angle Map Fig 16 of the Arup report.
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	No. The site is not to be significantly re-profiled as part of the development.
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	No. As indicated on the Slope Angle Map Fig 16 of the Arup report.
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	No. As indicated on the Slope Angle Map Fig 16 of the Arup report.
5. Is the London Clay the shallowest strata at the site?	*Yes. As indicated on the geological map and Figures 3, 5 and 8 of the Arup report*
6. Will any trees be felled as part of the proposed development and / or are any works proposed within any tree protection zones where trees are to be retained?	*Yes. A number of trees are to be felled as part of the development, while a large plane tree in the western corner will be retained.*

Question	Response for 32-34 Avenue Road
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	*Yes. The area is prone to these effects as a result of the presence of shrinkable London Clay.*
8. Is the site within 100 m of a watercourse or potential spring line?	*Yes. The River Tyburn historically flowed past the west of the site. This watercourse is not present at the surface and has been culverted to form part of the local surface water sewer.*
9. Is the site within an area of previously worked ground?	No. The geological map of the area and Figures 3, 4 and 8 of the Arup report do not indicate any worked ground.
10a. Is the site within an aquifer?	No. The site is underlain by the London Clay which is designated as Unproductive Strata by the Environment Agency and cannot store and transmit usable amounts of water.
10b. Will the proposed basement extend beneath the water table such that dewatering may be required during construction?	No.
11. Is the site within 50 m of Hampstead Heath ponds?	No.
12. Is the site within 5 m of a highway or pedestrian right of way?	*Yes. Although the site fronts on to Avenue Road and is bounded by Radlett Place, the proposed basement is located over 5 m away from the public footway and roads.*
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No. Basements are present beneath each of the surrounding properties. As such, it is unlikely that the development will increase the foundation depths relative to the neighbouring properties to a relatively significant extent. In any case, a ground movement analysis has been completed as part of this investigation to predict the likely movements as a result of the excavation. This is reported in Part 3.0 of this report.
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	*Yes. A Thames Water sewer is present beneath Avenue Road with an exclusion zone extending onto the site. However, the proposed development is set back into the site such that it does not intersect the exclusion zone.* *An online search for London Underground Tunnels and railway tunnels did not indicate any in the proximity of the site. This is confirmed with reference to Figure 18 of the ARUP report.*

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

Q5 The London Clay is the shallowest strata beneath the site.
Q6 A number of trees are to be felled as part of the development, while a large deciduous tree in the western corner will be retained.
Q7 The site is in an area likely to be affected by seasonal shrink-swell.
Q8 The site is within 100 m of London's "lost river", the River Tyburn.
Q12 The site is located within 5 m of a public highway.
Q14 A Thames Water sewer is present beneath Avenue Road with an exclusion zone extending onto the site.

3.1.3 Surface Flow and Flooding Screening Assessment

Question	Response for 32-34 Avenue Road
1. Is the site within the catchment of the pond chains on Hampstead Heath?	No. Figure 14 of Arup report confirms that the site is not located within this catchment area.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No. Any additional surface water from the increase hardstanding area will be attenuated and discharged into the Thames Water sewers to ensure the surface water flow regime will be unchanged. The basement will mainly be beneath the footprint of the building and existing hardstanding areas, and the 1m distance between the roof of the basement and ground surface as recommended by section 3.2 of the CPG Basements 2021 does not apply across these areas. Where the basement extends outside of the footprint of the overlying building, sunken lightwells are proposed which will incorporate drainage.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	*Yes. The basement will cover a marginally larger proportion of the site, which is currently permeable (namely across the rear garden). However, SUDS attenuation prior to discharge into the sewers will reduce the impact to acceptable levels.*
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	No. The use of SUDS attenuation to control how water is stored from additional hardstanding areas will result in no changes to the profile of inflows entering the ground. The proposed attenuation size should be based upon peak surface water flows and discharge rates.

Question	Response for 32-34 Avenue Road
5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No. Although the amount of hardstanding will marginally increase, the presence of the impermeable London Clay beneath the site mean it is very unlikely that this will result in any changes to the quality of surface water being received by adjacent properties or downstream watercourses as the surface water drainage regime will be unchanged and the land uses will remain the same.
6. Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment or is it at risk of flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	No. The Camden Flood Risk Management Strategy dated 2013, together with Figures 3v, 4e, 5a and 5b of the SFRA dated 2014, and Environment Agency online flood maps show that the site has a very low flooding risk from sewers, reservoirs (and other artificial sources), groundwater and fluvial/tidal watercourses. The Environment Agency online flood maps and Figure 3v of the SFRA show that the site has a very low, low and medium flooding risk from surface water. The flood depth is shown to be <0.3m during the low risk event. It is possible that the basement will be constructed within pockets of perched water and the recommendations outlined in the BIA with regards to water-proofing and tanking of the basement will reduce the risk to acceptable levels. In accordance with paragraph 5.11 of the CPG, a positive pumped device will be installed in the basement in order to further protect the site from sewer flooding. The site is located within the Critical Drainage Area number GROUP3-005, but not within a Local Flood Risk Zone as identified in the Updated SFRA Figure 6/Rev 2.

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

Q3 The development will result in a change in the proportion of hard surfaced / paved areas.

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
London Clay is the shallowest stratum at the site.	The London Clay is prone to seasonal shrink-swell (subsidence and heave).
Seasonal shrink-swell can result in foundation movements.	Multiple potential impacts depending on the specific setting of the basement development. For example, the implications of a deepened basement/foundation system on neighbouring properties should be considered.
The site is within 100 m of a former watercourse.	The basement may alter the groundwater flow regime to former watercourse.
A number of trees will be felled as part of the development, while a large deciduous tree in the western corner will be retained.	Whilst shrinkable soils are present at shallow depth, there are no critical slope angles that are dependent on the presence of the existing trees to aid long term stability.
The site is within 5 m of Avenue Road, the adjoining footpath and Radlett Place.	Should the design of retaining walls and foundations not take into account the presence of nearby infrastructure, it may lead to the structural damage of footways, highways and associated buried services.
A Thames Water sewer is present beneath Avenue Road with an exclusion zone extending onto the site.	The proposed development is set back into the site such that it does not cross into the exclusion zone.
Marginal increase in the proportion of hard-standing and paved areas.	Less soft covering for surface water infiltration. However, the London Clay is of relatively low permeability so will not make much difference.

These potential impacts have been investigated through the site investigation, as detailed in Section 13.0.

4.2 Exploratory Work

In order to meet the objectives described in Section 1.2, a single borehole was advanced to a depth of 20.00 m using a cable percussion rig. Additionally, four boreholes were advanced to depths of between 1.80 m and 3.10 m using window sampling equipment to provide coverage across the rest of the site. During boring, disturbed and undisturbed samples were obtained from the boreholes for subsequent laboratory examination and testing. Standard Penetration Tests (SPTs) were carried out at regular intervals to provide additional quantitative data on the strength of soils encountered.

A single groundwater monitoring standpipe has been installed in the cable percussion borehole to a depth of 5.00 m to facilitate groundwater monitoring, which has been carried out on two occasions to date.

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 records are appended, together with a site plan indicating the exploratory positions. The Ordnance Datum (OD) levels on the borehole records have been interpolated from spot heights shown on a topographical survey drawing provided by the consulting engineers (ref ([0909])0101_P05, dated February 2021).

4.3 Sampling Strategy

The boreholes were positioned on site by a geotechnical engineer from GEA in accessible areas, with due regard to the proposed development and the locations of known buried services. Three samples of the made ground have 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. The samples were also 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 generally encountered the expected ground conditions, in that beneath a surface covering of topsoil or tarmac, and a variable thickness of made ground, London Clay extended to the full depth of the investigation, of 20.00 m (21.05 m OD).

5.1 Made Ground

In Borehole Nos 1 and 5, which were advanced through the driveway, the made ground comprised an initial layer of brick and concrete rubble to a depth of 0.60 m (40.40 m OD and 40.45 m OD). In Borehole Nos 2 to 4, which were advanced through the rear garden, an initial horizon of topsoil was present to depths of between 0.10 m and 0.20 m.

Beneath these initial horizons, the made ground comprised dark brown sandy gravelly clay with fragments of brick, concrete, tarmac and clinker, roots and rootlets and generally extended to depths of between 0.90 m (40.32 m OD) and 1.00 m (40.00 m OD), and to a depth of 2.60 m (38.45 m OD) in Borehole No 1.

Apart from the presence of fragments of extraneous material noted above, no visual or olfactory evidence of contamination was observed during the fieldwork. Three samples of the made ground have however been analysed for a range of contaminants as a precautionary measure and the results are detailed within Section 4.4.

5.2 London Clay

The London Clay comprised firm becoming stiff fissured brown mottled grey becoming brownish grey silty clay with sandy lenses, selenite crystals and mica to the full depth of the investigation, of 20.00 m (21.05 m OD).

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

5.3 Groundwater

Groundwater was only encountered in Borehole No 3 at a depth of 0.80 m (40.42 m OD), from within the made ground. This shallow inflow is thought to be associated with a high

proportion of surface water infiltrating into the shallow soils through the garden, rather than being representative of a shallow ground water table.

A standpipe was installed in Borehole No 1, to enable future groundwater monitoring, and the findings of two groundwater monitoring visits are presented in the table below.

Borehole No	Date	Depth to water (m) [Level (m OD)]
1	05/04/2022	2.05 [38.95]
	21/04/2022	2.07 [38.97]

5.4 Soil Contamination

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

Determinant	BH1 0.50 m	BH2 0.50 m	BH3 0.40 m
pH	7.9	7.9	7.8
Arsenic	14	20	19
Chromium	48	35	36
Lead	130	**720**	**420**
Mercury	0.8	0.6	0.9
Copper	27	57	39
Nickel	36	29	24
Total PAH	1.64	36.8	**95.8**
Sulphide	1.4	4.4	5.8
Benzo(b)fluoranthene	0.1	**3.5**	**9.4**
Benzo(a)pyrene	0.22	3.3	**7.2**
Dibenz(a h)anthracene	<0.05	**0.45**	**1.1**
TPH	38	100	150
Total Organic Carbon %	0.5	1.8	1.1

Note: Figures in bold indicate values in excess of the generic guideline screening values.

In addition, all three samples of the made ground have been screened for the presence of asbestos and the results are shown in the table below.

BH ref	Sample depth (m)	Asbestos detected	Quantification; total asbestos in sample (%)
BH1	0.50	None	-
BH2	0.50	**Chrysotile – Loose fibres**	< 0.001
BH3	0.40	None	-

5.4.1 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[7] Soil Guideline Values where available, the Suitable 4 Use Values[8] (S4UL) produced by LQM/CIEH calculated using the CLEA UK Version 1.07[9] software, or the DEFRA Category 4 Screening values[10], assuming a residential end use with plant uptake. The key generic assumptions for this end use are as follows:

- that groundwater will not be a critical risk receptor;

7 *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.
8 *The LQM/CIEH S4ULs for Human Health Risk Assessment* S4UL3065 November 2014
9 Contaminated Land Exposure Assessment (CL|EA) Software Version 1.071 Environment Agency 2015
10 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

- that the critical receptor for human health will be young female children aged less than six years old;
- that the exposure duration will be six years;
- that the critical exposure pathways will be direct soil and indoor dust ingestion, consumption of home grown produce, consumption of soil adhering to home grown produce, skin contact with soils and dust, and inhalation of dust and vapours; and
- that the building type equates to a terraced house.

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 table below indicates contaminants of concern and the locations of the samples where the elevated concentrations were measured.

Contaminant of Concern	Maximum concentration recorded (mg/kg)	Generic Risk-Based Screening Value	Location of elevated concentrations
Lead	720	200	BH2 & BH3
Total PAH	95.8	62.9	BH3
Benzo(b)fluoranthene	9.4	3.3	BH2 & BH3
Benzo(a)pyrene	7.2	4.4	BH3
Dibenz(ah) anthracene	1.1	0.28	BH2 & BH3

Additionally, fibres of chrysotile asbestos have been identified in a sample of made ground from Borehole No 2 at a concentration of < 0.001 %.

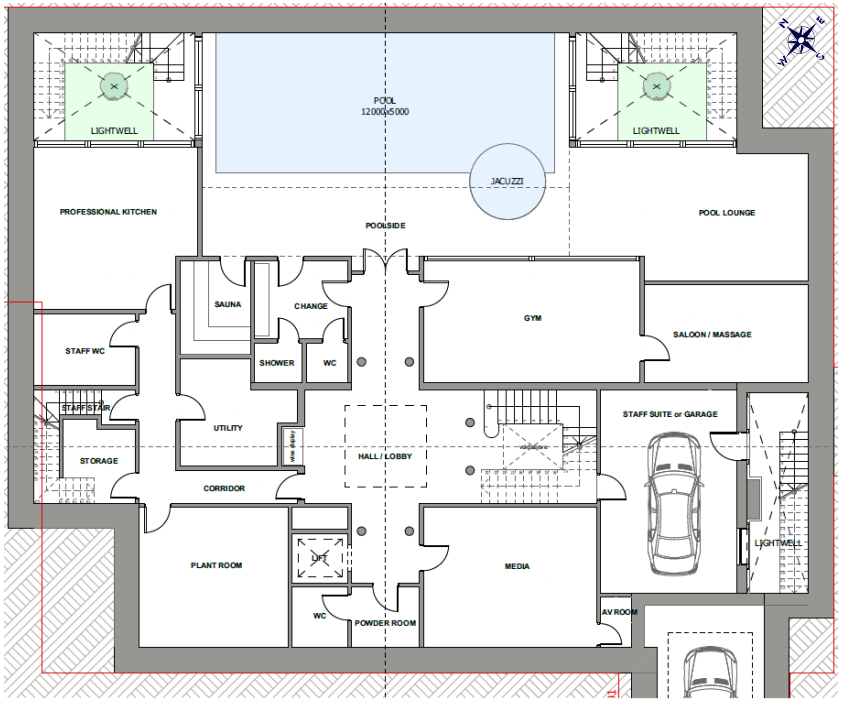
The significance of these results is considered further in Part 2 of the report.

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

It is understood that it is proposed to demolish the existing detached building and subsequently construct a new three-storey house over a larger footprint. The new house will include a single level basement to a depth of roughly 4.00 m below ground level (37.00 m OD) and a deeper swimming pool excavation to a depth of roughly 6.00 m below ground level (35.00 m OD). Typical dead loads for the development are understood to equate to a bearing pressure of approximately 45 kN/m^2 , with the live loads equating to an additional 7kN/m^2.



Proposed layout shown from basement level

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 for its entire developed history, and on the basis of the fieldwork, the ground conditions at this site can be characterised as follows:

- beneath a surface covering of topsoil or tarmac, and a variable thickness of made ground, London Clay extends to the full depth of the investigation, of 20.00 m (21.05 m OD);
- the made ground beneath the driveway comprises an initial layer of brick and concrete rubble to a depth of 0.60 m (40.40 m OD and 40.45 m OD). Beneath the rear garden an initial horizon of topsoil extends to depths of between 0.10 m and 0.20 m;
- beneath these initial horizons, the made ground comprises dark brown sandy gravelly clay with fragments of brick, concrete, tarmac and clinker, roots and rootlets to depths of between 0.90 m (40.32 m OD) and 2.60 m (38.45 m OD);
- the London Clay consists of firm becoming stiff fissured brown mottled grey becoming brownish grey silty clay with sandy lenses, selenite crystals and mica and extends to the full depth of the investigation of 20.00 m (21.05 m OD);
- pockets of perched groundwater are present within the made ground at measured depths of between 0.80 m (40.42 m OD) and 2.05 m (39.00 m OD); and
- contamination testing has revealed the presence of lead, polyaromatic hydrocarbons and asbestos contamination within the made ground.

8.0 Advice & Recommendations

Excavations for the proposed basement structure will require temporary support to maintain stability and to prevent any excessive ground movements.

Formation level for the basement will be within the London Clay at depths of about 4.00 m (37.00 m OD) and 6.00 m (35.00 m OD).

A bored piled wall is understood to be the preferred foundation and a contiguous piled wall should be suitable to support the excavation in the temporary and permanent conditions. Perched water may be encountered towards the base of the made ground, but significant groundwater inflows during the excavation are not anticipated.

The proposed use of piles extending into the London Clay to support the new building will also be suitable.

8.1 Basement Construction

Formation level for the basement is likely to be within the stiff clay of the London Clay at a depth of about 4.00 m, whilst a deeper excavation for the proposed swimming pool will also terminate in the London Clay at a depth of about 6.00 m.

Inflows of perched water should be anticipated from within the made ground. However, any such inflows are likely to be relatively minor in nature and should be adequately dealt with through sump pumping, although it would be prudent for the chosen contractor to have a contingency plan in place to deal with more significant or prolonged inflows as a precautionary measure.

The design of basement support in the temporary and permanent conditions needs to take account of the need to maintain the stability of the excavation and surrounding structures, and to protect against potential shallow groundwater inflows.

It is understood that it is likely that a contiguous bored pile wall is to be adopted to support the majority of the proposed basement excavations, which will have the advantage of being incorporated into the permanent works and being able to provide support for structural loads. Localised grouting and / or sump pumping is likely to be necessary where perched water inflows are encountered.

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. An assessment of the movements has been carried out and is discussed in Part 3.

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^3)	Effective Cohesion (c' – kN/m^2)	Effective Friction Angle (ϕ' – degrees)
Made ground	1700	Zero	27
London Clay	1950	Zero	23

Significant groundwater inflows are not anticipated within the basement, although monitoring of the standpipes should be continued to confirm this view, along with trial excavations.

Provided that a fully effective drainage system can be ensured in order to prevent the build-up of groundwater behind the retaining walls, it should be possible to design the basement on the basis that water will not collect behind the walls. If an effective drainage system cannot be ensured, then a water level of two-thirds of the basement depth, subject to a minimum depth of 1.0 m, should be assumed. The advice in BS8102:2009[11] should be followed in this respect and with regard to the provision of suitable waterproofing.

8.1.2 Basement Heave

The 4.00 m to 6.00 m deep excavation of the basement will result in a differential net unloading of between around 75 kN/m^2 to 115 kN/m^2, which will result in differential heave of the underlying London Clay. This will comprise immediate elastic movement, which will account for 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, however the ground movements associated with

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

the proposed basement excavation and construction have been considered in more detail in Part 3 of this report.

8.2 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. 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 / m²
Ultimate Skin Friction		
Basement Excavation	GL to 4.00	Ignore (Basement excavation)
London Clay	4.00 to 20.00	Increasing linearly from 35 to 87.5
Ultimate End Bearing		
London Clay	12.00 to 20.00	Increasing linearly from 1080 to 1575

In the absence of pile tests, guidance from the London District Surveyors Association (LDSA)[12] 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.

Pile diameter mm	Depth Below Ground Level	Pile Length m	Safe Working Load kN
450	12	7.9	260
	15	10.9	385
600	12	7.9	405
	15	10.9	545

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 potential groundwater inflows and instability within the made ground and claystones present within the London Clay.

In the design of piled foundations, the effect of potential future shrinkage and swelling of the clay should be taken into account.

8.3 Spread Foundations

Spread foundations may represent a suitable alternative to piled foundations to support the proposed development. New strip or pad foundations bearing beneath basement formation level in the stiff London Clay, may be designed to apply a net allowable bearing pressure of 120 kN/m². This value incorporates an adequate factor of safety against bearing capacity failure and should ensure that settlement remains within normal tolerable limits.

The depth of the basement excavation is expected to be such that foundations will be placed below the depth of actual or potential desiccation, but this should be checked once the proposals have been finalised.

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 existing / proposed trees.

The requirement for compressible material alongside foundations should be determined by reference to the NHBC guidelines.

12 LDSA (2017) *Guidance notes for the design of straight shafted bored piles in London Clay*. LDSA

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 London Clay 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, particularly within the vicinity of existing foundations, 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 Floor Slab

Following excavation of the basement, the floor slab will need to be suspended over a void or a layer of compressible material to accommodate the anticipated heave and any potential uplift forces from groundwater pressures, unless the slab can be suitably reinforced to cope with these movements.

8.6 Effect of Sulphates

Chemical analyses 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-1s would be appropriate for the site. This assumes a static water condition at the site. The guidelines contained in the digest should be followed in the design of foundation concrete.

8.7 Contamination Risk Assessment

The desk study findings indicate that the site does not have a potentially contaminative history as it has only been developed with houses for its entire developed history. Furthermore, no there are no potential offsite sources of contamination that are considered to pose a risk to the site.

The results of the contamination testing have identified elevated concentrations of lead within two samples of made ground taken from the rear garden and Total PAH within the same two samples. Speciation of the hydrocarbons within the elevated samples found the concentrations of dibenz(a,h)anthracene, benzo(b)fluoranthene and benzo(a)pyrene to all exceed the screening value for a residential end use with plant uptake. Additionally, fibres of chrysotile asbestos have been identified in a sample of made ground from Borehole No 2 at a concentration of < 0.001 %.

The source of the lead contamination is unknown. However, the made ground was noted as containing variable amounts of extraneous material, including clinker, and it is therefore likely that a fragment of such material was present within the samples tested, accounting for the elevated concentrations. Information on Urban Soil Chemistry provided by the BGS also indicates that background concentrations for lead in the vicinity of the site are between 2419.20 mg/kg and 2587.50 mg/kg, such that a significant proportion of the measured concentrations could be the result of residual airborne sources.

Lead compounds are relatively immobile, unlikely to be in a soluble form and are considered to be non-volatile or of a low volatility. The contamination does not therefore present a significant vapour risk or a significant risk of leaching and migration within any perched groundwater within the made ground. As the site is underlain by the London Clay, which cannot support a continuous groundwater table, a risk to groundwater is also not identified.

Statistical analysis of the specific PAH species identified in the sample has suggested that it is coal tar / tarmac based, i.e., originating from partially burnt hydrocarbons. Fragments of tarmac were noted within the made ground, so it is likely that this has resulted in the elevated concentrations. As such, the contamination is not considered likely to be soluble and should not, therefore pose a risk of vapours or to adjacent sites or groundwater.

As asbestos is insoluble and was found to be present as loose fibres within one sample, it is not considered to pose any meaningful risk to groundwater, the development or to neighbouring sites through migration in the ground. It is however potentially hazardous to

human health as airborne fibres and could thus pose a risk through inhalation during construction works and to end users through direct contact pathways. However, the asbestos was found to be present at a concentration of <0.001% and as a result there is a negligible risk of fibres dusting into the air with respect to end users[13]. However, it would be prudent to provide suitable protection to site workers during the groundworks.

All work being carried out within asbestos containing soils should be carried out in accordance with the Control of Asbestos Regulations, including toolbox talks for all workers and having the correct PPE in place. During the excavation and movement of any soils, an asbestos specialist should be appointed and will need to hand pick and suitably bag any asbestos containing material and also monitor dust levels using air monitoring equipment.

Any asbestos containing soil will need to be covered, either by a cover system, or by hardstanding in order to protect end users from exposure to fibres dusting from the shallow soil during activities on site.

The local authority and / or HSE should be consulted prior to commencement of any excavations. The local authority will also be able to provide information on the nearest suitable waste disposal facility licensed to accept asbestos. The measured concentration of <0.001% is sufficiently low to allow the affected soil to be classified as non-hazardous waste although the landfill may require further testing to confirm this view.

A basement is proposed beneath the part of the site, such that all of the made ground in this area will be removed and will therefore not represent an ongoing source of contamination. The made ground will remain in the area surrounding the basement.

8.7.1 End Users

End users will be effectively isolated from any potential contamination within the extent of the building and surrounding hardstanding, such that, only in proposed garden areas could end users conceivably come into direct contact with the contaminated soils, although this pathway is already in existence.

At this stage it is recommended that a cover thickness of imported subsoil and topsoil of 600 mm in thickness should be specified for any areas of new landscaping in accordance with recommendations from BRE[14]. It is likely to be possible to reduce the final thickness of cover required, but this will need to be determined once final levels have been established and the concentrations of potential contaminants within the imported material and in the soils at formation level are known.

8.7.2 Protection of Site Workers

Site workers should be made aware of the potential contamination and 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[15] and CIRIA[16] and the requirements of the Local Authority Environmental Health Officer.

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

8.7.3 Services

Consideration may need to be given to the protection of buried plastic services laid within the made ground. Details of the proposed protection measures for buried plastic services will in any case need to be approved by the EHO and the relevant service authority prior to the adoption of any scheme. It is possible that barrier pipe will be required, or additional testing will need to be carried out.

8.8 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[17] states that landfill WAC analysis, specifically leaching test results, must not be used for waste classification purposes.

13 *The Release of Dispersed Asbestos Fibres from Soils, Addison et. al., 1988 http://www.iom-world.org/pubs/IOM_TM8814.pdf*
14 BRE (2004) *Cover systems for land regeneration. Thickness of cover systems for contaminated land.* BRE pub 465
15 HSE (1992) HS(G)66 *Protection of workers and the general public during the development of contaminated land* HMSO
16 CIRIA (1996) *A guide for safe working on contaminated sites.* Report 132, Construction Industry. Research and Information Association
17 Environment Agency 2015. ***Guidance on the classification and assessment of waste.*** Technical Guidance WM3 First Edition

Any spoil arising from excavations or landscaping works, which is not to be re-used in accordance with the CL:AIRE[18] 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^3) or at the lower rate of £3.15 per tonne (roughly £5.85 per m^3). 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[19] 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.

18 CL:AIRE March 2011. *The Definition of Waste: Development Industry Code of Practice* Version 2

19 Environment Agency 23 Oct 2007 *Regulatory Position Statement Treating non-hazardous waste for landfill - Enforcing the new requirement*

Part 3: Ground Movement Analysis

This section of the report comprises an analysis of the ground movements arising from the proposed basement and foundation scheme discussed in Part 2 and the information obtained from the investigation, presented in Part 1 of the report.

9.0 Introduction

The sides of an excavation will move to some extent regardless of how they are supported. The movement will typically be both horizontal and vertical and will be influenced by the engineering properties of the ground, groundwater level and flow, the efficiency of the various support systems employed and the efficiency or stiffness of any support structures used.

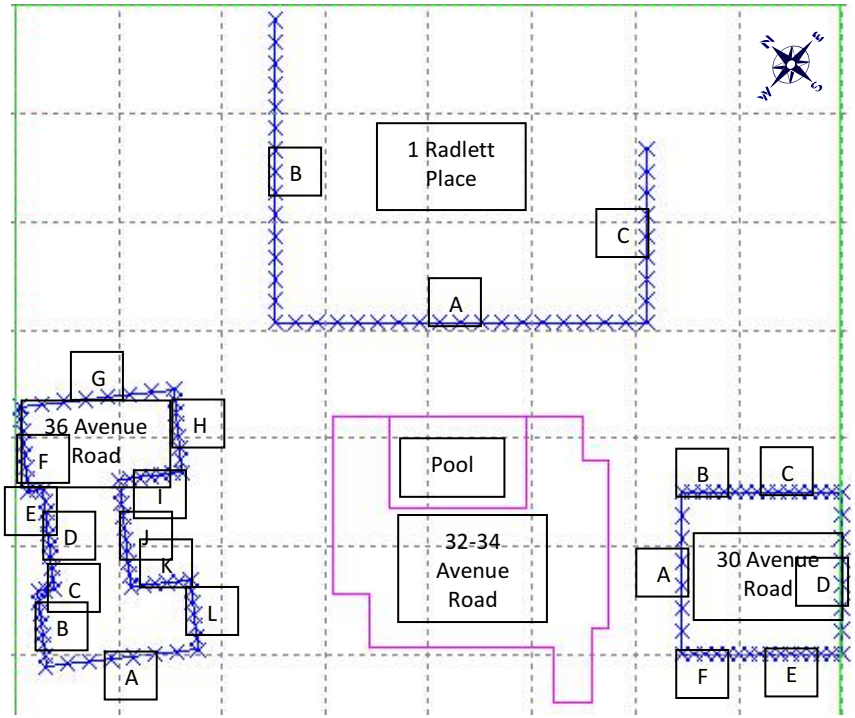
An analysis has been carried out of the likely movements arising from the proposed excavation and the results of this analysis have been used to predict the effect of these movements on surrounding structures.

9.1 Basis of Ground Movement Assessment

Sensitive structures relevant to this assessment include Nos 30 and 36 Avenue Road to the southeast and northwest respectively, and No 1 Radlett Place, to the northeast. Basements or lower ground floors are present beneath both No 36 and No 1, while a narrow partial lower ground floor is also present beneath No 30, on the side closest to the site.

Formation levels for each of the sensitive structures have been taken from planning information of each development provided by the consulting engineers. They are 38.40 m OD, 38.00 m OD and 32.60 m OD for Nos 30 and 36 Avenue Road and No 1 Radlett Place respectively.

A plan outlining the nearby sensitive structures is shown opposite.



9.2 Construction Sequence

Formation level for the proposed basement is at a level of roughly 37.00 m OD, while the pool excavation will extend to a level of roughly 35.00 m OD.

It is understood that the preferred method of retaining wall construction is through the installation of a contiguous piled wall.

In general, the sequence of works for excavation and construction, will comprise the following stages:

1. Site set up including removal of below ground obstructions and installation of monitoring points;
2. demolition of the existing building on site and installation of piling mat;
3. installation of contiguous bored pile retaining wall and load bearing piles;
4. excavation of first metre and installation of steel waling beams and horizontal props;
5. continued excavation down to formation level;
6. under slab heave protection layer and waterproof tanking to be installed;
7. suspended reinforced concrete lower ground floor slab to be cast (including internal ground beams and swimming pool structure);
8. waterproof tanking layer to be installed on the perimeter piled wall;
9. reinforced concrete perimeter lining walls to be constructed.
10. casting of reinforced concrete basement floor slab and construction of reinforced concrete columns;
11. construction up to ground floor level and casting of ground floor slab, with slab to laterally prop the basement walls in permanent condition;
12. removal of props; and
13. construction of house.

9.2.1 Temporary Support to Piled Walls

Following the installation of the bored pile wall and capping beams, temporary props will be installed, and the basement excavation will proceed. The detail of section sizes and spacings will be finalised by the contractor and the temporary works designer. It is anticipated that the general philosophy adopted will be for diagonal braces to be used across the corners or returns of the basement walls, whilst props will be positioned at regular intervals along the long walls of the basement. Where horizontal restraint cannot be provided by other parts of the piled wall, the prop forces will be provided by so-called 'flying shores' where the reaction to horizontal forces is provided by pile caps, gravity blocks or basement thickenings in the centre of the excavation.

It is anticipated that steel temporary props will be used with strut forces spread along the wall by steel waling beams fixed to the piles. Although the detail of the propping is to be finalised there is the option to use hydraulic 'active' props where the propping force is applied prior to excavation in order to minimise movement at critical locations. This analysis is based on the propping being applied to the capping beam or pile head such that the wall may be considered to be of high stiffness. If that detail is changed, this analysis will need to be reviewed to ensure that the movements are appropriate and that the building damage assessment remains valid.

9.2.2 Permanent Works

When the final excavation depths have been reached, the permanent works will be formed. The basement is understood to comprise reinforced concrete walls with a drained cavity lining inside of the bored pile wall. Reinforced concrete will be used for floor slabs while reinforced concrete piles extending into the clay will support the new structure.

It has been assumed that the floor slabs will be constructed basement first followed by ground floor and then progressively up to roof height.

10.0 Ground Movements

An assessment of ground movements within and surrounding the excavation has been undertaken using the P-Disp and X-Disp computer programs licensed from the OASYS suite of geotechnical modelling software from Arup. These programs are commonly used within the ground engineering industry and are considered to be appropriate tools for this analysis.

The X-Disp and P-Disp programs have been used to predict ground movements likely to arise from the excavation and construction of the proposed basement. This includes the heave / settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement). Both the P-Disp and X-Disp programs are commonly used within the ground engineering industry and are considered to be appropriate tools for the purpose of this analysis.

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction approximately parallel with the orientation east-west, whilst the y-direction is approximately parallel with the orientation of north-south. Vertical movement is in the z-direction.

The basement structure has been modelled as a polygon with dimensions of 28 m by 23 m, which will be formed through the construction of a contiguous bored pile wall. It should be noted that the proposed basement footprint contains a number of re-entrant corners, which, due to limitations within the software, will cause a doubling up of movements that creates an issue for any analysis, as the opposite is likely to be the case in reality, with an overall reduction in ground movements more likely due to the increased stiffness of the structure at these points. Where possible, the shape of the proposed basement has been simplified to remove these features to mitigate these effects and provide a more realistic model that can be used in the subsequent damage assessment.

It is assumed that suitable propping will be provided during the construction of the basement and in the permanent condition, such that the walls can be considered to be stiff for the purpose of the ground movement modelling.

The full outputs of all the analyses can be provided on request but samples of the output movement contour plots are included within the appendix.

10.1 Ground Movements – Surrounding the Basement

10.1.1 Model Used

For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are the default values within CIRIA report C760[20], which were derived from a number of historic case studies.

Installation of piled retaining walls:

The curve within the X-Disp programme for a contiguous wall has been adopted to predict both the vertical and horizontal movements resulting from the contiguous wall installation for this site.

For the purpose of the analysis, a pile length of 10 m has been conservatively assumed for the calculation of installation movements, giving a minimum embedment of 4.0 m in the area of the pool excavation, which is considered reasonable for a propped wall such as this.

Excavation Phase:

As it is assumed that the piles will be embedded into the clay and adequately propped at the head, the ground movement curves for 'excavations in front of a high stiffness wall' have been adopted to provide an estimate of the likely movements from the subsequent excavations.

For the XDisp analysis, the entire excavation has been modelled down to the deepest formation level of the development, at a depth of 6.00 m (35.00 m OD) to simplify the model and to provide a conservative assessment of the movements. In reality, the majority of the excavation will only extend to a depth of 4.00 m (37.00 m OD), with only the small pool area to the rear of the site extending to 6.00 m.

10.1.2 Results

The movements predicted by X-Disp are summarised in the table below; the results are presented below and in subsequent tables to the degree of accuracy required to allow predicted variations in ground movements around the structure to be illustrated but may not reflect the anticipated accuracy of the predictions

20 Gaba, A, Hardy, S, Powrie, W, Doughty, L and Selemetas, D (2017) *Embedded retaining walls – guidance for economic design* CIRIA Report C760

Phase of Works	Wall Movement (mm)	
	Vertical Settlement	Horizontal Movement
Installation of contiguous bored pile wall	4.0	5.0
Combined Installation and Excavation Movements	8.0	14.0

The analysis has indicated that the maximum vertical settlement and horizontal movements that will result from wall installation are between 4.0 and 5.0 mm, with the movements arising from the combined wall installation and excavation phases increasing to between 7 mm and 8 mm of vertical settlement and between 13 mm and 14 mm of horizontal movement.

The movements set out in the table and discussed above are the maximum movements and the analysis has indicated that they occur immediately or just outside the line of the retaining walls, and also account for the likely overprediction of movements within re-entrant corners included within the model.

10.2 Ground Movements – Resulting from Excavation

10.2.1 Model Used

Unloading of the London Clay will take place as a result of the excavation of the proposed basements and the reduction in vertical stress will cause heave to take place. Undrained soil parameters have been used to estimate the potential short-term movements, which include the "immediate" or elastic movements as a result of the basement excavation. Drained parameters have been used to provide an estimate of the total long-term movement.

The elastic analysis requires values of soil stiffness at various levels to calculate displacements. Values of stiffness for the soils at this site are readily available from published data[21] and a well-established method has been used to provide estimated values.

For the purpose of this analysis, conservative relationships of E_u = 500 C_u and E' = 300 C_u have been used to obtain values of Young's modulus for the cohesive soils.

The 4.00 m to 6.00 m deep excavation of the basement will result in a differential net unloading of between around 75 kN/m^2 to 115 kN/m^2, which will result in differential heave of the underlying London Clay.

The soil parameters used in this analysis and tabulated below have been primarily derived from the onsite investigation but supplemented with the data from the nearby GEA investigation.

A rigid boundary for the analysis has been set at the base of the London Clay at a depth of 54 m below ground level (-13 m OD), with an increase in cohesion of 7.5 kN/m^2 per m increase in depth adopted to provide a conservative estimate of the likely strength profile below the depth of the investigation.

Stratum	Depth Range (m) (m OS)	Eu (MPa)	E'(MPa)
Made Ground	GL to 1.0 (41.0 to 40.0)	10.0	6.0
London Clay	1.0 to 20.0* (40.0 to 21.0)	25.0 to 90.0*	15.0 to 54.0*
	20.0 to 54.0 21.0 to -13.0)	90.0 to 217.5	54.0 to 130.5

** Maximum depth of investigation.*

10.2.2 Results

The predicted movements are summarised in the table below; the results are presented below and in subsequent tables to the degree of accuracy required to allow predicted variations in ground movements around the structure(s) to be illustrated, but may not reflect the anticipated accuracy of the predictions. In the table below, heave movements are shown as negative.

21 Burland JB, Standing, JR, and Jardine, FM (2001) *Building response to tunnelling, case studies from construction of the Jubilee Line JExtension.* CIRIA Special Publication 200

Location	Short-term Movement		Total Movement
	Basement Excavation	Additional Pool Excavation	
Centre of proposed basement	-17.0 to -18.0	-19.0 to -20.0	-38.0 to -39.0
Edge of proposed basement	-6.0 to -12.0	-7.0 to -12.0	-13.0 to -21.0

The P-Disp analysis indicates that, by the time the basement construction is complete, up to 44.0 mm of heave is likely to have taken place beneath the area of the basement. Given that no load is to be applied at formation level, instead taken down to depth through the piles, there will be limited force counteracting the heave of the clay, hence the relative high uplift forces.

If a compressible material is used beneath the slab, it will need to be designed to be able to resist the potential uplift forces generated by the ground movements. In this respect, potential heave pressures are typically taken to equate to around 40% of the total unloading pressure.

11.0 Damage Assessment

In addition to the above assessment of the likely movements that will result from the proposed development, any neighbouring buildings within the zone of influence of the excavations are considered to be sensitive structures, requiring Building Damage Assessments, on the basis of the classification given in Table 6.4 of CIRIA report C760[22].

The sensitive structures outlined previously have been modelled as displacement lines in the analysis along which the damage assessment has been undertaken.

11.1 Damage to Neighbouring Structures

The ground movements resulting from the piling and basement excavation phases have been calculated using X-Disp modelling software to carry out an assessment of the likely damage to adjacent properties and the results are discussed below.

The building damage reports for sensitive structures highlighted above are included in the appendix and indicate that predominantly the damage to the adjoining and nearby structures due to basement construction are between damage categories 'Negligible (0)', with the exception of four sensitive structures predicted as 'Very Slight (1)'. A summary of the structures indicated as affected is included below, and the structures suffering damage exceeding category 'Negligible (0)' are highlighted in bold in the table below.

Structure	Elevation	Max tensile strain %	Category*
No 36 Avenue Road	Wall A	0.049	Negligible (0)
	Wall G	0.026	Negligible (0)
	Wall H	0.002	Negligible (0)
	Wall I	0.043	Negligible (0)
	Wall J	0.001	Negligible (0)
	Wall K	0.045	Negligible (0)
	Wall L	0.001	Negligible (0)
No 1 Radlett Place	Wall A	0.001	Negligible (0)
	Wall B	0.003	Negligible (0)
	Wall C	0.007	Negligible (0)
No 30 Avenue Road	Wall A	0.001	Negligible (0)
	Wall B	0.061	**Very Slight (1)**
	Wall C	0.052	**Very Slight (1)**
	Wall D	0.001	Negligible (0)
	Wall E	0.051	**Very Slight (1)**
	Wall F	0.061	**Very Slight (1)**

*From Table 6.4 of C760: Classification of visible damage to walls.

22 Gaba, A, Hardy, S, Powrie, W, Doughty, L and Selemetas, D (2017) *Embedded retaining walls – guidance for economic design* CIRIA Report C760

The results discussed above are based on individual building lines, or walls, that in some instances, have been further divided up within the analysis into a series of segments that are assumed to be able to move independently of one another, with the most critical segment determining the result for the entire wall. In reality, this is unlikely to be the case as the walls will behave as single stiff elements that are also joined continuously with the rest of the structure.

The results therefore provide a conservative estimate of the behaviour of each of the sensitive structures and overestimate the degree of damage, although they provide a useful indication of the most critical structures within the adjoining properties that may require further assessment, as detailed below.

11.2 Monitoring of Ground Movements

The predictions of ground movement based on the ground movement analysis should be checked by monitoring of the adjacent properties and structures. The structures to be monitored during the construction stages should include the existing property and the neighbouring structure assessed above. Condition surveys of the above existing structures should be carried out before and after the proposed works.

The precise monitoring strategy will be developed at a later stage, and it will be subject to discussions and agreements with the owners of the adjacent properties and structures. Contingency measures will be implemented if movements of the adjacent structures exceed predefined trigger levels. Both contingency measures and trigger levels will need to be developed within a future monitoring specification for the works.

12.0 GMA Conclusions

The analysis has concluded that the predicted damage to the neighbouring properties from the construction of the proposed basements would be 'Negligible' to 'Very Slight'.

On this basis, the damage that has been predicted to occur as a result of the construction the proposed basement falls within the limits acceptable to the London Borough of Camden assuming that the careful control is taken during construction of the proposed excavations, and monitoring will be required to ensure that no excessive movements occur that would lead to damage in excess of these limits.

The separate phases of work, including piling and subsequent excavation of the proposed basement, will in practice be separated by a number of weeks. This will provide an opportunity for the ground movements during and immediately after installation of the retaining walls to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the predicted wall movements to be reassessed prior to the main excavation taking place so that propping arrangements can be adjusted if required.

Part 4: 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, site investigation and ground movement assessment.

13.0 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.

13.1 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	Consequence
London Clay is the shallowest stratum at the site.	The London Clay is prone to seasonal shrink-swell (subsidence and heave).
Seasonal shrink-swell can result in foundation movements.	Multiple potential impacts depending on the specific setting of the basement development. For example, the implications of a deepened basement/foundation system on neighbouring properties should be considered.
The site is within 100 m of a former watercourse.	The site investigation did not establish the presence of alluvial deposits beneath the site, which would indicate any hydraulic continuity with saturated alluvial deposits associated with the Tyburn stream. Therefore, there is not considered to be an issue to the site or the proposed development and in any case a continuous groundwater level has not been encountered below the site.
A number of trees will be felled as part of the development, while a large deciduous tree in the western corner will be retained.	Whilst shrinkable soils are present at shallow depth, there are no critical slope angles that are dependent on the presence of the existing trees to aid long term stability. Care will need to be taken to ensure the roots of the tree are not disturbed.
The site is within 5 m of Avenue Road, the adjoining footpath and Radlett Place.	Should the design of retaining walls and foundations not take into account the presence of nearby infrastructure, it may lead to the structural damage of footways, highways and associated buried services.
A Thames Water sewer is present beneath Avenue Road with an exclusion zone extending onto the site.	The proposed development is set back into the site such that it does not cross into the exclusion zone.
Marginal increase in the proportion of hard-standing and paved areas.	Less soft covering for surface water infiltration. However, the London Clay is of relatively low permeability so will not make much difference.

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.

London Clay is the shallowest stratum / Seasonal Shrink-Swell

The investigation indicated that beneath a variable thickness of made ground, the London Clay is present. The London Clay has been classified as being of high volume change potential, which are prone to seasonal shrink-swell (settlement and heave).

Shrinkable clay is present within a depth that can be affected by tree roots. Numerous trees are present on the site, although desiccation was not observed within the natural soils. The proposed basement is likely to extend below the potential depth of root action, but this should be confirmed once proposals have been finalised.

The site is located within 100 m of a former river course

The River Tyburn has been culverted to form a drain and is, therefore, unlikely to be in hydraulic continuity with the London Clay around the basement footprint or be influenced by the proposed basement development. No alluvial soils resulting from the former river were encountered on site and additionally, a continuous water table was not encountered. The proposed basement development would not therefore impact on the surrounding water environment.

A number of trees will be felled as part of the development, while a large deciduous tree in the western corner will be retained

Whilst shrinkable soils are present at shallow depth, there are no critical slope angles that are dependent on the presence of the existing trees to aid long term stability.

Care will need to be taken to ensure the roots of the retained tree are not disturbed.

The site is within 5 m of Avenue Road, the adjoining footpath and Radlett Place / A Thames Water sewer is present beneath Avenue Road with an exclusion zone extending onto the site

Should the design of retaining walls and foundations not take into account the presence of nearby infrastructure, it may lead to the structural damage of footways, highways and associated buried services.

In any case, the proposed basement is set back over 5 m from the site boundaries and does not intersect the Thames Water exclusion zone, such that the impact on surrounding infrastructure will be nominal.

Marginal increase in hardstanding and paved areas

The proposed development for the site will increase the amount of hard-standing and paved areas, but this will have little effect as the ground is of low permeability. The ground conditions will not be suitable for a soakaway or similar SUDS based system. It is understood that attenuation systems will be adopted to mitigate any potential impact on surface water inflows and run-off.

13.2 BIA Conclusions

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

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

13.3 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.

13.3.1 Screening

The following table provides the evidence used to answer the subterranean (groundwater flow) screening questions.

Question	Evidence
1a. Is the site located directly above an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
1b. Will the proposed basement extend beneath the water table surface?	Previous nearby GEA investigations and BGS archive borehole records.
2. Is the site within 100 m of a watercourse, well (used/ disused) or potential spring line?	Topographical and historical maps acquired as part of the desk study, reference to the Lost Rivers of London and Figures 11 and 12 of the Arup report.
3. Is the site within the catchment of the pond chains on Hampstead Heath?	Figures 12 and 14 of the Arup report
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	A site walkover and existing plans of the site have confirmed the proportions of hardstanding and soft landscaping, which have been compared to the proposed drawings to determine the changes in the proportions.
5. As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	The details of the proposed development do not indicate the use of soakaway drainage.
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to or lower than, the mean water level in any local pond or spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report.

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

Question	Evidence
1. Does the existing site include slopes, natural or manmade, greater than 7°?	Topographical maps and Figures 16 and 17 of the Arup report and confirmed during a site walkover
2. Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	The details of the proposed development provided do not include the re-profiling of the site to create new slopes
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	Topographical maps and Figures 16 and 17 of the Arup report
4. Is the site within a wider hillside setting in which the general slope is greater than 7°?	
5. Is the London Clay the shallowest strata at the site?	Geological maps and Figures 3, 5 and 8 of the Arup report
6. Will any trees be felled as part of the proposed development and / or are any works proposed within any tree protection zones where trees are to be retained?	The details of the proposed development.
7. Is there a history of seasonal shrink-swell subsidence in the local area and / or evidence of such effects at the site?	Knowledge on the ground conditions of the area and reference to NHBC guidelines were used to make an assessment of this, in addition to a visual inspection of the buildings carried out during the site walkover.
8. Is the site within 100 m of a watercourse or potential spring line?	Topographical maps acquired as part of the desk study and Figures 11 and 12 of the Arup report
9. Is the site within an area of previously worked ground?	Geological maps and Figures 3, 5 and 8 of the Arup report
10. Is the site within an aquifer?	Aquifer designation maps acquired from the Environment Agency as part of the desk study and Figures 3, 5 and 8 of the Arup report.
11. Is the site within 50 m of Hampstead Heath ponds?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report
12. Is the site within 5 m of a highway or pedestrian right of way?	Site plans and the site walkover.
13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	Camden planning portal and the site walkover confirmed the position of the proposed basement relative the neighbouring properties.
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	Maps and plans of infrastructure tunnels were reviewed.

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

Question	Evidence
1. Is the site within the catchment of the pond chains on Hampstead Heath?	Topographical maps acquired as part of the desk study and Figures 12 and 14 of the Arup report
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	A site walkover confirmed the current site conditions and the details provided on the proposed development, including reference to the FRA for the site.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	
4. Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	
5. Will the proposed basement result in changes to the quantity of surface water being received by adjacent properties or downstream watercourses?	
6. Is the site in an area known to be at risk from surface water flooding such as South Hampstead, West Hampstead, Gospel Oak and Kings Cross, or is it at risk of flooding because the proposed basement is below the static water level of a nearby surface water feature?	Flood risk maps acquired from the Environment Agency as part of the desk study, Figure 15 of the Arup report, the Camden Flood Risk Management Strategy dated 2013 and the North London Strategic Flood Risk Assessment dated 2008, and reference to the site specific FRA.

13.3.2 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, with reference to the possible impacts outlined in the Arup 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, the engineering properties of the underlying soils to enable suitable design of the basement development and the configuration of existing party wall foundations. The findings of the investigation are discussed in Section 5.0 of this report and summarized in both Section 7.0 and the Executive Summary.

13.3.3 Impact Assessment

Section 14.0 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 9.0 of this report also provides recommendations for the design of the proposed development.

A ground movement analysis and building damage assessment has been carried out and its findings are presented in Part 3.

14.0 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.

As discussed throughout the report, perched water is likely to be encountered during the basement excavation, although the finding of the investigation indicate that potential inflows are unlikely to be significant and should be adequately dealt with through sump pumping. However, groundwater monitoring should be continued, and trial excavations should be considered to assess the extent of inflows to be expected within the proposed basement excavations.

The investigation has not identified the presence of any significant contamination and as the some of the made ground will be removed from this site through the excavation of the proposed basement and large areas are covered by hardstanding, remedial measures should not be required, other than where areas of soft landscaping are to be formed. However, as with any site there is a potential for further areas of contamination to be present within the made ground beneath parts of the site not covered by the investigation it is recommended that a watching brief is maintained during any groundworks for the proposed new foundations and that if any suspicious soils are encountered that they are inspected by a geo-environmental engineer and further assessment may be required.

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 Records

b. Lab Testing

Geotechnical Test Results
SPT & Cohesion/Depth Graph
Chemical Test Results
Generic Risk Based Screening Values

c. Desk Study

Risk Assessment Tables
Envirocheck Extracts
Historical Maps
UXO Preliminary Risk Assessment
Service Searches

d. Ground Movement Analysis

PDisp Analysis – All Input Data
PDisp Analysis – Short Term Movements
PDisp Analysis – Total Movements
XDisp Analysis – All Input Data
XDisp Analysis – Installation Movements
XDisp Analysis – Installation & Excavation Movements
XDisp Analysis – Building Damage Assessment Results

appendix a

Field Work

Site Plan
Borehole Records

GEA

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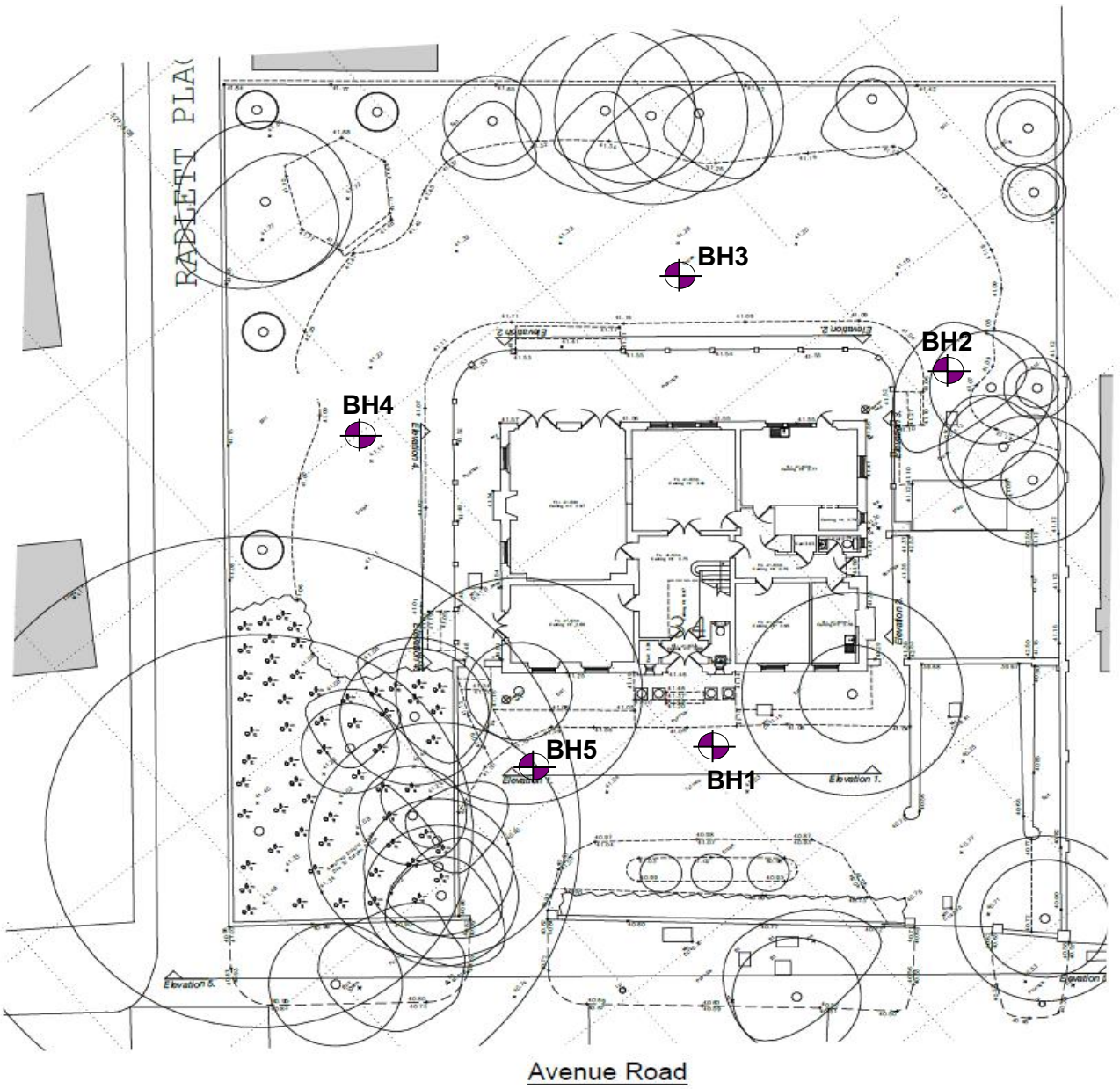
Site Plan

Site	32-34 Avenue Road, London NW8 6BU
Client	Mrs K Massey
Engineer	Engineers HRW

Job Number J22076

Sheet 1 / 1



Position of borehole

0 10 20

Approximate Scale in metres

GEA

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Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH1**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.05		
Client	Engineer			Sheet
Mrs K Massey	Engineers HRW			1 of 2

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				40.95		0.10	Tarmac	
				40.80		0.25	Concrete	
0.50	D			40.45		0.60	MADE GROUND (brick and concrete rubble)	
1.00	D						MADE GROUND (brown sandy gravelly clay with occasional brick and concrete blocks)	
1.20	B	1,1/1,2,2,2 N60 = 7				(2.00)		
2.00	B	1,2/1,2,2,6 N60 = 12		38.45		2.60		
3.00	B	1,1/2,2,3,3 N60 = 11					Firm becoming stiff fissured high strength brown silty CLAY with occasional selenite crystals and mica	
3.70	D							
4.00	U							
4.50	D							
4.70	D							
5.00	S	3,3/3,4,5,5 N60 = 18						
6.00	U							
6.50	D					(8.20)		
7.50	S	3,3/4,4,5,6 N60 = 20						
9.00	U							
9.50	D							

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth
3.00	24-03-22	11.00	3.00	150	DRY
10.00	24-03-22	13.00	3.00	150	DRY

GENERAL REMARKS

Inspection pit dug to 1.20 m for 1 hour 15 minutes
Chiselling from 14.10 m to 14.60 m for 30 minutes
Groundwater not encountered
Standpipe installed to 5.00 m
1 hour spent tidying up

All dimensions in metres Scale 1:62.5	Method/ Plant Used Cable percussion rig	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH1**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.05		
Client	Engineer			Sheet
Mrs K Massey	Engineers HRW			2 of 2

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
							Firm becoming stiff fissured high strength brown silty CLAY with occasional selenite crystals and mica(continued)	
10.50	S	4,4/5,6,6,7 N60 = 26		30.25		10.80		
							Stiff fissured very high strength greyish brown silty CLAY with selenite crystals and mica	
12.00	U							
12.50	D							
13.50	S	5,5/6,7,7,8 N60 = 30						
							14.10 Claystone	
14.60	D							
15.00	U						15.00 ... locally high strength	
						(9.20)		
15.50	D							
16.50	S	5,6/7,8,9,10 N60 = 36						
18.00	U							
18.50	D							
19.50	S	6,7/8,9,10,12 N60 = 42		21.05		20.00		

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth
20.00	24-03-22	17.00	3.00	150	DRY

GENERAL REMARKS

Inspection pit dug to 1.20 m for 1 hour 15 minutes
Chiselling from 14.10 m to 14.60 m for 30 minutes
Groundwater not encountered
Standpipe installed to 5.00 m
1 hour spent tidying up

All dimensions in metres Scale 1:62.5	Method/ Plant Used Cable percussion rig	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH2**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.07		
Client	Engineer			Sheet
Mrs K Massey	Engineers HRW			1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				40.87		0.20	Topsoil	
0.50	D			40.07		(0.80) 1.00	MADE GROUND (dark brown sandy gravelly clay with fragments of brick, concrete, tarmac and clinker)	
1.00	D	PP = 2.0					Firm becoming stiff fissured brown mottled grey silty CLAY with occasional sandy lenses and rootlets	
		PP = 2.0						
1.50	D	PP = 2.0						
		PP = 2.0						
2.00	D	PP = 2.5				(2.10)		
		PP = 2.5						
2.50	D	PP = 2.5						
		PP = 2.5						
3.00	D	PP = 2.5		37.97		3.10		

Boring Progress and Water Observations					
Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Inspection pit dug to 1.20 m
Borehole refused on stiff clay at 3.10 m
Groundwater not encountered

All dimensions in metres Scale 1:62.5	Method/ Plant Used Window sampler	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH3**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.22		
Client	Engineer			Sheet
Mrs K Massey	Engineers HRW			1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				41.12		0.10	Topsoil	
0.40	D		1			(0.80)	MADE GROUND (dark brown sandy gravelly clay with fragments of brick, concrete and clinker)	
				40.32		0.90		
		PP = 2.0					Firm becoming stiff fissured brown mottled grey silty CLAY with occasional sandy lenses and rootlets	
1.20	D	PP = 2.0						
		PP = 2.0						
		PP = 2.5						
		PP = 2.0				(2.10)		
		PP = 2.0						
2.20	D	PP = 2.5						
		PP = 2.5						
		PP = 2.5						
		PP = 2.5		38.22		3.00		
		PP = 2.5						

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Inspection pit dug to 1.20 m
Borehole refused on stiff clay at 3.00 m

All dimensions in metres Scale 1:62.5	Method/ Plant Used Window sampler	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH4**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.14		
Client	Engineer			Sheet
Mrs K Massey	Engineers HRW			1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				40.94		0.20	Topsoil	
						(0.80)	MADE GROUND (dark brown sandy gravelly clay with fragments of brick, concrete and clinker)	
				40.14		1.00		
1.50	D	PP = 2.0 PP = 2.0 PP = 2.0 PP = 2.5 PP = 2.0 PP = 2.0 PP = 2.5 PP = 2.5 PP = 2.5 PP = 2.5 PP = 2.5				(2.00)	Firm becoming stiff fissured brown mottled grey silty CLAY with occasional sandy lenses and rootlets	
				38.14		3.00		

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Inspection pit dug to 1.20 m
Borehole refused on stiff clay at 3.00 m
Groundwater not encountered

All dimensions in metres Scale 1:62.5	Method/ Plant Used Window sampler	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

GEA

Geotechnical & Environmental Associates

Project				BOREHOLE No
32-34 Avenue Road, London NW8 6BU				**BH5**
Job No	Date	Ground Level (m OD)	Co-Ordinates ()	
J22076	24-03-22	41.00		
Client		Engineer		Sheet
Mrs K Massey		Engineers HRW		1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument / Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
				40.90		0.10	Tarmac	
				40.75		0.25	Concrete	
				40.40		0.60	MADE GROUND (brick and concrete rubble)	
				40.00		1.00	MADE GROUND (brown sandy gravelly clay with fragments of brick and concrete and roots up to 5 mm and rootlets)	
1.60	D	PP = 2.5 PP = 2.5 PP = 3.0 PP = 3.0 PP = 3.0		39.20		(0.80) 1.80	Stiff fissured silty sandy gravelly CLAY with sandy lenses and rootlets (possible reworked) - appeared to be slightly desiccated	

Boring Progress and Water Observations

Depth	Date	Time	Casing Depth	Casing Dia. mm	Water Depth

GENERAL REMARKS

Inspection pit dug to 1.20 m
Borehole refused on stiff clay at 1.80 m
Groundwater not encountered

All dimensions in metres Scale 1:62.5	Method/ Plant Used Window sampler	Logged By GC

Report ID: CABLE PERCUSSION || Project: J22076 - 32-34 AVENUE ROAD.GPJ || Library: GEA LIBRARY.GLB || Date: 21 April 2022

appendix b

Lab Testing

Geotechnical Test Results
SPT & Cohesion/Depth Graph
Chemical Test Results
Generic Risk Based Screening Values

SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Location	Depth (m)	Sample Ref	Type	Description	WC %	LL %	PL %	PI %	<425 µm %	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 g/L	W/S Mg mg/L	
BH1	2.00		B	Brown and orangish brown mottled slightly gravelly slightly sandy CLAY.	33.2	62	24	38	70										
BH1	3.00		B	Brown slightly sandy CLAY with rare gravel.	30.7	75	26	49	98							8.4	0.75		
BH1	4.00		U	Stiff fissured brown mottled grey CLAY.	31.2					1.96	1.49	Undisturbed	80	161	80				
BH1	4.70		D	Dark brown slightly sandy CLAY. Sand is fine.	30.3	75	25	50	100										
BH1	6.00		U	Stiff fissured brown CLAY with occasional gypsum.	30.6					1.96	1.50	Undisturbed	120	176	88				
BH1	9.00		U	Very stiff fissured brown mottled orangish brown CLAY with rare gypsum.	30.4					1.95	1.50	Undisturbed	180	204	102				
BH1	9.50		D	Brown slightly sandy CLAY with rare gypsum. Sand is fine.	27.5	77	28	49	100							8.4	0.31		
BH1	12.00		U	Very stiff fissured dark brown CLAY.	24.7					1.99	1.60	Undisturbed	240	327	163				
BH1	15.00		U	Very stiff fissured dark brown CLAY.	26.9					2.03	1.60	Undisturbed	300	234	117				
BH1	18.00		U	Very stiff fissured dark brown CLAY.	24.9					1.96	1.57	Undisturbed	360	323	162				

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

[redacted]

Project Number:

G

Project Name:

GEOLABS®

SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Location	Depth (m)	Sample Ref	Type	Description	WC %	LL %	PL %	PI %	<425 µm %	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 g/L	W/S Mg mg/L	
BH1	18.50		D	Dark brown slightly sandy CLAY. Sand is fine.	25.4	69	25	44	100										
BH2	1.00		D	Brown and orangish brown mottled slightly sandy CLAY. Sand is fine.	30.7	81	26	55	100							8.3	0.065		
BH2	2.50		D	Brown mottled orangish brown and grey slightly sandy CLAY. Sand is fine.	25.0	72	27	45	100										
BH5	1.60		D	Brown mottled orangish brown slightly sandy CLAY with rare gravel.	22.1	69	22	47	99										

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

[redacted]

Project Number:

G

Project Name:

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UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	4.00
Sample Type	U

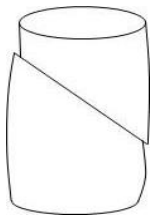
Description:

Stiff fissured brown mottled grey CLAY.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	201.0
Diameter	(mm)	101.3
Moisture content	(%)	31.2
Bulk density	(Mg/m³)	1.96
Dry density	(Mg/m³)	1.49
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.0
Membrane correction	(kPa)	0.5
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	80
Strain at failure	(%)	7.5
Maximum deviator stress	(kPa)	161
Shear Stress Cu	(kPa)	80

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	40

Project Number:

GEO / 35139

Project Name:

32-34 AVENUE ROAD
J22076

GEOLABS® UKAS TESTING 1982

BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	6.00
Sample Type	U

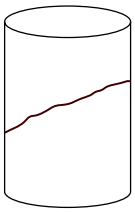
Description:

Stiff fissured brown CLAY with occasional gypsum.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	201.7
Diameter	(mm)	101.5
Moisture content	(%)	30.6
Bulk density	(Mg/m³)	1.96
Dry density	(Mg/m³)	1.50
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.7
Membrane correction	(kPa)	0.4
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	120
Strain at failure	(%)	5.5
Maximum deviator stress	(kPa)	176
Shear Stress Cu	(kPa)	88

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	50

Project Number:

GEO / 35139

Project Name:

32-34 AVENUE ROAD
J22076

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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	9.00
Sample Type	U

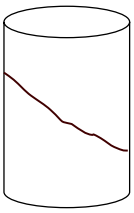
Description:

Very stiff fissured brown mottled orangish brown CLAY with rare gypsum.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	202.0
Diameter	(mm)	102.9
Moisture content	(%)	30.4
Bulk density	(Mg/m³)	1.95
Dry density	(Mg/m³)	1.50
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	202.0
Membrane correction	(kPa)	0.2
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	180
Strain at failure	(%)	2.5
Maximum deviator stress	(kPa)	204
Shear Stress Cu	(kPa)	102

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	40

[redacted]

Project Number:

GEO / 35139

Project Name:

32-34 AVENUE ROAD
J22076

GEOLABS® UKAS TESTING 1982

BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	12.00
Sample Type	U

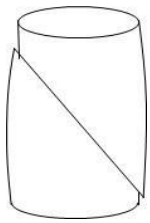
Description:

Very stiff fissured dark brown CLAY.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	201.7
Diameter	(mm)	101.3
Moisture content	(%)	24.7
Bulk density	(Mg/m³)	1.99
Dry density	(Mg/m³)	1.60
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.6
Membrane correction	(kPa)	0.6
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	240
Strain at failure	(%)	8.4
Maximum deviator stress	(kPa)	327
Shear Stress Cu	(kPa)	163

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	50

Project Number:

GEO / 35139

Project Name:

32-34 AVENUE ROAD
J22076

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BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	15.00
Sample Type	U

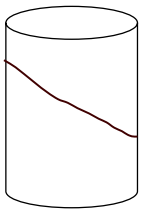
Description:

Very stiff fissured dark brown CLAY.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	201.3
Diameter	(mm)	101.1
Moisture content	(%)	26.9
Bulk density	(Mg/m³)	2.03
Dry density	(Mg/m³)	1.60
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.3
Membrane correction	(kPa)	0.3
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	300
Strain at failure	(%)	4.5
Maximum deviator stress	(kPa)	234
Shear Stress Cu	(kPa)	117

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	90

Project Number:

GEO / 35139

Project Name:

32-34 AVENUE ROAD
J22076

GEOLABS® UKAS TESTING 1982

BS EN ISO 17892-8 : 2018

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION

Location	BH1
Depth (m)	18.00
Sample Type	U

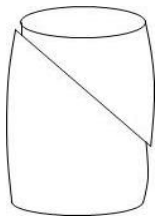
Description:

Very stiff fissured dark brown CLAY.

Specimen Details

Specimen conditions		Undisturbed
Length	(mm)	201.7
Diameter	(mm)	103.2
Moisture content	(%)	24.9
Bulk density	(Mg/m³)	1.96
Dry density	(Mg/m³)	1.57
Test Details		
Latex membrane thickness	(mm)	0.3
Specimen height prior to shearing	(mm)	201.6
Membrane correction	(kPa)	0.5
Mean rate of shear	(%/min)	2.0
Cell pressure	(kPa)	360
Strain at failure	(%)	7.4
Maximum deviator stress	(kPa)	323
Shear Stress Cu	(kPa)	162

Mode of failure



Orientation of the sample	Vertical
Distance from top of tube mm	40

Project Number:

GEO / 35139

Project Name

32-34 AVENUE ROAD
J22076

GEOLABS UKAS TESTING 1982

GEA
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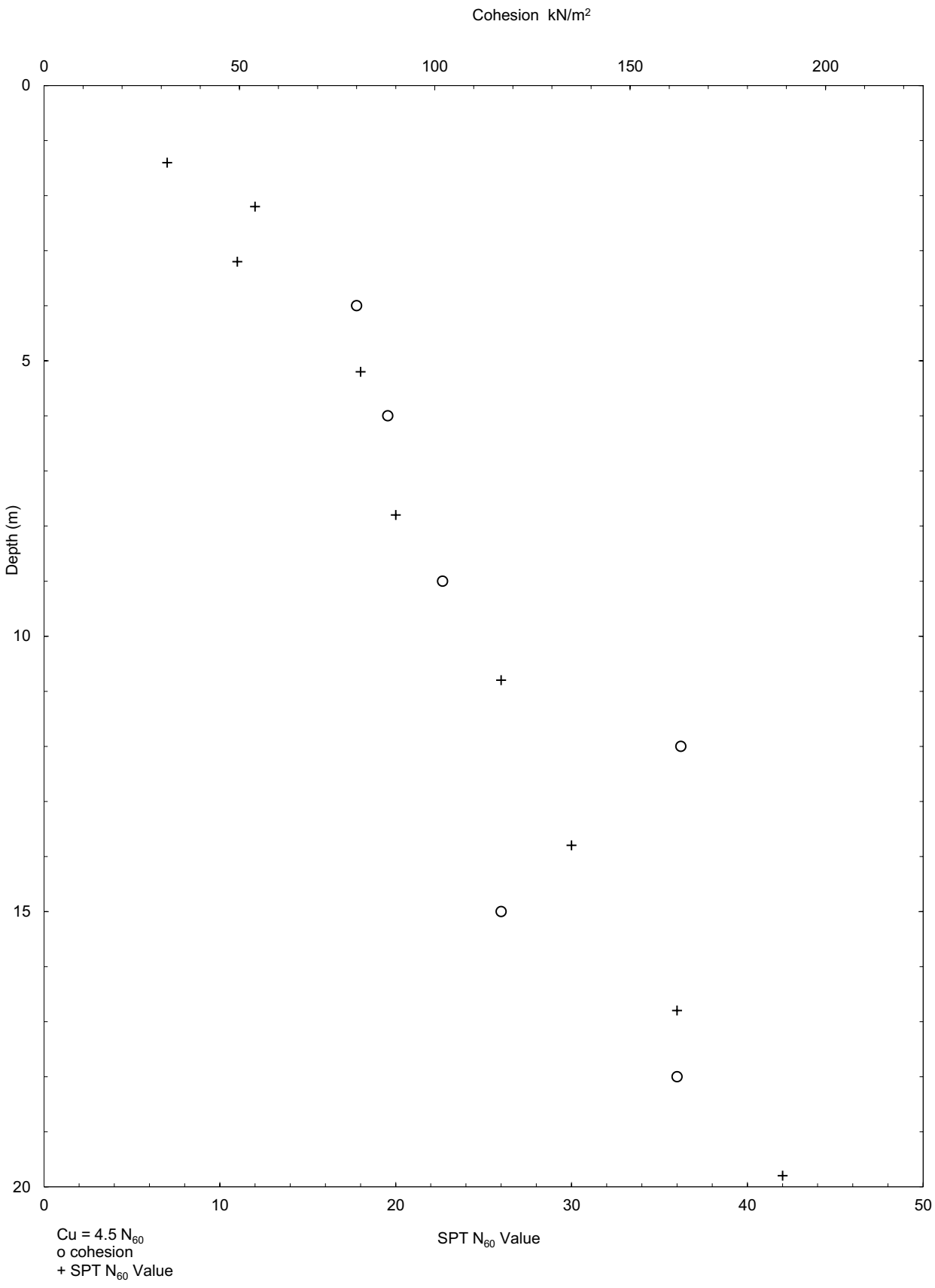
Herts | 01727 824666 Notts | 01509 674888

SPT & Cohesion / Depth Graph

Site	32-34 Avenue Road, London NW8 6BU
Client	Mrs K Massey
Engineer	Engineers HRW

Job Number J22076

Sheet 1 / 1



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Business Park,
Watford,
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WD18 8YS

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Analytical Report Number : 22-48152

Project / Site name:	32 34 Avenue Road	**Samples received on:**	28/03/2022
Your job number:	J22076	**Samples instructed on/ Analysis started on:**	28/03/2022
Your order number:		**Analysis completed by:**	02/04/2022
Report Issue Number:	1	**Report issued on:**	04/04/2022
Samples Analysed:	3 soil samples		

Signe [redacted]

Anna
Technical Reviewer (Reporting Team)
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

Excel copies of reports are only valid when accompanied by this PDF certificate.

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: 22-48152
Project / Site name: 32 34 Avenue Road

Lab Sample Number				2218634	2218635	2218636
Sample Reference				BH1	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	0.40
Date Sampled				24/03/2022	24/03/2022	24/03/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	18	19
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.9	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1000	680	710
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.16	0.044	0.027
Sulphide	mg/kg	1	MCERTS	1.4	4.4	5.8
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	18	5.6	3.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	1.8	1.1

Total Phenols

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

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.52	0.37
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.6	1.5
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.51	1.5
Phenanthrene	mg/kg	0.05	MCERTS	0.18	4.6	16
Anthracene	mg/kg	0.05	MCERTS	< 0.05	1.2	3.3
Fluoranthene	mg/kg	0.05	MCERTS	0.3	6.1	17
Pyrene	mg/kg	0.05	MCERTS	0.3	5.4	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.21	3.3	8.6
Chrysene	mg/kg	0.05	MCERTS	0.15	2.8	7.1
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.1	3.5	9.4
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.18	1.3	2.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.22	3.3	7.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.5	3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.45	1.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	1.6	3.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.64	36.8	95.8

Analytical Report Number: 22-48152
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Lab Sample Number				2218634	2218635	2218636
Sample Reference				BH1	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	0.40
Date Sampled				24/03/2022	24/03/2022	24/03/2022
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	20	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	35	36
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	57	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	720	420
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	0.6	0.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	36	29	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	77	170	120
Petroleum Hydrocarbons						
TPH C10 - C40 $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	38	100	150
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	2.7	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	6	8.3
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	7.6	25	52
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	18	56	71
TPH Total C8 - C35 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	MCERTS	26	90	130

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

Analytical Report Number: 22-48152
Project / Site name: 32 34 Avenue Road
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2218635	BH2	0.50	131	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

Analytical Report Number : 22-48152
Project / Site name: 32 34 Avenue Road

* 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 *
2218634	BH1	None Supplied	0.5	Brown clay and loam with gravel.
2218635	BH2	None Supplied	0.5	Brown clay and loam with gravel and vegetation.
2218636	BH3	None Supplied	0.4	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 22-48152
Project / Site name: 32 34 Avenue Road

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
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
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
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
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
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

Analytical Report Number : 22-48152
Project / Site name: 32 34 Avenue Road

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
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

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 30oC.

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 - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

GEA
Widbury Barn
Widbury Hill
Ware
SG12 7QE

Generic Risk-Based Soil Screening Values

Site	32-34 Avenue Road, London NW8 6BU
Client	Mrs. K Massey
Engineer	Engineers HRW

Job Number J22076

Sheet 1 / 2

Proposed End Use Residential with plant uptake

Soil Organic Matter content % 2.5

Contaminant	Screening Value mg/kg	Data Source
Metals		
Arsenic	37	C4SL
Cadmium	26	C4SL
Chromium (III)	910	S4UL
Chromium (VI)	21	C4SL
Copper	2,400	S4UL
Lead	200	C4SL
Elemental Mercury	1.2	S4UL
Inorganic Mercury	40	S4UL
Nickel	180	S4UL
Selenium	350	SGV
Zinc	3,700	S4UL
Anions		
Soluble Sulphate	500 mg/l	Structures
Sulphide	50	Structures
Chloride	400	Structures
Others		
Organic Carbon (%)	6	Methanogenic potential
Total Cyanide	140	WRAS
Total Mono Phenols	290	SGV
PAH		
Naphthalene	5.60	S4UL
Acenaphthylene	420	S4UL
Acenaphthene	510	S4UL
Fluorene	400	S4UL
Phenanthrene	220	S4UL
Anthracene	5,400	S4UL
Fluoranthene	560	S4UL
Pyrene	1,200	S4UL
Benzo(a)anthracene	11.0	S4UL
Chrysene	22	S4UL
Benzo(b)fluoranthene	3.3	S4UL
Benzo(k)fluoranthene	93.0	S4UL
Benzo(a)pyrene	4.40	C4SL
Indeno(1 2 3 cd)pyrene	36.0	S4UL
Dibenz(a h)anthracene	0.28	S4UL
Benzo (g h i)perylene	340	S4UL
Total PAH Screen	**62.9**	B(a)P / 0.15

Contaminant	Screening Value mg/kg	Data Source
Hydrocarbons		
Banded TPH (8-10)	128	Calc1
Banded TPH (10-12)	277	Calc1
Banded TPH (12-16)	508	Calc1
Banded TPH (16-21)	831	Calc1
Banded TPH (21-35)	2308	Calc1
Benzene	0.34	C4SL
Toluene	320	SGV
Ethyl Benzene	180	SGV
Xylene	120	SGV
Aliphatic C5-C6	78	S4UL
Aliphatic C6-C8	230	S4UL
Aliphatic C8-C10	65	S4UL
Aliphatic C10-C12	330	S4UL
Aliphatic C12-C16	2400	S4UL
Aliphatic C16-C35	92,000	S4UL
Aromatic C6-C7	See Benzene	S4UL
Aromatic C7-C8	See Toluene	S4UL
Aromatic C8-C10	83	S4UL
Aromatic C10-C12	180	S4UL
Aromatic C12-C16	330	S4UL
Aromatic C16-C21	540	S4UL
Aromatic C21-C35	1500	S4UL
PRO (C_5 –C_{10})	776	Calc2
DRO (C_{12} –C_{28})	95,270	Calc2
Lube Oil (C_{28} –C_{44})	93,500	Calc2
TPH	**500**	Trigger to consider speciated testing
Chlorinated Solvents		
1,1,1 trichloroethane (TCA)	18	S4UL
tetrachloroethane (PCA)	2.8	S4UL
tetrachloroethene (PCE)	0.39	S4UL
trichloroethene (TCE)	0.034	S4UL
1,2-dichloroethane (DCA)	0.011	S4UL
vinyl chloride (Chloroethene)	0.00087	S4UL
tetrachloromethane (Carbon tetra	0.056	S4UL
trichloromethane (Chloroform)	1.7	S4UL

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 & 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

appendix c

Desk Study

Risk Assessment Tables
Envirocheck Extracts
Historical Maps
UXO Preliminary Risk Assessment
Service Seaches

Classification of Consequence

Classification	Definition	Examples
Severe	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings / property. A short-term risk to a particular ecosystem, or organism forming part of such ecosystem (note: the definitions of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to short-term human health risk if buildings are occupied).
Medium	Chronic damage to Human Health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem (note: the definitions of ecological systems within Draft Circular on Contaminated Land, DETR, 2000).	Concentrations of a contaminant from site exceed the generic, or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the Draft Circular of Contaminated Land, DETR, 2000). Damage to sensitive buildings / structures / services or the environment.	Pollution of non-classified groundwater Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.

Classification of Probability

Classification	Probability
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

From Rudland, DJ, Lancefield, RM and Mayell, PN (2001) *Contaminated land risk assessment. A guide to good practice.* CIRIA Pub C552

Risk Assessment Matrix

		Consequence			
		Severe	***Medium***	***Mild***	***Minor***
Probability	***High likelihood***	**Very high risk**	**High risk**	**Moderate risk**	Moderate / low risk
	Likely	**High risk**	**Moderate risk**	Moderate / low risk	Low risk
	Low likelihood	**Moderate risk**	Moderate / low risk	Low risk	Very low risk
	Unlikely	Moderate / low risk	Low risk	Very low risk	Very low risk

	Description of the assessed risks and likely action required
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very low risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

From Rudland, DJ, Lancefield, RM and Mayell, PN (2001) *Contaminated land risk assessment. A guide to good practice.* CIRIA Pub C552

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
292557463_1_1

Customer Reference:
J22076

National Grid Reference:
527170, 183730

Slice:
A

Site Area (Ha):
0.17

Search Buffer (m):
1000

Site Details:

32-34
Avenue Road
LONDON
NW8 6BU

Client Details:

Mr S Branch
GEA Ltd
Widbury Barn
Widbury Hill
Ware
Herts
SG12 7QE

GEA

Contents

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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Natural England Copyright Notice

Scottish Natural Heritage Copyright

Ove Arup Copyright Notice

Stantec Copyright Notice

Radon Potential dataset Copyright Notice

Natural Resources Wales Copyright Notice

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility					n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	1
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 1			1	17
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3			Yes	
Pollution Incidents to Controlled Waters	pg 4				4
Prosecutions Relating to Authorised Processes	pg 4				1
Registered Radioactive Substances	pg 4				12
River Quality	pg 6			1	
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 7			3	8 (*23)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 15	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 15	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 15	1	1		
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 16	1		1	5

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 17				1
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 17				1
Potentially Infilled Land (Water)	pg 17				1
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites	pg 17				1
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry					
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry	pg 18		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 20	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					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 20	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 21	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 21	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 21	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
Industrial Land Use					
Contemporary Trade Directory Entries	pg 22			9	160
Fuel Station Entries	pg 36				3
Points of Interest - Commercial Services	pg 36			1	42
Points of Interest - Education and Health	pg 40				7
Points of Interest - Manufacturing and Production	pg 40			1	17
Points of Interest - Public Infrastructure	pg 42				13
Points of Interest - Recreational and Environmental	pg 43			4	29
Gas Pipelines					
Underground Electrical Cables	pg 46		4	19	29

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
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	pg 52				2
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Thames Water Utilities Ltd Property Type: WTW/WATER COLLECTION/TREATMENT/SUPPLY Location: Barrow Hill Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.0018 Permit Version: 1 Effective Date: 15th September 1989 Issued Date: 15th September 1989 Revocation Date: 5th October 2000 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: River Thames **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A14SW (E)	426	2	527600 183600
2	**Discharge Consents** Operator: Marylebone Cricket Club Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA Location: Marylebone Cricket Club Lord'S Cricket Ground Marylebone Cricket Club St John'S Wood London Nw8 8qn Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Eprkb3091es Permit Version: 2 Effective Date: 26th March 2021 Issued Date: 26th March 2021 Revocation Date: Not Supplied Discharge Type: Trade Discharge - Process Water Discharge Environment: Land/Soakaway Receiving Water: Groundwater **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A8SW (S)	897	2	526996 182820
3	**Local Authority Pollution Prevention and Controls** Name: St John'S Wood Dry Cleaners Location: 47 Charlbert Street, London, NW8 6JN Authority: Westminster City Council, Environmental Health Department Permit Reference: 09/53345/EE1EP Dated: 10th November 2009 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	377	3	527114 183327
4	**Local Authority Pollution Prevention and Controls** Name: Ivy Dry Cleaner Location: 4 Queens Terrace, London, Nw8 6dx Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/40583/EE1EP Dated: 14th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SE (W)	502	3	526672 183539
5	**Local Authority Pollution Prevention and Controls** Name: Johnsons Cleaners Location: 69 St Johns Wood High Street, London, Nw8 7nl Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/40583/EE1EP Dated: 7th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Site Closed** Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	523	3	526938 183230
5	**Local Authority Pollution Prevention and Controls** Name: Madame George Location: 9 Circus Road, London, Nw8 6nx Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/39117/EE1EP Dated: 7th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	543	3	526902 183227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Local Authority Pollution Prevention and Controls** Name: Tempo Dry Cleaners Location: 98 St Johns Wood High Street, London, Nw8 7sh Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/38279/EE1EP Dated: 7th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Site Closed** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	537	3	527019 183184
7	**Local Authority Pollution Prevention and Controls** Name: Elias Dry Cleaners Location: 68 St Johns Wood High Street, London, Nw8 7sh Authority: Westminster City Council, Environmental Health Department Permit Reference: 08/15232/EE1EP Dated: 6th March 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	597	3	527077 183110
8	**Local Authority Pollution Prevention and Controls** Name: Kings Dry Cleaners Location: 25 Winchester Road, London, E4 Authority: London Borough of Waltham Forest, Environmental Health Department Permit Reference: DC05 Dated: 6th July 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	656	4	526812 184310
9	**Local Authority Pollution Prevention and Controls** Name: Bp Filling Station Location: 21-41 Wellington Road, St John's Wood, LONDON, NW8 9SP Authority: Westminster City Council, Environmental Health Department Permit Reference: VR 8 Dated: 7th May 1999 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	691	3	526864 183080
10	**Local Authority Pollution Prevention and Controls** Name: Swiss Cottage Dry Cleaners Location: 121 Finchley Road, London, Nw3 6hy Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC10 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	744	5	526626 184270
11	**Local Authority Pollution Prevention and Controls** Name: Masterclean Dry Cleaners Location: 6 Langtry Walk, London, Nw8 0du Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC38 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	835	5	526352 184004
12	**Local Authority Pollution Prevention and Controls** Name: Primrose Valet Location: 91 Regent'S Park Road, London, Nw1 8ur Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC53 Dated: 28th January 2009 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	837	5	527917 184155

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	**Local Authority Pollution Prevention and Controls** Name: London Zoo Location: Regents Park, LONDON, NW1 4RY Authority: Westminster City Council, Environmental Health Department Permit Reference: Not Given Dated: 1st November 1992 Process Type: Local Authority Air Pollution Control Description: PG5/1Clinical waste incineration processes under 1 tonne an hour **Status: Authorisation has expired** Positional Accuracy: Automatically positioned to the address	A14SE (E)	859	3	528016 183480
14	**Local Authority Pollution Prevention and Controls** Name: Chequers Textile Care Ltd Location: 48 Englands Lane, London, Nw3 4ue Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC47 Dated: 5th December 2006 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A18NE (N)	888	5	527498 184580
15	**Local Authority Pollution Prevention and Controls** Name: Abbey Dry Cleaners Location: 11 Blenheim Terrace, London, Nw8 0eh Authority: Westminster City Council, Environmental Health Department Permit Reference: 07/71922/EE1EP Dated: 25th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Site Closed** Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	914	3	526303 183355
16	**Local Authority Pollution Prevention and Controls** Name: Lords Dry Cleaners Location: 4 Lodge Road, London, Nw8 7ja Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/40566/EE1EP Dated: 7th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8SE (S)	923	3	527192 182777
17	**Local Authority Pollution Prevention and Controls** Name: Connoisseur Dry Cleaners Location: 3-5 Fairhazel Gardens, London, Nw6 3qe Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC11 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	961	5	526262 184119
17	**Local Authority Pollution Prevention and Controls** Name: Sqweaky Clean Professional Dry Cleaners Location: 13 Fairhazel Gardens, London, Nw6 3qe Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC37 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	990	5	526237 184134
18	**Local Authority Pollution Prevention and Controls** Name: Siciliana Location: 6 Blenheim Terrace, London, Nw8 0eb Authority: Westminster City Council, Environmental Health Department Permit Reference: 06/48997/EE1EP Dated: 25th September 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	997	3	526198 183395
	Nearest Surface Water Feature	A8NE (SE)	477	-	527462 183325

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: LONDON, NW8 Authority: Environment Agency, Thames Region Pollutant: Miscellaneous - Natural Note: Not Supplied Incident Date: 10th September 1996 Incident Reference: SE960481 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	A8NE (S)	517	2	527300 183200
20	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: LONDON, NW8 Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 2nd February 1996 Incident Reference: SE960054 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	A7NE (SW)	621	2	526800 183200
21	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Hampstead Road Lock, CAMDEN TOWN Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 17th December 1998 Incident Reference: THNE1998041401 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	A14NE (E)	848	2	528000 184000
22	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: St Johns Wood, LONDON, NW8 Authority: Environment Agency, Thames Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: Not Supplied Incident Reference: SE960382 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	A8SE (S)	910	2	527300 182800
23	**Prosecutions Relating to Authorised Processes** Location: Regents Park Road, London, Nw1 Prosecution Text: Failure to comply with packaging waste regulations Prosecution Act: Pro97 Hearing Date: 6th September 2007 Verdict: Guilty Fine: 85000 Costs: 8836 Positional Accuracy: Manually positioned to the road within the address or location	A15NW (E)	998	2	528192 183763
24	**Registered Radioactive Substances** Name: Wellington Hospital Location: 8a Wellington Place, LONDON, NW8 9LE Authority: Environment Agency, Thames Region Permit Reference: Bw7716 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Application has been authorised and any conditions apply to the operator** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	674	2	526814 183127

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	**Registered Radioactive Substances** Name: Wellington Hospital Location: 8a Wellington Place, LONDON, NW8 9LE Authority: Environment Agency, Thames Region Permit Reference: Br5558 Dated: 28th March 2002 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation **Status: Application has been authorised and any conditions apply to the operator** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	674	2	526814 183127
24	**Registered Radioactive Substances** Name: Wellington Hospital Location: 8a Wellington Place, LONDON, NW8 9LE Authority: Environment Agency, Thames Region Permit Reference: Br5531 Dated: 28th March 2002 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	674	2	526814 183127
24	**Registered Radioactive Substances** Name: Humana Hospital Wellington Location: 27 Circus Road, LONDON, Greater London, NW8 9JG Authority: Environment Agency, Thames Region Permit Reference: AB8520 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA in respect of a registration under S7 when Technetium 99M is used being =< 10 gigabecquerels **Status: Authorisation either revoked or cancelled** Positional Accuracy: Unknown	A7NE (SW)	679	2	526794 183133
25	**Registered Radioactive Substances** Name: Wynn Institute For Metabolic Research Location: Flat 21, Cavendish House, 21 Wellington Road, LONDON, Greater London, NW8 9SQ Authority: Environment Agency, Thames Region Permit Reference: AC0591 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA **Status: Authorisation either revoked or cancelled** Positional Accuracy: Automatically positioned to the address	A8SW (S)	727	2	526898 183025
26	**Registered Radioactive Substances** Name: Hca International Limited Location: The Wellington Hospital, Wellington Place, St Johns Wood, Nw8 9le Authority: Environment Agency, Thames Region Permit Reference: ZB3233DA Dated: Not Supplied Process Type: Not Supplied Description: Not Supplied **Status: Application has been determined by the EA** Positional Accuracy: Automatically positioned to the address	A8SW (S)	750	2	526931 182989
26	**Registered Radioactive Substances** Name: Humana Hospital Wellington Location: 8A Wellington Place, LONDON, Greater London, NW8 9LE Authority: Environment Agency, Thames Region Permit Reference: AB8511 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA **Status: Authorisation either revoked or cancelled** Positional Accuracy: Unknown	A8SW (S)	780	2	526918 182961

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	**Registered Radioactive Substances** Name: Institute Of Zoology Location: Regents Park, London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: Bw7007 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Application has been authorised and any conditions apply to the operator** Positional Accuracy: Automatically positioned to the address	A14SE (E)	854	2	528011 183480
27	**Registered Radioactive Substances** Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AC7596 Dated: 31st March 1991 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Unknown	A14SE (E)	854	2	528011 183480
27	**Registered Radioactive Substances** Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AC7588 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Unknown	A14SE (E)	856	2	528011 183475
27	**Registered Radioactive Substances** Name: Institute Of Zoology Location: Zoological Society Of London, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AQ9405 Dated: 30th August 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Unknown	A14SE (E)	858	2	528016 183485
27	**Registered Radioactive Substances** Name: Institute Of Zoology Location: London Zoo, Regents Park, LONDON, Greater London, NW1 4RY Authority: Environment Agency, Thames Region Permit Reference: AS7515 Dated: 21st December 1995 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation **Status: Application has been authorised and any conditions apply to the operator** Positional Accuracy: Unknown	A14SE (E)	861	2	528016 183475
	River Quality Name: Guc (Paddington Arm) GQA Grade: River Quality E Reach: Canal Feeder - Camden Road Estimated Distance (km): 10.5 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A8NE (SE)	498	2	527440 183283

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	**Water Abstractions** Operator: Thames Water Utilities Ltd Licence Number: Th/039/0039/058 Permit Version: 1 Location: Borehole At Barrow Hill Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct 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: 1st April 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SW (E)	443	2	527636 183697
28	**Water Abstractions** Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0231 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SW (E)	447	2	527640 183690
28	**Water Abstractions** Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0202 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 26th September 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SW (E)	447	2	527640 183690
29	**Water Abstractions** Operator: London Borough Of Camden Licence Number: 28/39/39/0219 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: 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: Swiss Cottage Open Space, Winchester Road, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	638	2	526800 184280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	**Water Abstractions** Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: 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: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	653	2	526750 184261
30	**Water Abstractions** Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: General Washing/Process Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	653	2	526750 184261
30	**Water Abstractions** Operator: London Borough Of Camden Licence Number: Th/039/0039/087 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Lake And Pond Throughflow Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	653	2	526750 184261
31	**Water Abstractions** Operator: Marylebone Cricket Club Licence Number: Th/039/0039/116 Permit Version: 3 Location: Lords Cricket Ground, London. Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Heat Pump 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: 26th March 2021 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	870	2	526902 182872

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	**Water Abstractions** Operator: Marylebone Cricket Club Licence Number: Th/039/0039/116 Permit Version: 2 Location: Lords Cricket Ground, London. Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Heat Pump 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: 28th May 2020 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	870	2	526902 182872
31	**Water Abstractions** Operator: Marylebone Cricket Club Licence Number: Th/039/0039/116 Permit Version: 1 Location: Lords Cricket Ground, London. Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Heat Pump 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: 17th May 2017 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	870	2	526902 182872
32	**Water Abstractions** Operator: Zoological Society Of London Licence Number: 28/39/39/0035 Permit Version: 100 Location: Borehole At Regent'S Park, London Nw1 Authority: Environment Agency, Thames Region Abstraction: Zoos/Kennels/Stables: Animal Watering & General Use (Non Agricultural) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 59 Yearly Rate (m3): 681 Details: Regent'S Park, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 4th April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14SE (E)	871	2	528000 183400
	Water Abstractions Operator: Abbey Lodge Rtm Company Limited Licence Number: 28/39/39/0115 Permit Version: 101 Location: Abbey Lodge, Park Road, London Nw8-Two Boreholes Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Abbey Lodge, Park Road, London Nw8 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st June 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NE (S)	1109	2	527420 182620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Wood Management Trustees Ltd Licence Number: 28/39/39/0115 Permit Version: 100 Location: Two Boreholes At Abbey Lodge, Park Road, London Nw8 Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 100 Yearly Rate (m3): 28640 Details: Abbey Lodge, Park Road, London Nw8 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th November 1991 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3NE (S)	1109	2	527420 182620
	Water Abstractions Operator: Canal And River Trust Licence Number: 28/39/39/0164 Permit Version: 101 Location: St John'S Wood, London - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NW (S)	1246	2	527050 182460
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0164 Permit Version: 100 Location: St John'S Wood, London - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th April 1983 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NW (S)	1246	2	527050 182460
	Water Abstractions Operator: British Waterways Licence Number: 28/39/39/0164A Permit Version: Not Supplied Location: St Johns Wood, LONDON, Nw1 Authority: Environment Agency, Thames Region Abstraction: Industrial Cooling (Cegb) Abstraction Type: Not Supplied Source: River Daily Rate (m3): 1920 Yearly Rate (m3): 1 Details: Annual Abstraction Total Aggregated To Another Licence For Quantity Purposes. 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	A3NW (S)	1311	2	527000 182400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0173 Permit Version: 100 Location: Oval Road, Camden - Grand Union Regents Canal Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 20 Yearly Rate (m3): 7000 Details: Land At Oval Road, Camden, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th December 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1327	2	528490 184020
	Water Abstractions Operator: British Waterways Licence Number: 28/39/39/0164B Permit Version: Not Supplied Location: Southampton Bridge, LONDON, Nw8 Authority: Environment Agency, Thames Region Abstraction: Industrial Cooling (Cegb) Abstraction Type: Not Supplied Source: River Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Annual Abstraction Total Aggregated To Another Licence For Quantity Purposes. 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	A15NW (E)	1332	2	528500 184000
	Water Abstractions Operator: Canal And River Trust Licence Number: 28/39/39/0164 Permit Version: 101 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1336	2	528500 184020
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0164 Permit Version: 100 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th April 1983 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1336	2	528500 184020

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Abbey National Plc Licence Number: 28/39/39/0070 Permit Version: 101 Location: Borehole At Abbey House, Baker Street, London Nw1 Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 91 Yearly Rate (m3): 2273 Details: Abbey House, Baker Street, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4SW (S)	1721	2	527800 182100
	Water Abstractions Operator: Baskerville Estates (Gp) Limited Licence Number: 28/39/39/0070 Permit Version: 102 Location: Abbey House, Baker Street- Borehole Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Abbey House, Baker Street, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 19th December 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4SE (SE)	1740	2	527850 182100
	Water Abstractions Operator: Dorset House Residential Limited Licence Number: 28/39/39/0021 Permit Version: 104 Location: Dorset House, London- 2 Boreholes Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Dorset House, Gloucester Place, London W1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 18th November 2020 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1814	2	527800 182000
	Water Abstractions Operator: Dorset House Residential Limited Licence Number: 28/39/39/0021 Permit Version: 103 Location: Dorset House, London- 2 Boreholes Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Dorset House, Gloucester Place, London W1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th November 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1814	2	527800 182000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Bellnorth Limited Licence Number: 28/39/39/0021 Permit Version: 102 Location: Dorset House, London- 2 Boreholes Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Dorset House, Gloucester Place, London W1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th August 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1814	2	527800 182000
	Water Abstractions Operator: Bellnorth Limited Licence Number: 28/39/39/0021 Permit Version: 101 Location: Two Boreholes At Dorset House, Gloucester Place, London. W1 Authority: Environment Agency, Thames Region Abstraction: Household Water Supply: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 318 Yearly Rate (m3): 56370 Details: Dorset House, Gloucester Place, London W1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th January 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1814	2	527800 182000
	Water Abstractions Operator: Greenwich Leisure Limited Licence Number: 28/39/39/0091 Permit Version: 101 Location: Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kentish Town Sports Centre, Prince Of Wales Road, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NE (NE)	1874	2	528800 184700
	Water Abstractions Operator: Greenwich Leisure Limited Licence Number: 28/39/39/0091 Permit Version: 101 Location: Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th May 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NE (NE)	1874	2	528800 184700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Greenwich Leisure Ltd Licence Number: 28/39/39/0091 Permit Version: 101 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th April 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NE (NE)	1874	2	528800 184700
	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Commercial/Industrial/Public Services: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 605 Yearly Rate (m3): 76509 Details: Kentish Town Sports Centre, Prince Of Wales Road, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NE (NE)	1874	2	528800 184700
	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Industrial; Commercial And Public Services: Laundry Use Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20NE (NE)	1874	2	528800 184700
	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0091 Permit Version: 100 Location: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: St. Pancras Public Baths, Prince Of Wales Road, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20NE (NE)	1874	2	528800 184700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Sir Ritblat Licence Number: Th/039/0039/022/R01 Permit Version: 1 Location: Doric Villa, York Terrace East, London Authority: Environment Agency, Thames Region Abstraction: Production of Energy: Electricity: Heat Pump 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: 1st April 2019 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1928	2	528407 182223
	Water Abstractions Operator: Sir Ritblat Licence Number: Th/039/0039/022 Permit Version: 1 Location: Doric Villa, York Terrace East, London Authority: Environment Agency, Thames Region Abstraction: Production of Energy: Electricity: Heat Pump 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 January Authorised End: 31 December Permit Start Date: 26th February 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SE)	1928	2	528407 182223
	Groundwater Vulnerability Map 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 Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (SW)	0	6	527167 183729
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A13NW (SW)	0	6	527167 183729
	Superficial Aquifer Designations No Data Available				
33	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A13NW (SW)	0	2	527167 183729
34	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone I (Inner Protection Zone): Travel time of 50 days or less to the groundwater source.	A13NE (E)	161	2	527356 183734
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5204.1 Watercourse Level: Underground Permanent: True Watercourse Name: The Fountains Catchment Name: Thames Primacy: 1	A13NW (W)	0	7	527159 183729
36	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 2236.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Grand Union Canal Catchment Name: Trent Primacy: 1	A8NE (SE)	484	7	527482 183333
37	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 18.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SE (S)	886	7	527251 182818
38	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 20.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SE (S)	887	7	527267 182819
39	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 4.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SE (S)	887	7	527244 182816
40	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SE (S)	887	7	527265 182819
41	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 8.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A8SE (S)	890	7	527240 182813

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	**Licensed Waste Management Facilities (Locations)** Licence Number: 401853 Location: Regents Park Office, The Store Yard, Inner Circle, Regents Park, London, NW1 4NR Operator Name: The Royal Parks Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Composting **Licence Status: Issued** Issued: 24th February 2015 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	685	2	527538 183124
	Local Authority Landfill Coverage Name: London Borough of Camden - Has no landfill data to supply		0	8	527167 183729
	Local Authority Landfill Coverage Name: Westminster City Council - Has supplied landfill data		9	3	527148 183704
43	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1991	A12SW (W)	705	10	526436 183663
44	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A14SE (E)	959	10	528126 183504
45	**Registered Waste Treatment or Disposal Sites** Licence Holder: The Zoological Society Licence Reference: DL124 Site Location: Regents Park Zoo, WESTMINSTER, London, NW1 4RY Operator Location: As Site Address Authority: Environment Agency - Thames Region, North East Area Site Category: Incineration Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: Only waste produced on site Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st June 1983 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Alcohols, Animal And Food Wastes, Aromatic Hydrocarbons, Halogenated Cleaning Cmpds Prohibited Waste: Notifiable Wastes, Special Wastes	A14SE (E)	964	2	528100 183400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A13NW (SW)	0	1	527167 183729
	BGS Estimated Soil Chemistry No data available				
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527263, 183792 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.40 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 110.30 mg/kg Lead Measured Concentration: 2419.20 mg/kg Nickel Measured Concentration: 40.00 mg/kg	A13NE (NE)	91	1	527263 183792
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526761, 183848 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 23.60 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 78.40 mg/kg Lead Measured Concentration: 572.40 mg/kg Nickel Measured Concentration: 37.60 mg/kg	A12NE (W)	397	1	526761 183848
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527278, 183302 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 31.70 mg/kg Cadmium Measured Concentration: 0.90 mg/kg Chromium Measured Concentration: 91.20 mg/kg Lead Measured Concentration: 2587.50 mg/kg Nickel Measured Concentration: 46.40 mg/kg	A8NE (S)	413	1	527278 183302
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527207, 184291 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 13.10 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 81.00 mg/kg Lead Measured Concentration: 714.00 mg/kg Nickel Measured Concentration: 26.50 mg/kg	A18SE (N)	536	1	527207 184291

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527766, 183762 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 17.80 mg/kg Cadmium Measured Concentration: 0.50 mg/kg Chromium Measured Concentration: 86.20 mg/kg Lead Measured Concentration: 432.00 mg/kg Nickel Measured Concentration: 27.40 mg/kg	A14NW (E)	572	1	527766 183762
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526820, 183228 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 12.00 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 57.90 mg/kg Lead Measured Concentration: 221.30 mg/kg Nickel Measured Concentration: 19.00 mg/kg	A7NE (SW)	586	1	526820 183228
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526761, 184231 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 7.00 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 20.70 mg/kg Lead Measured Concentration: 38.00 mg/kg Nickel Measured Concentration: 6.70 mg/kg	A17SE (NW)	623	1	526761 184231
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527717, 184227 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 21.20 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 77.40 mg/kg Lead Measured Concentration: 2046.50 mg/kg Nickel Measured Concentration: 33.50 mg/kg	A19SW (NE)	719	1	527717 184227
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 527775, 183248 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.60 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 86.10 mg/kg Lead Measured Concentration: 203.10 mg/kg Nickel Measured Concentration: 34.40 mg/kg	A9NW (SE)	756	1	527775 183248

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526218, 183841 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 18.90 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 90.90 mg/kg Lead Measured Concentration: 937.50 mg/kg Nickel Measured Concentration: 30.50 mg/kg	A12NW (W)	928	1	526218 183841
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 526685, 182842 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 25.30 mg/kg Cadmium Measured Concentration: 0.70 mg/kg Chromium Measured Concentration: 85.40 mg/kg Lead Measured Concentration: 1373.50 mg/kg Nickel Measured Concentration: 37.70 mg/kg	A7SE (SW)	985	1	526685 182842
	BGS Urban Soil Chemistry Averages 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	A13NW (SW)	0	1	527167 183729
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	236	1	527426 183690
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729
	Radon Potential - Radon Affected Areas 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	A13NW (SW)	0	1	527167 183729
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (SW)	0	1	527167 183729

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	**Contemporary Trade Directory Entries** Name: 24 Hr Waste Disposal Location: St. Johns Wood Ter, London, NW8 6LP Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13SW (S)	292	-	527122 183412
47	**Contemporary Trade Directory Entries** Name: Majestic Hardware Location: 49, Charlbert Street, London, NW8 6JN Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	372	-	527107 183334
47	**Contemporary Trade Directory Entries** Name: Johns Wood Location: 47 Charlbert St, London, NW8 6JN Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	376	-	527116 183328
47	**Contemporary Trade Directory Entries** Name: Parks Location: 76-78, Allitsen Road, London, NW8 7BG Classification: Candle Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	402	-	527121 183301
48	**Contemporary Trade Directory Entries** Name: H R Brook Location: Flat 7, 7-8, St. Edmunds Terrace, London, NW8 7QP Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A14SW (E)	427	-	527594 183582
49	**Contemporary Trade Directory Entries** Name: Top Tier Blinds & Shutters Location: 11, Aquila Street, London, NW8 6PN Classification: Blinds, Awnings & Canopies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	432	-	526928 183341
50	**Contemporary Trade Directory Entries** Name: Groom 'N' Zoom Location: 106, Allitsen Road, London, NW8 7AY Classification: Pet Foods & Animal Feeds **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	468	-	527048 183248
51	**Contemporary Trade Directory Entries** Name: Arrow Enterprises (Uk) Ltd Location: 13, Lower Merton Rise, London, NW3 3RA Classification: Chemicals & Allied Products **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	479	-	527235 184231
51	**Contemporary Trade Directory Entries** Name: Swan Dry Cleaners Location: 19, Lower Merton Rise, London, NW3 3RA Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	506	-	527226 184259
52	**Contemporary Trade Directory Entries** Name: Snappy Snaps Location: 140, ST. JOHNS WOOD HIGH STREET, LONDON, NW8 7SE Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	493	-	526958 183254
52	**Contemporary Trade Directory Entries** Name: Johnson Cleaners (Uk) Ltd Location: 69-71, St. Johns Wood High Street, London, NW8 7NL Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	529	-	526935 183226
52	**Contemporary Trade Directory Entries** Name: Supasnaps Location: 69-71, St. Johns Wood High Street, London, NW8 7NL Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	529	-	526935 183226

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	**Contemporary Trade Directory Entries** Name: Shirt Makers England Ltd Location: Cochrane Mews, London, NW8 6NY Classification: Shirt Makers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A8NW (SW)	540	-	526925 183218
52	**Contemporary Trade Directory Entries** Name: Madame George Dry Cleaners Location: 9, CIRCUS ROAD, LONDON, NW8 6NX Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	543	-	526908 183223
53	**Contemporary Trade Directory Entries** Name: Ivy Dry Cleaners Location: 4, Queens Terrace, London, NW8 6DX Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	501	-	526673 183539
54	**Contemporary Trade Directory Entries** Name: Cleaning Services St Johns Wood Ltd Location: 61, Queens Grove, London, NW8 6ER Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	518	-	526641 183581
55	**Contemporary Trade Directory Entries** Name: Oslo Court Garage Location: Prince Albert Road, London, NW8 7EN Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (S)	529	-	527245 183177
55	**Contemporary Trade Directory Entries** Name: Oslo Court Garage Location: Prince Albert Road, London, NW8 7EN Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	529	-	527245 183177
55	**Contemporary Trade Directory Entries** Name: Oslo Court Garage Ltd Location: Prince Albert Road, London, NW8 7EN Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	529	-	527245 183177
55	**Contemporary Trade Directory Entries** Name: C D Carriage Location: Flat 2, Oslo Court, Prince Albert Road, London, NW8 7EN Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (S)	529	-	527245 183177
56	**Contemporary Trade Directory Entries** Name: Tempo Dry Cleaners Ltd Location: 98, St. Johns Wood High Street, London, NW8 7SH Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	537	-	527020 183184
57	**Contemporary Trade Directory Entries** Name: Formwork Architects Ltd Location: 47, St. Johns Wood High Street, London, NW8 7NJ Classification: Laundry & Dry Cleaning Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	559	-	526964 183180
58	**Contemporary Trade Directory Entries** Name: Fantastic Services St Johns Wood Location: 14, Finchley Road, London, NW8 6EB Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	563	-	526639 183465
58	**Contemporary Trade Directory Entries** Name: Buzy Cleaning Location: 18-22, Finchley Road, London, NW8 6EB Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (SW)	576	-	526615 183484

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**Contemporary Trade Directory Entries** Name: Soap Opera The Location: 8, Winchester Road, London, NW3 3NT Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	577	-	526882 184260
60	**Contemporary Trade Directory Entries** Name: Wellington Hospital Location: St Johns Wood,Circus Road, London, NW8 6PD Classification: Hospitals **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A8NW (SW)	578	-	526845 183221
61	**Contemporary Trade Directory Entries** Name: Scotts Location: Flat 15, Bray, Fellows Road, London, NW3 3JX Classification: Cabinet Makers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	586	-	527247 184337
62	**Contemporary Trade Directory Entries** Name: Lilliman & Cox Location: 29, St. Johns Wood High Street, London, NW8 7NH Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	588	-	527013 183133
63	**Contemporary Trade Directory Entries** Name: Elias Cleaners Ltd Location: 68, ST. JOHNS WOOD HIGH STREET, LONDON, NW8 7SH Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (S)	597	-	527077 183110
63	**Contemporary Trade Directory Entries** Name: Elias Dry Cleaners Location: 68, St. Johns Wood High Street, London, NW8 7SH Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	597	-	527077 183110
63	**Contemporary Trade Directory Entries** Name: Elias Cleaners Ltd Location: 68 St Johns Wood High Street, London, NW8 7SH Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	597	-	527077 183110
63	**Contemporary Trade Directory Entries** Name: Anna'S Laundrette Location: 62, St. Johns Wood High Street, London, NW8 7SH Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (S)	610	-	527087 183096
63	**Contemporary Trade Directory Entries** Name: Wellington Gallery Location: 1, St. Johns Wood High Street, London, NW8 7NG Classification: Furniture - Repairing & Restoring **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	642	-	527070 183066
64	**Contemporary Trade Directory Entries** Name: Tyre Tigers Location: 97, AVENUE ROAD, LONDON, NW3 5EJ Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	610	-	526723 184178
64	**Contemporary Trade Directory Entries** Name: Tyre Tigers Location: 97, AVENUE ROAD, LONDON, NW3 5EJ Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	610	-	526723 184178
64	**Contemporary Trade Directory Entries** Name: Fairfax Engineering Location: 1, Regency Parade, Finchley Road, London, NW3 5EQ Classification: Catering Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	**Contemporary Trade Directory Entries** Name: Medoroux Medical Ltd Location: 11, Regency Parade, Finchley Road, London, NW3 5EG Classification: Medical Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166
64	**Contemporary Trade Directory Entries** Name: Balco Ltd Location: 8, Regency Parade, Finchley Road, London, NW3 5EG Classification: Ventilators & Ventilation Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166
64	**Contemporary Trade Directory Entries** Name: Oxyvita Ltd Location: 11, Regency Parade, Finchley Road, London, NW3 5EG Classification: Medical Instruments - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166
64	**Contemporary Trade Directory Entries** Name: Golf Doktor Location: Former 8, Regency Parade, Finchley Road, London, NW3 5EG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166
64	**Contemporary Trade Directory Entries** Name: My 1st Call Locksmith Location: 4, Regency Parade, Finchley Road, London, NW3 5EG Classification: Lock Suppliers and Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	624	-	526694 184166
65	**Contemporary Trade Directory Entries** Name: Ibstock Building Products Ltd Location: 28 Wellington Rd, London, NW8 9SP Classification: Brick Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	612	-	526900 183150
66	**Contemporary Trade Directory Entries** Name: Komodo Location: 77c, King Henrys Road, London, NW3 3QU Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	637	-	527629 184199
66	**Contemporary Trade Directory Entries** Name: Komodo Location: 77, King Henrys Road, London, NW3 3QU Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	637	-	527629 184199
67	**Contemporary Trade Directory Entries** Name: Wellington Hospital Location: 27, Circus Road, London, NW8 6PG Classification: Hospitals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	658	-	526816 183144
68	**Contemporary Trade Directory Entries** Name: Layal Location: 10, St. Georges Terrace, London, NW1 8XH Classification: Lingerie & Hosiery Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	667	-	527800 184012
69	**Contemporary Trade Directory Entries** Name: Clean With Us Ltd Location: Flat 8, Leitch House, Alexandra Road, London, NW8 0SE Classification: Boat Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	671	-	526567 184075
70	**Contemporary Trade Directory Entries** Name: Danico Location: 31-35, Winchester Road, London, NW3 3NR Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	674	-	526803 184325

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
71	**Contemporary Trade Directory Entries** Name: Wellington Road Filling Station Location: 21, Wellington Road, London, NW8 9SQ Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	691	-	526864 183080
71	**Contemporary Trade Directory Entries** Name: M R H Service Station Location: Wellington Road, London, NW8 9SQ Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	699	-	526876 183065
72	**Contemporary Trade Directory Entries** Name: Butterworth Centre Location: 36 Circus Road, London, NW8 9SE Classification: Hospitals **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	700	-	526752 183137
73	**Contemporary Trade Directory Entries** Name: Hospital Of St John & St Elizabeth Location: 60, Grove End Road, London, NW8 9NH Classification: Hospitals **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: Ghosh Breast Clinic Location: 60 Grove End Road, Westminster, London, NW8 9NH Classification: Hospitals **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: Pathlabnw8 Location: 60, Grove End Road, London, NW8 9NH Classification: Medical & Dental Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: St John & St Elizabeth Hospital Location: 60, GROVE END ROAD, LONDON, NW8 9NH Classification: Hospitals **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: Mr Nilesh Agarwal - Well Women'S Clinic Location: 60 Grove End Road, Westminster, London, NW8 9NH Classification: Hospitals **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: Path Lab Location: 60, Grove End Road, London, NW8 9NH Classification: Hospitals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
73	**Contemporary Trade Directory Entries** Name: The London Spine Unit Location: 60, Grove End Road, London, NW8 9NH Classification: Hospitals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	721	-	526649 183196
74	**Contemporary Trade Directory Entries** Name: B P Service Station Location: Lords Service Station,21-41 Wellington Road, Westminster, London, NW8 9SQ Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	722	-	526898 183030

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
75	**Contemporary Trade Directory Entries** Name: Cork & Bottle Wines Ltd Location: 47, Ainger Road, London, NW3 3AH Classification: Bottle Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	728	-	527797 184141
75	**Contemporary Trade Directory Entries** Name: Fabric Lab Location: 54, Ainger Road, London, NW3 3AH Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	767	-	527822 184175
76	**Contemporary Trade Directory Entries** Name: Cedo Ltd Location: 32, Eton Avenue, London, NW3 3HL Classification: Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	741	-	527135 184498
77	**Contemporary Trade Directory Entries** Name: Modern Motors Ltd Location: 95, Adelaide Road, London, NW3 3XX Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	744	-	527628 184339
77	**Contemporary Trade Directory Entries** Name: Modern Motors Ltd Location: 95 Adelaide Rd, London, NW3 3QB Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	744	-	527628 184339
78	**Contemporary Trade Directory Entries** Name: New Brooms Location: 11, Chamberlain Street, London, NW1 8XB Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	745	-	527846 184095
78	**Contemporary Trade Directory Entries** Name: R Danzig & Sons Ltd Location: 65, Regents Park Road, London, NW1 8XD Classification: Furriers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (NE)	746	-	527862 184066
78	**Contemporary Trade Directory Entries** Name: Gale Furs Location: 65, Regents Park Road, London, NW1 8XD Classification: Furriers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (NE)	746	-	527862 184066
78	**Contemporary Trade Directory Entries** Name: T M K Aesthetics Lab Ltd Location: 128, REGENTS PARK ROAD, LONDON, NW1 8XL Classification: Laboratories **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	755	-	527890 184026
78	**Contemporary Trade Directory Entries** Name: Andrew Moor Associates Location: 14, CHAMBERLAIN STREET, LONDON, NW1 8XB Classification: Stained Glass Designers & Producers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	758	-	527862 184093
78	**Contemporary Trade Directory Entries** Name: Bearoak Ltd Location: 73, Regents Park Road, London, NW1 8UY Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	768	-	527872 184093
79	**Contemporary Trade Directory Entries** Name: Kara Services Location: 38, Fellows Road, London, NW3 3LH Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	746	-	527417 184459

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
80	**Contemporary Trade Directory Entries** Name: Swiss Cottage Dry Cleaners Location: 121, Finchley Road, London, NW3 6HY Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	746	-	526623 184270
80	**Contemporary Trade Directory Entries** Name: Fuji Photo Film (Uk) Ltd Location: 125, Finchley Road, London, NW3 6HY Classification: Photographic Equipment & Supplies - Wholesale **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	762	-	526612 184282
80	**Contemporary Trade Directory Entries** Name: London Overground Rail Operations Ltd Location: 125, Finchley Road, London, NW3 6HY Classification: Railways **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	763	-	526612 184282
81	**Contemporary Trade Directory Entries** Name: Sunny Clean Location: Flat 7, Hilltop Court 14-16, Alexandra Road, London, NW8 0DR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (NW)	748	-	526453 184025
81	**Contemporary Trade Directory Entries** Name: Sunny Clean Location: Flat 7, Hilltop Court 14-16, Alexandra Road, London, NW8 0DR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (NW)	748	-	526453 184025
82	**Contemporary Trade Directory Entries** Name: The Wellington Hospital Location: 8A, WELLINGTON PLACE, LONDON, NW8 9LE Classification: Hospitals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	750	-	526931 182989
83	**Contemporary Trade Directory Entries** Name: Polymer Fusion Coatings Location: Ground Floor 102 Regents Park Road, Camden, London, NW1 8UG Classification: Coating Specialists **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	750	-	527918 183932
84	**Contemporary Trade Directory Entries** Name: Fara Kids Charity Shop Location: 83 Park Road,Primrose Hill, London, NW1 8UY Classification: Mechanical Engineers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	785	-	527881 184114
84	**Contemporary Trade Directory Entries** Name: Northern Extremes Ltd Location: 4, Erskine Road, London, NW3 3AJ Classification: Footwear Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	794	-	527860 184166
84	**Contemporary Trade Directory Entries** Name: D & Mc Automobiles Location: A, 89, Regents Park Road, London, NW1 8UY Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	807	-	527890 184144
84	**Contemporary Trade Directory Entries** Name: R J Welsh Location: 156, Regents Park Road, London, NW1 8XN Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	820	-	527922 184111
84	**Contemporary Trade Directory Entries** Name: Clothing Co Location: 6, Erskine Road, London, NW3 3AJ Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	823	-	527883 184184

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
84	**Contemporary Trade Directory Entries** Name: Mel-Art Graphics Location: 158, Regents Park Road, London, NW1 8XN Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	824	-	527925 184115
84	**Contemporary Trade Directory Entries** Name: Blossom & Browne Sycamore Location: 160, Regents Park Road, London, NW1 8XN Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	829	-	527928 184120
85	**Contemporary Trade Directory Entries** Name: Spellbound Entertainment Ltd Location: 6, Primrose Mews, Sharpleshall Street, London, NW1 8YW Classification: Television & Video Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	787	-	527925 184028
86	**Contemporary Trade Directory Entries** Name: Mark One Motors Location: 5-6, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	831	-	527339 184570
86	**Contemporary Trade Directory Entries** Name: Hampstead Motor Services Uk Ltd Location: 4, LAMBOLLE PLACE, LONDON, NW3 4PD Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	844	-	527295 184591
86	**Contemporary Trade Directory Entries** Name: Hmc Fleet Maintenance Centre Location: 3, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	847	-	527346 184585
86	**Contemporary Trade Directory Entries** Name: Little & Pace Location: 3, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	847	-	527346 184585
86	**Contemporary Trade Directory Entries** Name: Belsize Automotive Repairs Location: 3, ETON GARAGES, LAMBOLLE PLACE, LONDON, NW3 4PE Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	850	-	527344 184588
86	**Contemporary Trade Directory Entries** Name: Belsize Motors Location: 3, Lambolle Place, London, NW3 4PD Classification: Car Engine Tuning & Diagnostic Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	853	-	527299 184600
86	**Contemporary Trade Directory Entries** Name: Rayden Location: 17, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	854	-	527326 184596
86	**Contemporary Trade Directory Entries** Name: Autotech Hamstead Location: 3, LAMBOLLE PLACE, LONDON, NW3 4PD Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	854	-	527299 184600
86	**Contemporary Trade Directory Entries** Name: Little & Pace Motors Location: 2-3 Eton Garages,Lambolle Pl, London, NW3 4PE Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18NE (N)	858	-	527346 184596

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	**Contemporary Trade Directory Entries** Name: Porsheworx Engineering Ltd Location: 2, LAMBOLLE PLACE, LONDON, NW3 4PD Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	861	-	527303 184607
86	**Contemporary Trade Directory Entries** Name: Beta Lighting Ltd Location: 19, Eton Garages, Lambolle Place, London, NW3 4PE Classification: Lighting Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	870	-	527332 184610
87	**Contemporary Trade Directory Entries** Name: Technology Pools Location: 67 Loudoun Road, London, NW8 0DQ Classification: Swimming Pool Contractors, Repairers & Service **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	836	-	526351 184007
87	**Contemporary Trade Directory Entries** Name: Drown & Co Ltd Location: 73, Loudoun Road, London, NW8 0DQ Classification: Art Restoration & Picture Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	838	-	526346 183997
87	**Contemporary Trade Directory Entries** Name: Francis Butlin Location: 73, Loudoun Road, London, NW8 0DQ Classification: Art Restoration & Picture Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	838	-	526346 183997
87	**Contemporary Trade Directory Entries** Name: Susan M Moore Fbapcr Location: 73, Loudoun Road, London, NW8 0DQ Classification: Art Restoration & Picture Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	838	-	526346 183997
87	**Contemporary Trade Directory Entries** Name: Swiss Cottage Launderette Location: 7, Langtry Walk, London, NW8 0DU Classification: Laundries & Launderettes **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	845	-	526341 184007
87	**Contemporary Trade Directory Entries** Name: Artworks Euro Ltd Location: 69, Loudoun Road, London, NW8 0DB Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	845	-	526341 184007
87	**Contemporary Trade Directory Entries** Name: Swiss Cottage Launderette Location: 7, Langtry Walk, London, NW8 0DU Classification: Laundries & Launderettes **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NW (W)	845	-	526341 184007
87	**Contemporary Trade Directory Entries** Name: Master Clean Dry Cleaners Location: 2, LANGTRY WALK, LONDON, NW8 0DU Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NW (W)	846	-	526341 184006
87	**Contemporary Trade Directory Entries** Name: Master Clean Dry Cleaners Location: 2, Langtry Walk, London, NW8 0DU Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NW (W)	846	-	526341 184006
88	**Contemporary Trade Directory Entries** Name: Chase Dry Cleaners Location: 74 Whittom,Primrose Hill Rd, London, NW3 4AB Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18NE (N)	844	-	527493 184534

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Contemporary Trade Directory Entries** Name: R K P Hardware D I Y Location: 51, Englands Lane, LONDON, NW3 4YD Classification: Hardware **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	874	-	527517 184557
88	**Contemporary Trade Directory Entries** Name: Chequers Dry Cleaners Location: 48, ENGLANDS LANE, LONDON, NW3 4UE Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	889	-	527502 184579
89	**Contemporary Trade Directory Entries** Name: The Studio Location: 170, Regents Park Road, London, NW1 8XN Classification: Perfume Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	855	-	527946 184141
89	**Contemporary Trade Directory Entries** Name: P H Factor Location: 172, Regents Park Road, London, NW1 8XN Classification: Toiletries **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	860	-	527949 184145
90	**Contemporary Trade Directory Entries** Name: Gootc Ltd Location: 26, Northways Parade, London, NW3 5DN Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	859	-	526630 184429
90	**Contemporary Trade Directory Entries** Name: Red Spot Location: 26, NORTHWAYS PARADE, LONDON, NW3 5DN Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	859	-	526630 184429
90	**Contemporary Trade Directory Entries** Name: Trans-World Trading Ltd Location: 24, Northways Parade, London, NW3 5DN Classification: Photographic Equipment & Supplies - Wholesale **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	859	-	526630 184429
90	**Contemporary Trade Directory Entries** Name: Smart Choice Dry Cleaners Location: 23, NORTHWAYS PARADE, LONDON, NW3 5DN Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	859	-	526630 184429
90	**Contemporary Trade Directory Entries** Name: Sevenoaks Sound & Vision Ltd Location: 15, Northways Parade, London, NW3 5EN Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	859	-	526630 184429
91	**Contemporary Trade Directory Entries** Name: St Johns Wood Autos Location: Langford Place, Basement 0f 22 Abbey Road, London, NW8 9DN Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	864	-	526419 183246
91	**Contemporary Trade Directory Entries** Name: Langford Motors Location: Langford Ct,22 Abbey Rd, London, NW8 9DN Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	865	-	526418 183246
92	**Contemporary Trade Directory Entries** Name: Printing.Com Location: 3, Harben Parade, Finchley Road, London, NW3 6JP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	868	-	526586 184404

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
92	**Contemporary Trade Directory Entries** Name: Kall Kwik Location: 3, Harben Parade, Finchley Road, London, NW3 6JP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	868	-	526586 184404
92	**Contemporary Trade Directory Entries** Name: A K Design & Print Location: 3 Harben Parade,Finchley Road, Camden, London, NW3 6JP Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	868	-	526587 184405
93	**Contemporary Trade Directory Entries** Name: Cleaners South Hampstead Location: 48a, Boundary Road, London, NW8 0HJ Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	886	-	526266 183880
94	**Contemporary Trade Directory Entries** Name: Harringtons Construction Ltd Location: 57, Belsize Road, London, NW6 4BE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (W)	892	-	526318 184076
94	**Contemporary Trade Directory Entries** Name: Cresta Motors Location: 59-65, Belsize Road, London, NW6 4BE Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (W)	906	-	526300 184067
95	**Contemporary Trade Directory Entries** Name: Clive Sutton Ltd Location: 151B, PARK ROAD, LONDON, NW8 7HT Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (S)	902	-	527171 182798
95	**Contemporary Trade Directory Entries** Name: Ovefinch Location: 151-153, Park Road, London, NW8 7HT Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	904	-	527160 182796
95	**Contemporary Trade Directory Entries** Name: Clive Sutton Group Ltd Location: 151-153, Park Road, London, NW8 7HT Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	904	-	527160 182796
95	**Contemporary Trade Directory Entries** Name: Clive Sutton Group Ltd Location: 151-153, Park Road, London, NW8 7HT Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	904	-	527160 182796
95	**Contemporary Trade Directory Entries** Name: Overfinch Location: Flat, 151, Park Road, London, NW8 7HT Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (S)	907	-	527166 182793
95	**Contemporary Trade Directory Entries** Name: Lords Dry Cleaners Location: 4, LODGE ROAD, LONDON, NW8 7JA Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (S)	923	-	527192 182777
95	**Contemporary Trade Directory Entries** Name: Dominion (England) Ltd Location: Flat 1, Strathmore Court, 143, Park Road, London, NW8 7HY Classification: Road Construction Equipment Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8SE (S)	923	-	527179 182777

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	**Contemporary Trade Directory Entries** Name: Anthony Rau Location: 38, FAIRFAX ROAD, LONDON, NW6 4HA Classification: Cabinet Makers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	918	-	526391 184257
96	**Contemporary Trade Directory Entries** Name: Paper Moon Location: 53, Fairfax Road, London, NW6 4EL Classification: Wallpapers & Wall Coverings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	949	-	526350 184254
96	**Contemporary Trade Directory Entries** Name: Pro Carpet Cleaners London Location: Flat 1, Gladstone Court, 49, Fairfax Road, London, NW6 4EP Classification: Carpet, Curtain & Upholstery Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	956	-	526355 184273
96	**Contemporary Trade Directory Entries** Name: Cleansville Location: 39, Fairfax Road, London, NW6 4EL Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	963	-	526362 184295
97	**Contemporary Trade Directory Entries** Name: Blue Tunnel Ltd Location: C, 119, Rowley Way, London, NW8 0SP Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	920	-	526258 183993
98	**Contemporary Trade Directory Entries** Name: Volvo Cars Location: 1, Northways Parade, London, NW3 5EN Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	921	-	526596 184482
98	**Contemporary Trade Directory Entries** Name: Kwik-Fit Location: 1, Northways Parade, London, NW3 5EN Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	921	-	526596 184482
98	**Contemporary Trade Directory Entries** Name: Volvo Cars London Location: 1, Northways Parade, London, NW3 5EN Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	921	-	526596 184482
98	**Contemporary Trade Directory Entries** Name: Speedway Location: 1, Northways Parade, London, NW3 5EN Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	921	-	526596 184482
99	**Contemporary Trade Directory Entries** Name: Haywood Motors Location: A, 23, Lambolle Place, London, NW3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	927	-	527361 184663
99	**Contemporary Trade Directory Entries** Name: Belsize Motors Location: A, 23, Lambolle Place, London, NW3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	927	-	527361 184663
99	**Contemporary Trade Directory Entries** Name: J A Harnett Location: 4, Lancaster Stables, Lambolle Place, London, NW3 4PH Classification: Antiques - Repairing & Restoring **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	929	-	527379 184661

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
100	**Contemporary Trade Directory Entries** Name: Bonsai Breakdown Location: Flat 7, Noel House, Harben Road, London, NW6 4RL Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	934	-	526510 184423
101	**Contemporary Trade Directory Entries** Name: Drennan & Co Location: 64, Belsize Park, London, NW3 4EH Classification: Door & Gate Operating Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	938	-	526723 184584
102	**Contemporary Trade Directory Entries** Name: Red Grey Ltd Location: 32, Englands Lane, London, NW3 4UE Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (N)	939	-	527522 184625
102	**Contemporary Trade Directory Entries** Name: Allchin Pharmacy Location: 28, Englands Lane, London, NW3 4UE Classification: Pharmaceutical Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (N)	946	-	527536 184627
103	**Contemporary Trade Directory Entries** Name: Primrose Carpet Cleaners Ltd Location: 4a, Manley Street, London, NW1 8LT Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	962	-	528134 183938
104	**Contemporary Trade Directory Entries** Name: Clean 4 You Location: 55, Belsize Park, London, NW3 4EE Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	964	-	526650 184571
105	**Contemporary Trade Directory Entries** Name: Cleansville Location: 3-5, Fairhazel Gardens, London, NW6 3QE Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	965	-	526259 184121
105	**Contemporary Trade Directory Entries** Name: Connoisseur Dry Cleaners Location: 3-5, FAIRHAZEL GARDENS, LONDON, NW6 3QE Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	965	-	526259 184121
105	**Contemporary Trade Directory Entries** Name: Jacques Bouvier Ltd Location: 4-5, Coleridge Gardens, London, NW6 3QH Classification: Leather Merchants & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A17SW (NW)	975	-	526244 184115
105	**Contemporary Trade Directory Entries** Name: Jean Patou Ltd Location: 3, Coleridge Gardens, London, NW6 3QH Classification: Perfume Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A17SW (NW)	975	-	526244 184114
105	**Contemporary Trade Directory Entries** Name: Maurice Douek Ltd Location: 3, Coleridge Gardens, London, NW6 3QH Classification: Perfume Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A17SW (NW)	975	-	526244 184114
105	**Contemporary Trade Directory Entries** Name: Eurotrade International Location: Coleridge Gdns, London, NW6 3QH Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A17SW (NW)	977	-	526242 184114

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	**Contemporary Trade Directory Entries** Name: Swiss Dry Cleaners Location: 13, FAIRHAZEL GARDENS, LONDON, NW6 3QE Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	989	-	526238 184135
106	**Contemporary Trade Directory Entries** Name: Butcher Ltd Location: 8, Fitzroy Road, London, NW1 8TX Classification: Plaster Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (E)	967	-	528090 184099
107	**Contemporary Trade Directory Entries** Name: Marguerite Marr Location: Flat 403, Elm Tree Court, Elm Tree Road, London, NW8 9JT Classification: Art Restoration & Picture Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SW)	967	-	526685 182862
108	**Contemporary Trade Directory Entries** Name: N W Creative Location: New College Parade, Finchley Road, London, NW3 5EP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	973	-	526536 184500
109	**Contemporary Trade Directory Entries** Name: Tom Thumb Location: 52, Auden Place, London, NW1 8ND Classification: Homefurnishings - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	974	-	528162 183849
110	**Contemporary Trade Directory Entries** Name: Mercantile Radio Services Ltd Location: 134a, Gloucester Avenue, London, NW1 8JA Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	979	-	528056 184199
110	**Contemporary Trade Directory Entries** Name: London Communications Plc Location: 134-136, Gloucester Avenue, London, NW1 8JA Classification: Radio Communication Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	979	-	528056 184199
110	**Contemporary Trade Directory Entries** Name: London Communications Plc Location: 134-136, Gloucester Avenue, London, NW1 8JA Classification: Radio Communication Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	979	-	528056 184199
111	**Contemporary Trade Directory Entries** Name: Spring Fresh Cleaning Services Location: A, 19, Ainsworth Way, London, NW8 0SR Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	979	-	526170 183869
112	**Contemporary Trade Directory Entries** Name: Chalcot House Services Location: Flat 1, 51, Belsize Park Gardens, London, NW3 4JL Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	981	-	527202 184737
113	**Contemporary Trade Directory Entries** Name: Gayle Mcvay Location: 52, Belsize Park Gardens, London, NW3 4ND Classification: Hats & Caps - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	994	-	527379 184728
114	**Contemporary Trade Directory Entries** Name: Schmitt Automobile Services Ltd Location: 109, Goldhurst Terrace, London, NW6 3HA Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	996	-	526282 184233

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	**Contemporary Trade Directory Entries** Name: Abbey Dry Cleaners Location: 7, BLENHEIM TERRACE, LONDON, NW8 0EH Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NW (W)	996	-	526212 183360
115	**Contemporary Trade Directory Entries** Name: Siciliana Dry Cleaners Location: 6, BLENHEIM TERRACE, LONDON, NW8 0EB Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	996	-	526199 183394
116	**Fuel Station Entries** Name: Mfg Lords Location: 21-41, Wellington Road , St Johns Wood , London, Inner London, NW8 9SQ Brand: BP Premises Type: Petrol Station **Status: Open** Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	691	-	526864 183080
117	**Fuel Station Entries** Name: Boundary Road Service Station Location: 150, Loudon Road , St Johns Wood , London, Inner London, NW8 0DH Brand: Total Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A12NW (W)	753	-	526423 183961
118	**Fuel Station Entries** Name: Loudon Road Service Station Location: 21a, Loudon Road , St Johns Wood , London, Inner London, NW8 0NB Brand: Unbranded Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	766	-	526375 183661
119	**Points of Interest - Commercial Services** Name: Lions Gate Location: 58 Acacia Road, London, NW8 6AG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SE (SW)	461	9	526819 183393
120	**Points of Interest - Commercial Services** Name: Yemen Gulf Line Location: Prince Albert House 2, Kingsmill Terrace, London, NW8 6BN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (SW)	520	9	526893 183259
121	**Points of Interest - Commercial Services** Name: C D Location: Prince Albert Road, London, NW8 7EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	529	9	527245 183177
121	**Points of Interest - Commercial Services** Name: Oslo Court Garage Location: Prince Albert Road, London, NW8 7EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	529	9	527245 183177
121	**Points of Interest - Commercial Services** Name: C D Carriage Co Location: Prince Albert Road, London, NW8 7EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	529	9	527245 183177
121	**Points of Interest - Commercial Services** Name: Oslo Court Garage Location: Prince Albert Road, London, NW8 7EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (S)	529	9	527245 183177

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
122	**Points of Interest - Commercial Services** Name: Tyre Tigers Location: 97 Avenue Road, London, NW3 5EJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	610	9	526723 184178
122	**Points of Interest - Commercial Services** Name: Golf Doktor Location: 96 Regency Pde, Finchley Rd, London, NW3 5EG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	624	9	526693 184165
122	**Points of Interest - Commercial Services** Name: Kar Dok Location: Regency Service Station 96, Finchley Road, London, NW3 5EL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	647	9	526690 184196
123	**Points of Interest - Commercial Services** Name: Atton Fleet Care Ltd Location: 45 Quickswood, London, NW3 3SA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	613	9	527433 184308
124	**Points of Interest - Commercial Services** Name: Modern Motors Ltd Location: 95 Adelaide Rd, London, NW3 3QB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	744	9	527628 184339
124	**Points of Interest - Commercial Services** Name: Modern Motors Ltd Location: 95 Adelaide Road, London, NW3 3XX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	744	9	527628 184339
125	**Points of Interest - Commercial Services** Name: Blue Team Location: 5-6 Eton Garages, Lambolle Place, London, NW3 4PE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	823	9	527336 184562
125	**Points of Interest - Commercial Services** Name: Hampstead Motor Services UK Ltd Location: 4 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	844	9	527295 184591
125	**Points of Interest - Commercial Services** Name: Hampstead Motor Services Ltd Location: 4 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	845	9	527295 184591
125	**Points of Interest - Commercial Services** Name: Camden M O T Garage Location: 3 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	847	9	527346 184585
125	**Points of Interest - Commercial Services** Name: Hmc Fleet Maintenance Centre Location: 3 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	847	9	527346 184585
125	**Points of Interest - Commercial Services** Name: Little & Pace Motors Location: 3 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	847	9	527346 184585

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
125	**Points of Interest - Commercial Services** Name: Belsize Automotive Repairs Location: 3 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	850	9	527344 184588
125	**Points of Interest - Commercial Services** Name: Autotech London Ltd Location: 3 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	853	9	527299 184600
125	**Points of Interest - Commercial Services** Name: Rayden Car Repairs Location: 17 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	854	9	527326 184596
125	**Points of Interest - Commercial Services** Name: Rayden Car Repairs Location: 17 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	854	9	527326 184596
125	**Points of Interest - Commercial Services** Name: Rayden Car Repairs Location: 17 Eton Garages, Lambolle Place, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	854	9	527326 184596
125	**Points of Interest - Commercial Services** Name: Autotech Hamstead Location: 3 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	854	9	527299 184600
125	**Points of Interest - Commercial Services** Name: Kassbet Ltd Location: 2-3 Eton Garages, Lambolle Pl, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	855	9	527349 184592
125	**Points of Interest - Commercial Services** Name: Little & Pace Motors Location: 2-3 Eton Garages, Lambolle Pl, London, NW3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	858	9	527346 184596
125	**Points of Interest - Commercial Services** Name: Porsheworx Location: 2 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	861	9	527303 184607
125	**Points of Interest - Commercial Services** Name: Porsheworx Engineering Ltd Location: 2 Lambolle Place, London, NW3 4PD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	861	9	527303 184607
126	**Points of Interest - Commercial Services** Name: Thorne Henderson Location: 79 Loudoun Road, London, NW8 0DQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12NW (W)	838	9	526346 183997
127	**Points of Interest - Commercial Services** Name: St Johns Wood Autos Location: Abbey Road, London, NW8 9DN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	846	9	526443 183244

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
127	**Points of Interest - Commercial Services** Name: St Johns Wood Autos Location: Langford Place, Basement 0f 22 Abbey Road, Westminster, London, NW8 9DN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	864	9	526419 183246
128	**Points of Interest - Commercial Services** Name: Speedway Autocare Location: 1 Northways Parade, London, NW3 5EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	921	9	526596 184482
128	**Points of Interest - Commercial Services** Name: Speedway Autocare Ltd Location: 1 Northways Parade, London, NW3 5EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	921	9	526596 184482
128	**Points of Interest - Commercial Services** Name: Speedway Location: 1 Northways Parade, London, NW3 5EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	921	9	526596 184482
128	**Points of Interest - Commercial Services** Name: Volvo Cars London Location: 1a Northways Parade, London, NW3 5EN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NE (NW)	936	9	526584 184491
129	**Points of Interest - Commercial Services** Name: Belsize Motors Location: 23 Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	926	9	527361 184662
129	**Points of Interest - Commercial Services** Name: Haywood Motors Location: 23A Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	926	9	527361 184662
129	**Points of Interest - Commercial Services** Name: Haywood Motors (Fleetmead) Location: 23A Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	927	9	527361 184663
129	**Points of Interest - Commercial Services** Name: Haywood Motors Location: A 23 Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	927	9	527361 184663
129	**Points of Interest - Commercial Services** Name: Belsize Motors Location: A 23 Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	927	9	527361 184663
129	**Points of Interest - Commercial Services** Name: Belsize Motors Location: 23a Lambolle Place, London, NW3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	927	9	527361 184663
130	**Points of Interest - Commercial Services** Name: Schmitt Automobile Services Ltd Location: 109 Goldhurst Terrace, London, NW6 3HA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	996	9	526282 184233

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	**Points of Interest - Commercial Services** Name: Schmitt Automobile Services Ltd Location: 109 Goldhurst Terrace, London, NW6 3HA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	996	9	526282 184233
131	**Points of Interest - Education and Health** Name: The Wellington Hospital North Building Location: 27 Circus Road, London, NW8 6PG Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	658	9	526816 183144
131	**Points of Interest - Education and Health** Name: Wellington Hospital Location: 8a Wellington Place, London, NW8 9LE Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	674	9	526814 183127
131	**Points of Interest - Education and Health** Name: The Wellington Hospital Location: 8a Wellington Place, London, NW8 9LE Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	674	9	526814 183127
132	**Points of Interest - Education and Health** Name: Hospital of St John & St Elizabeth Location: 60 Grove End Road, London, NW8 9NH Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	721	9	526649 183196
132	**Points of Interest - Education and Health** Name: Hospital of St John & St Elizabeth Location: 60 Grove End Road, London, NW8 9NH Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	721	9	526649 183196
132	**Points of Interest - Education and Health** Name: Hospital of St John & St Elizabeth Location: 60 Grove End Road, London, NW8 9NH Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A7NE (SW)	721	9	526649 183196
133	**Points of Interest - Education and Health** Name: The Wellington Hospital Location: 8a Wellington Place, London, NW8 9LE Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A8SW (S)	750	9	526931 182989
134	**Points of Interest - Manufacturing and Production** Name: Air Shaft Location: NW3 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	328	9	527172 184085
135	**Points of Interest - Manufacturing and Production** Name: Castle Trading Wellington Building Location: 28-32 Wellington Road, London, NW8 9SP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NW (SW)	610	9	526904 183150
135	**Points of Interest - Manufacturing and Production** Name: Castle Trading Ltd Location: 28-32 Wellington Road, London, NW8 9SP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NW (SW)	610	9	526904 183150
135	**Points of Interest - Manufacturing and Production** Name: Castle M Location: 28-32 Wellington Road, London, NW8 9SP Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NW (SW)	610	9	526904 183150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
136	**Points of Interest - Manufacturing and Production** Name: Air Shaft Location: NW3 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	676	9	527585 184286
136	**Points of Interest - Manufacturing and Production** Name: Air Shaft Location: NW3 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	693	9	527623 184278
137	**Points of Interest - Manufacturing and Production** Name: Air Shaft Location: NW8 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	687	9	526460 183836
138	**Points of Interest - Manufacturing and Production** Name: Shaft Location: NW8 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	713	9	526920 183032
139	**Points of Interest - Manufacturing and Production** Name: Shaft Location: NW6 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	816	9	526507 184242
140	**Points of Interest - Manufacturing and Production** Name: Works Location: NW1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	899	9	527948 184223
140	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	902	9	527951 184224
140	**Points of Interest - Manufacturing and Production** Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	923	9	528008 184170
140	**Points of Interest - Manufacturing and Production** Name: Factory Location: NW1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19SE (NE)	924	9	528007 184174
141	**Points of Interest - Manufacturing and Production** Name: Shaft Location: NW6 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A17NW (NW)	958	9	526479 184425
142	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (E)	959	9	528086 184086
142	**Points of Interest - Manufacturing and Production** Name: Works Location: NW1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (E)	959	9	528086 184087

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (E)	971	9	528096 184094
142	**Points of Interest - Manufacturing and Production** Name: Works Location: NW1 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (E)	972	9	528097 184094
143	**Points of Interest - Public Infrastructure** Name: St John's Wood Police Station Location: St. Johns Wood Police Station 20 & A Half, Newcourt Street, London, NW8 7AA Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NE (S)	613	9	527170 183087
143	**Points of Interest - Public Infrastructure** Name: St Johns Wood Police Station Location: St. Johns Wood Police Station 20 & A Hal, Newcourt Street, London, NW8 7AA Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NE (S)	613	9	527170 183087
143	**Points of Interest - Public Infrastructure** Name: Metroploitan Police Service St Johns Wood Location: St. Johns Wood Police Station & A Half 20, Newcourt Street, London, NW8 7AA Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A8NE (S)	613	9	527170 183087
144	**Points of Interest - Public Infrastructure** Name: BP Service Station Location: Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	688	9	526869 183080
144	**Points of Interest - Public Infrastructure** Name: M R H Service Station Location: 21-41 Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	689	9	526868 183080
144	**Points of Interest - Public Infrastructure** Name: Wellington Service Station Location: Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	691	9	526864 183080
144	**Points of Interest - Public Infrastructure** Name: BP Service Station Location: Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	691	9	526864 183080
144	**Points of Interest - Public Infrastructure** Name: BP Connect Location: Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	691	9	526864 183080
144	**Points of Interest - Public Infrastructure** Name: Wellington Service Station Location: Cavendishhouse, 21, Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	691	9	526864 183080

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
144	**Points of Interest - Public Infrastructure** Name: Mfg Lords Location: Wellington Road, London, NW8 9SQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (SW)	691	9	526864 183080
145	**Points of Interest - Public Infrastructure** Name: Belsize Fire Station Location: Belsize Fire Station 36, Lancaster Grove, London, NW3 4PB Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A18NE (N)	785	9	527241 184539
146	**Points of Interest - Public Infrastructure** Name: South Hampstead Rail Station Location: Loudoun Road, NW8 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A17SW (NW)	834	9	526379 184070
146	**Points of Interest - Public Infrastructure** Name: South Hampstead Station Location: Loudoun Road, NW8 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A17SW (NW)	834	9	526379 184070
147	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (S)	274	9	527177 183426
147	**Points of Interest - Recreational and Environmental** Name: Playground Location: St John'S Wood Terrace, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (S)	274	9	527177 183426
147	**Points of Interest - Recreational and Environmental** Name: Playground Location: Allitsen Road, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (S)	306	9	527204 183396
147	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SE (S)	307	9	527195 183394
148	**Points of Interest - Recreational and Environmental** Name: Play Area Location: NW3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	529	9	527029 184268
149	**Points of Interest - Recreational and Environmental** Name: Play Area Location: NW1 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NE (SE)	590	9	527409 183162
150	**Points of Interest - Recreational and Environmental** Name: Playground Location: Fellows Road, NW3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	608	9	527238 184361
150	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	609	9	527238 184362

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	**Points of Interest - Recreational and Environmental** Name: Playground Location: Avenue Road, NW3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A17SE (NW)	623	9	526777 184244
151	**Points of Interest - Recreational and Environmental** Name: Adventure Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	636	9	526804 184281
152	**Points of Interest - Recreational and Environmental** Name: Play Area Location: NW3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	629	9	527366 184353
153	**Points of Interest - Recreational and Environmental** Name: Play Area Location: NW3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	664	9	527528 184313
154	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	710	9	527756 184168
155	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	714	9	527902 183631
155	**Points of Interest - Recreational and Environmental** Name: Playground Location: Prince Albert Road, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	714	9	527902 183631
156	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	721	9	526558 184152
156	**Points of Interest - Recreational and Environmental** Name: Playground Location: Hilgrove Road, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	721	9	526558 184152
156	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	738	9	526535 184149
156	**Points of Interest - Recreational and Environmental** Name: Playground Location: Hilgrove Road, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	738	9	526535 184149
157	**Points of Interest - Recreational and Environmental** Name: Playground Location: Wellington Road, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8SW (S)	762	9	527048 182948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
157	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	770	9	527050 182939
158	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Loudoun Road, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A7NE (SW)	795	9	526536 183207
158	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	796	9	526536 183205
159	**Points of Interest - Recreational and Environmental** Name: Play Area Location: NW1 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14NE (E)	884	9	528013 184066
160	**Points of Interest - Recreational and Environmental** Name: Regent's Park Location: London, NW1 Category: Recreational Class Code: Municipal Parks And Gardens Positional Accuracy: Positioned to address or location	A9NE (SE)	907	9	527870 183126
161	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	938	9	526477 184395
161	**Points of Interest - Recreational and Environmental** Name: Playground Location: Harben Road, NW6 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A17SW (NW)	942	9	526479 184402
162	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	982	9	526174 183909
162	**Points of Interest - Recreational and Environmental** Name: Playground Location: Nr Rowley Way, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	982	9	526174 183909
162	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A11NE (W)	1000	9	526153 183897
162	**Points of Interest - Recreational and Environmental** Name: Playground Location: Nr Rowley Way, NW8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A11NE (W)	1000	9	526153 183896
163	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	987	9	528133 183425

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	**Points of Interest - Recreational and Environmental** Name: Regent's Park Location: London, NW1 Category: Recreational Class Code: Municipal Parks And Gardens Positional Accuracy: Positioned to address or location	A9NE (SE)	989	9	527971 183120
165	**Underground Electrical Cables** Unique Feature Identifier: 10005742 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NW (NW)	187	10	527065 183915
166	**Underground Electrical Cables** Unique Feature Identifier: 10005962 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NW (NW)	187	10	527065 183915
167	**Underground Electrical Cables** Unique Feature Identifier: 10005967 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NW (NW)	203	10	526959 183822
168	**Underground Electrical Cables** Unique Feature Identifier: 10007952 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NW (NW)	203	10	526960 183823
169	**Underground Electrical Cables** Unique Feature Identifier: 10006209 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NE (NE)	297	10	527435 183907
170	**Underground Electrical Cables** Unique Feature Identifier: 10008209 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13NE (NE)	298	10	527443 183898
171	**Underground Electrical Cables** Unique Feature Identifier: 10007679 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A13NE (NE)	301	10	527444 183903
172	**Underground Electrical Cables** Unique Feature Identifier: 10008201 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A13NE (NE)	309	10	527469 183875
173	**Underground Electrical Cables** Unique Feature Identifier: 10006069 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13SW (SW)	319	10	526900 183512

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
174	**Underground Electrical Cables** Unique Feature Identifier: 10005937 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A13SW (SW)	320	10	526900 183511
175	**Underground Electrical Cables** Unique Feature Identifier: 10005960 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A18SW (NW)	398	10	526965 184102
176	**Underground Electrical Cables** Unique Feature Identifier: 10006130 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A18SW (NW)	399	10	526965 184102
177	**Underground Electrical Cables** Unique Feature Identifier: 10006210 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A14NW (E)	423	10	527618 183750
178	**Underground Electrical Cables** Unique Feature Identifier: 10005733 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A14NW (E)	431	10	527625 183759
179	**Underground Electrical Cables** Unique Feature Identifier: 10008141 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A14SW (E)	445	10	527616 183589
180	**Underground Electrical Cables** Unique Feature Identifier: 10008222 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8NE (SE)	471	10	527497 183363
181	**Underground Electrical Cables** Unique Feature Identifier: 10007875 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8NE (SE)	472	10	527498 183362
182	**Underground Electrical Cables** Unique Feature Identifier: 10007835 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8NE (SE)	475	10	527461 183327
183	**Underground Electrical Cables** Unique Feature Identifier: 10008290 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A8NE (SE)	476	10	527465 183328

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
184	**Underground Electrical Cables** Unique Feature Identifier: 10005732 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A19SW (NE)	495	10	527528 184098
185	**Underground Electrical Cables** Unique Feature Identifier: 10008256 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A19SW (NE)	496	10	527524 184103
186	**Underground Electrical Cables** Unique Feature Identifier: 10006068 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A7NE (SW)	497	10	526811 183352
187	**Underground Electrical Cables** Unique Feature Identifier: 10007707 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A7NE (SW)	497	10	526811 183352
188	**Underground Electrical Cables** Unique Feature Identifier: 10006662 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A14SW (SE)	501	10	527575 183407
189	**Underground Electrical Cables** Unique Feature Identifier: 10006670 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A14SW (SE)	534	10	527645 183445
190	**Underground Electrical Cables** Unique Feature Identifier: 10006618 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8NE (S)	544	10	527374 183197
191	**Underground Electrical Cables** Unique Feature Identifier: 10008027 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A14SW (E)	547	10	527723 183594
192	**Underground Electrical Cables** Unique Feature Identifier: 10005832 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8NE (S)	601	10	527339 183124
193	**Underground Electrical Cables** Unique Feature Identifier: 10006260 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A19SW (NE)	656	10	527518 184310

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
194	**Underground Electrical Cables** Unique Feature Identifier: 10005731 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A19SW (NE)	673	10	527518 184330
195	**Underground Electrical Cables** Unique Feature Identifier: 10005416 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A17SE (NW)	710	10	526801 184367
196	**Underground Electrical Cables** Unique Feature Identifier: 10005934 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A17SE (NW)	710	10	526801 184366
197	**Underground Electrical Cables** Unique Feature Identifier: 10005930 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A8SE (S)	749	10	527296 182962
198	**Underground Electrical Cables** Unique Feature Identifier: 10005834 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A14SE (E)	755	10	527931 183564
199	**Underground Electrical Cables** Unique Feature Identifier: 10007708 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A17NE (NW)	759	10	526777 184410
200	**Underground Electrical Cables** Unique Feature Identifier: 10005918 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A17NE (NW)	759	10	526777 184409
201	**Underground Electrical Cables** Unique Feature Identifier: 10006211 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8SE (S)	823	10	527293 182887
202	**Underground Electrical Cables** Unique Feature Identifier: 10006988 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A14SE (E)	825	10	528009 183598
203	**Underground Electrical Cables** Unique Feature Identifier: 10005936 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A7NE (SW)	837	10	526582 183099

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
204	**Underground Electrical Cables** Unique Feature Identifier: 10005946 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 3rd May 2018	A19SW (NE)	837	10	527720 184385
205	**Underground Electrical Cables** Unique Feature Identifier: 10007705 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A7NE (SW)	837	10	526582 183099
206	**Underground Electrical Cables** Unique Feature Identifier: 10006259 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 23rd March 2018	A19NW (NE)	852	10	527719 184405
207	**Underground Electrical Cables** Unique Feature Identifier: 10005421 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 23rd March 2018	A19NW (NE)	852	10	527719 184405
208	**Underground Electrical Cables** Unique Feature Identifier: 10008501 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 29th July 2020	A8SE (S)	868	10	527342 182850
209	**Underground Electrical Cables** Unique Feature Identifier: 10008502 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 29th July 2020	A8SE (S)	868	10	527342 182850
210	**Underground Electrical Cables** Unique Feature Identifier: 10005730 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A19NW (NE)	871	10	527732 184418
211	**Underground Electrical Cables** Unique Feature Identifier: 10007876 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8SE (S)	873	10	527290 182835
212	**Underground Electrical Cables** Unique Feature Identifier: 10005831 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8SE (S)	941	10	527280 182766
213	**Underground Electrical Cables** Unique Feature Identifier: 10005931 Cable Status: Electrically Decommissioned Cable Type: Not Supplied Record Last Updated: 27th February 2021	A8SE (S)	950	10	527279 182756

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
214	**Underground Electrical Cables** Unique Feature Identifier: 10005919 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A18NW (N)	964	10	526834 184662
215	**Underground Electrical Cables** Unique Feature Identifier: 10006131 Cable Status: Electrically Decommissioned Cable Type: Alternating Current Record Last Updated: 27th October 2017	A18NW (N)	964	10	526834 184663
216	**Underground Electrical Cables** Unique Feature Identifier: 10006212 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 26th October 2017	A8SE (S)	975	10	527265 182730

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
217	**Local Nature Reserves** Name: St Johns Wood Church Grounds Multiple Area: N Area (m2): 19876.67 Source: Natural England Designation Date: 1st January 1998	A8NW (S)	648	11	527088 183057
218	**Local Nature Reserves** Name: Adelaide Multiple Area: N Area (m2): 2767.76 Source: Natural England Designation Date: Not Supplied	A19SW (NE)	678	11	527576 184295

Data Suppliers

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	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** 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	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Westminster City Council - Environmental Health Department** Council House, Marylebone Road, London, NW1 5PT	Telephone: 020 7641 1317 Fax: 020 7641 1142 Website: www.westminster.gov.uk
4	**London Borough of Waltham Forest - Environmental Health Department** 154 Blackhorse Road, Walthamstow, London, E17 6NW	Telephone: 020 8496 3000 Fax: 0181 524 8960 Website: www.lbwf.gov.uk
5	**London Borough of Camden - Pollution Projects Team** Seventh Floor, Town Hall Extension, Argyle Street, London, WC1H 8EQ	Telephone: 020 7278 4444 Fax: 020 7860 5713 Website: www.camden.gov.uk
6	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
7	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
8	**London Borough of Camden** Town Hall, Judd Street, London, WC1H 9JE	Telephone: 020 7974 4444 Fax: 020 7974 6866 Email: info@camden.gov.uk Website: www.camden.gov.uk
9	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
11	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** 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

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LASI	Langley Silt Member	Clay and Silt	Not Supplied - Devensian
	LHGR	Lynch Hill Gravel Member	Sand and Gravel	Not Supplied - Wolstonian

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian
	CLGB	Claygate Member	Clay, Silt and Sand	Not Supplied - Ypresian
	BGS	Bagshot Formation	Sand	Not Supplied - Ypresian

GEA

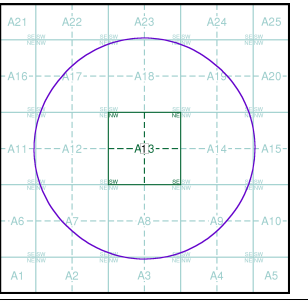
Geology 1:50,000 Maps

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:	**256**
Map Name:	**North London**
Map Date:	**2006**
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



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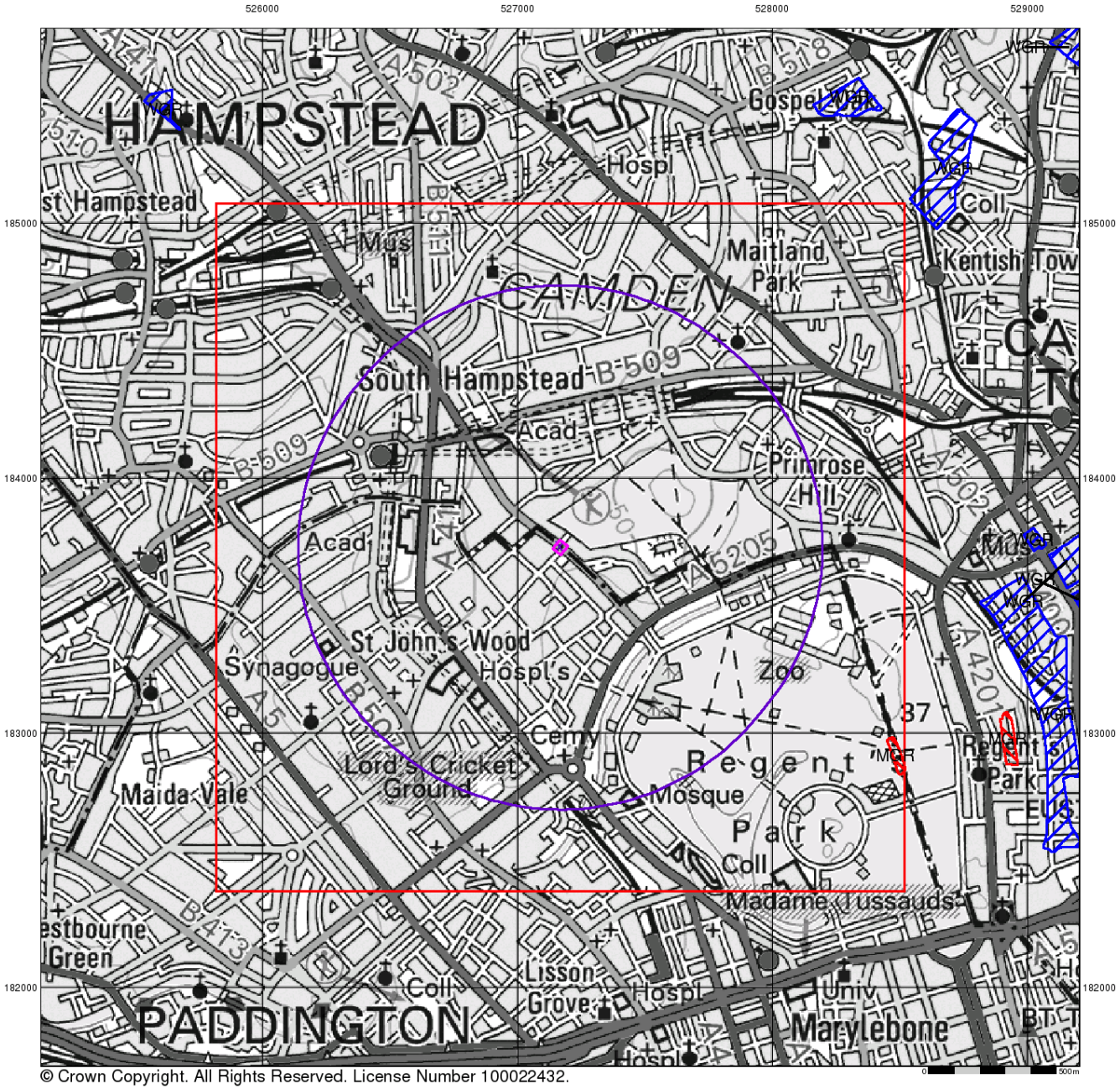
Search Buffer (m):	1000

Site Details:

32-34, Avenue Road, LONDON, NW8 6BU



GEA

Artificial Ground and Landslip

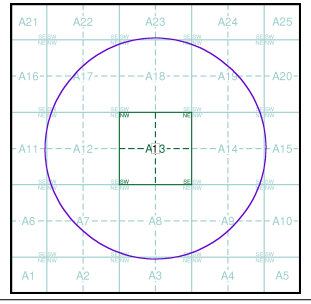
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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



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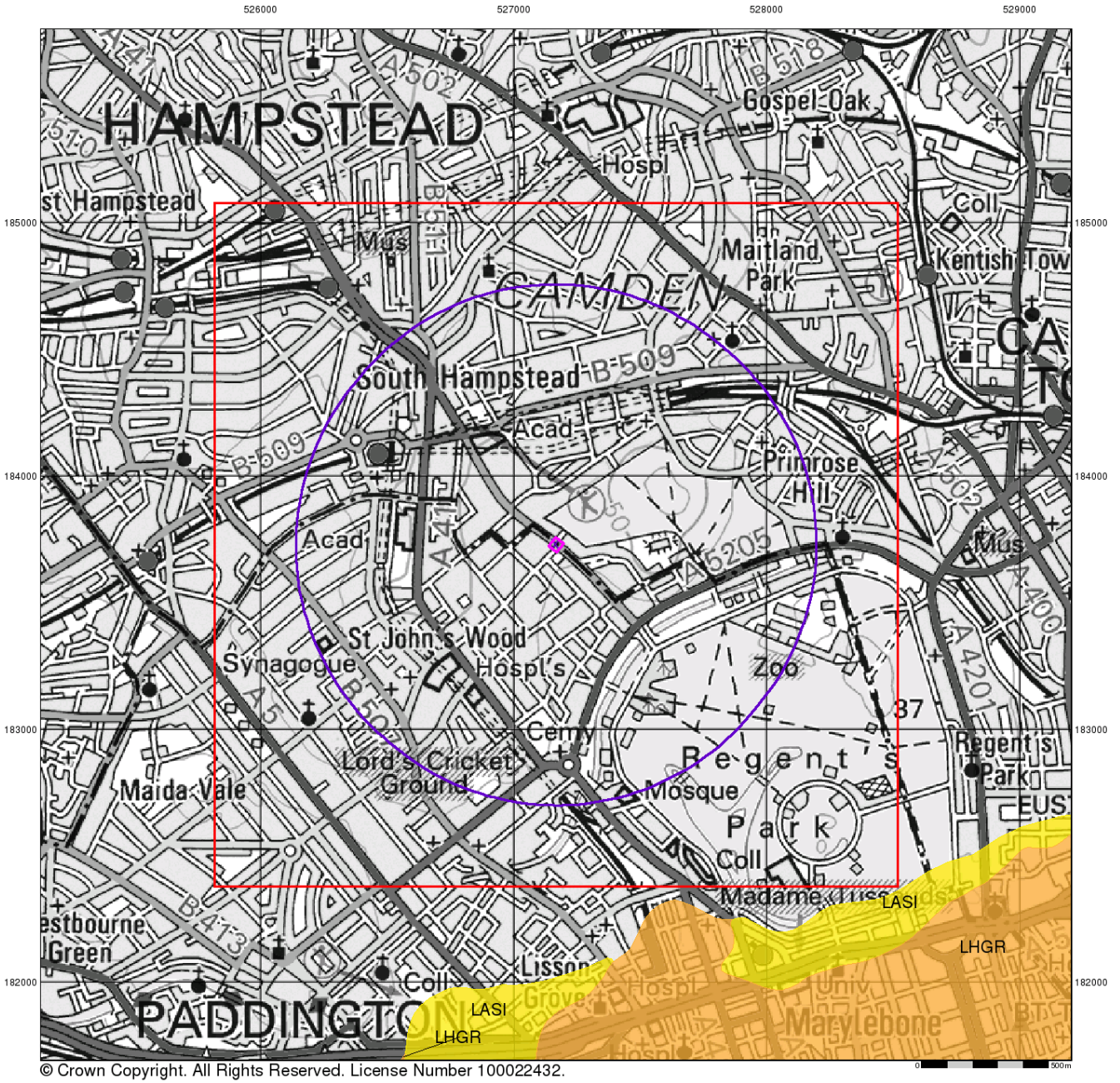
Site Details:

32-34, Avenue Road, LONDON, NW8 6BU

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



GEA

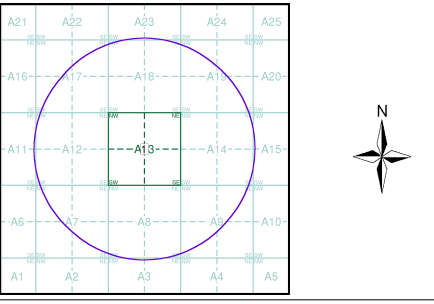
Superficial Geology

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



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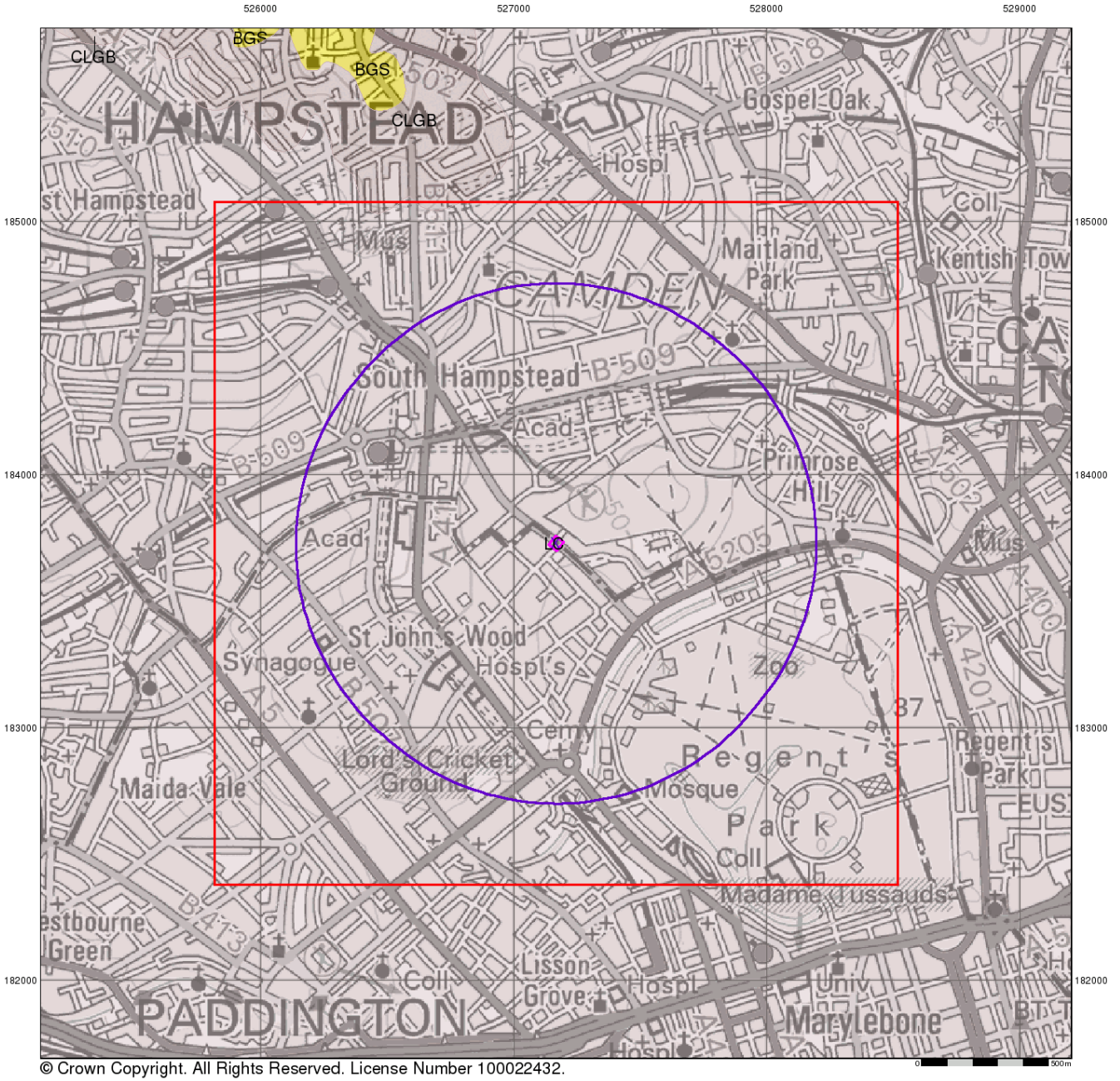


GEA

Bedrock and Faults

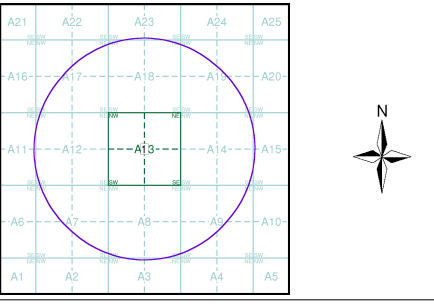
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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



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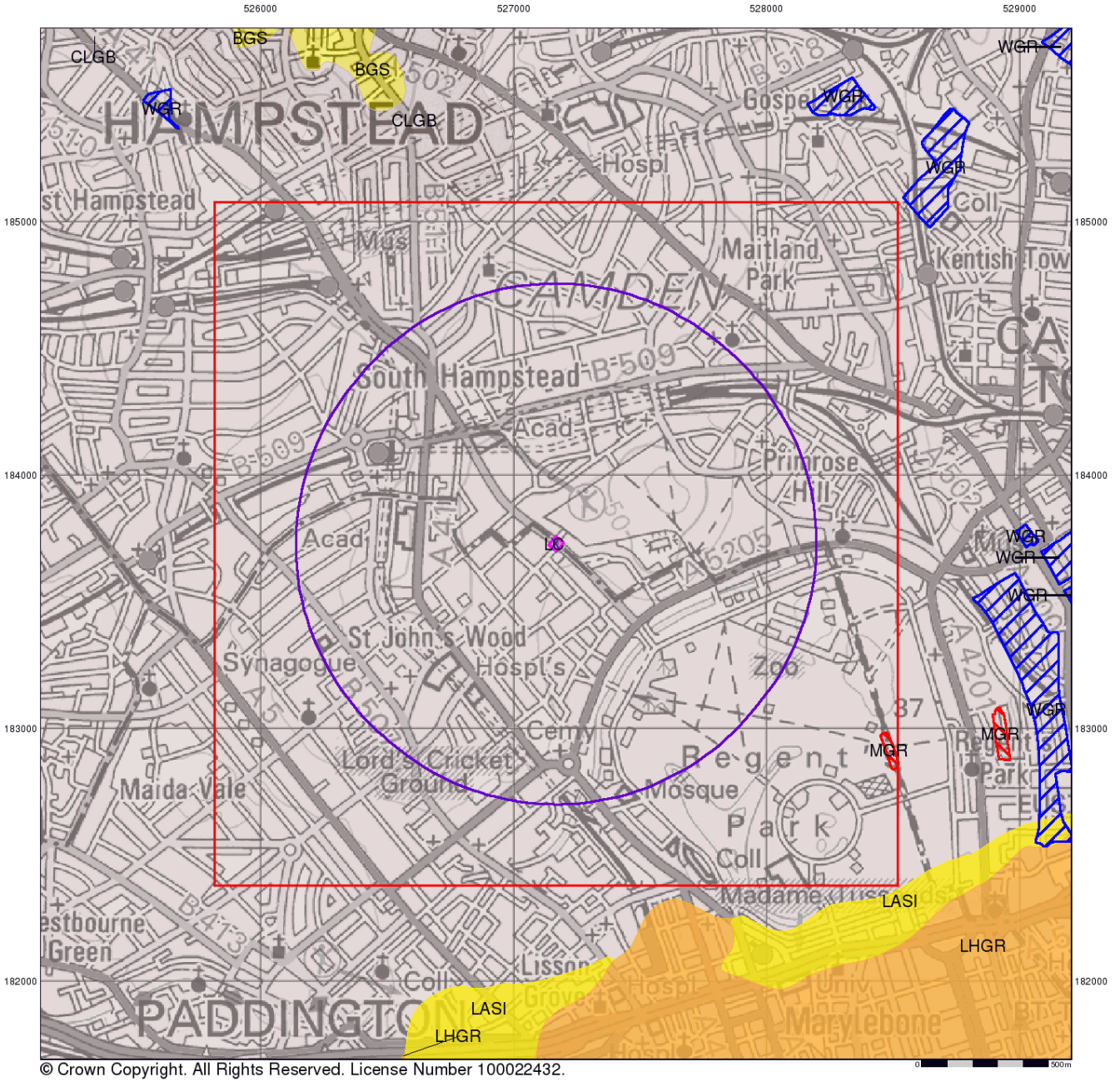


GEA

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.

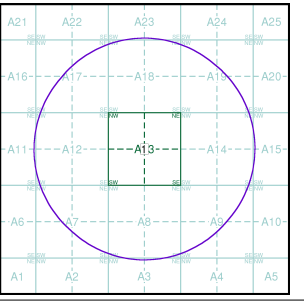
Additional Information

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



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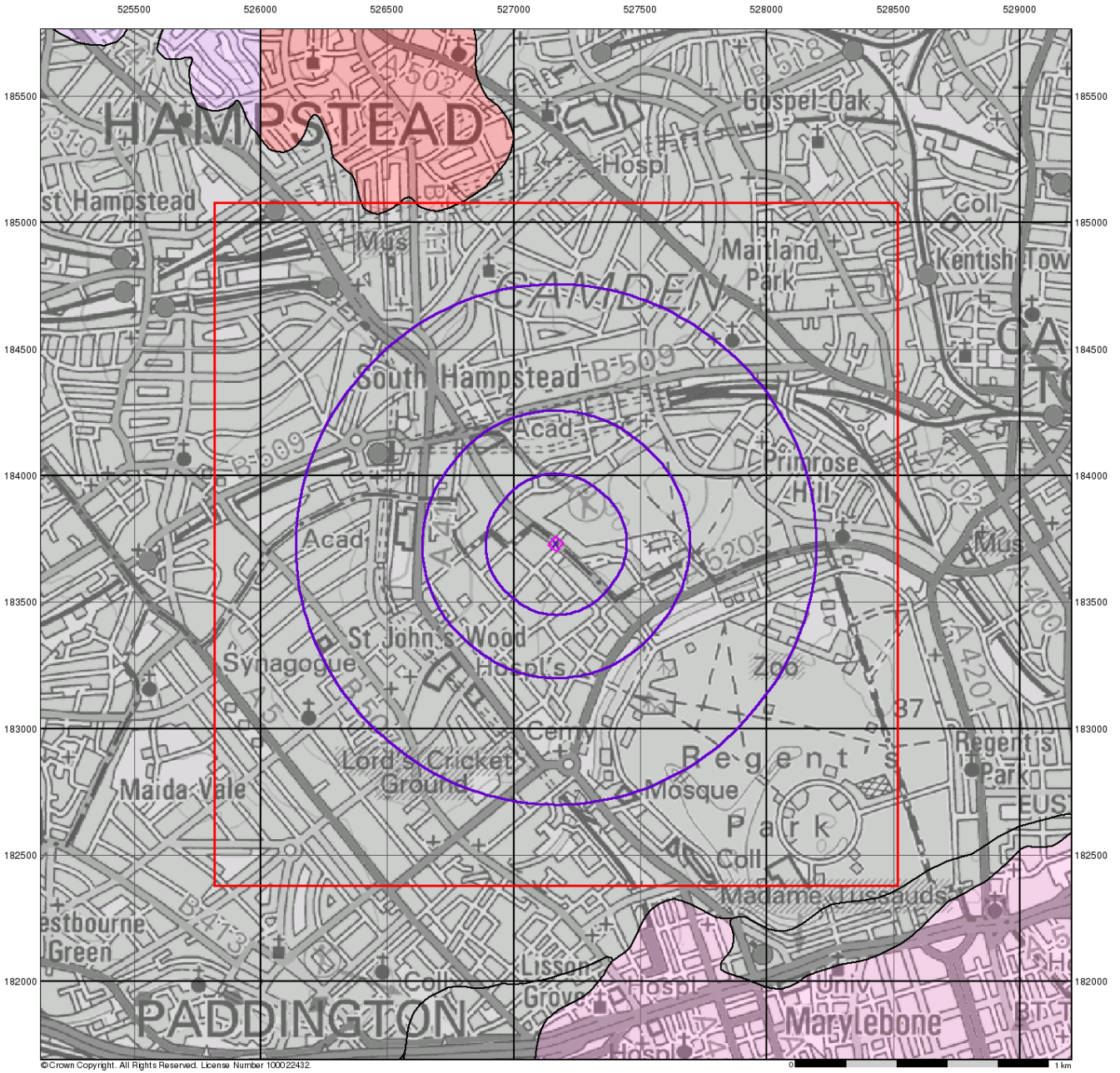


GEA

Groundwater Vulnerability

General

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

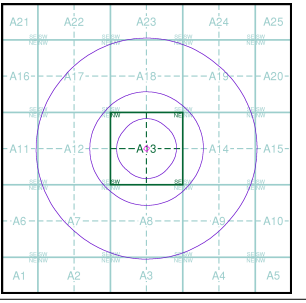
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



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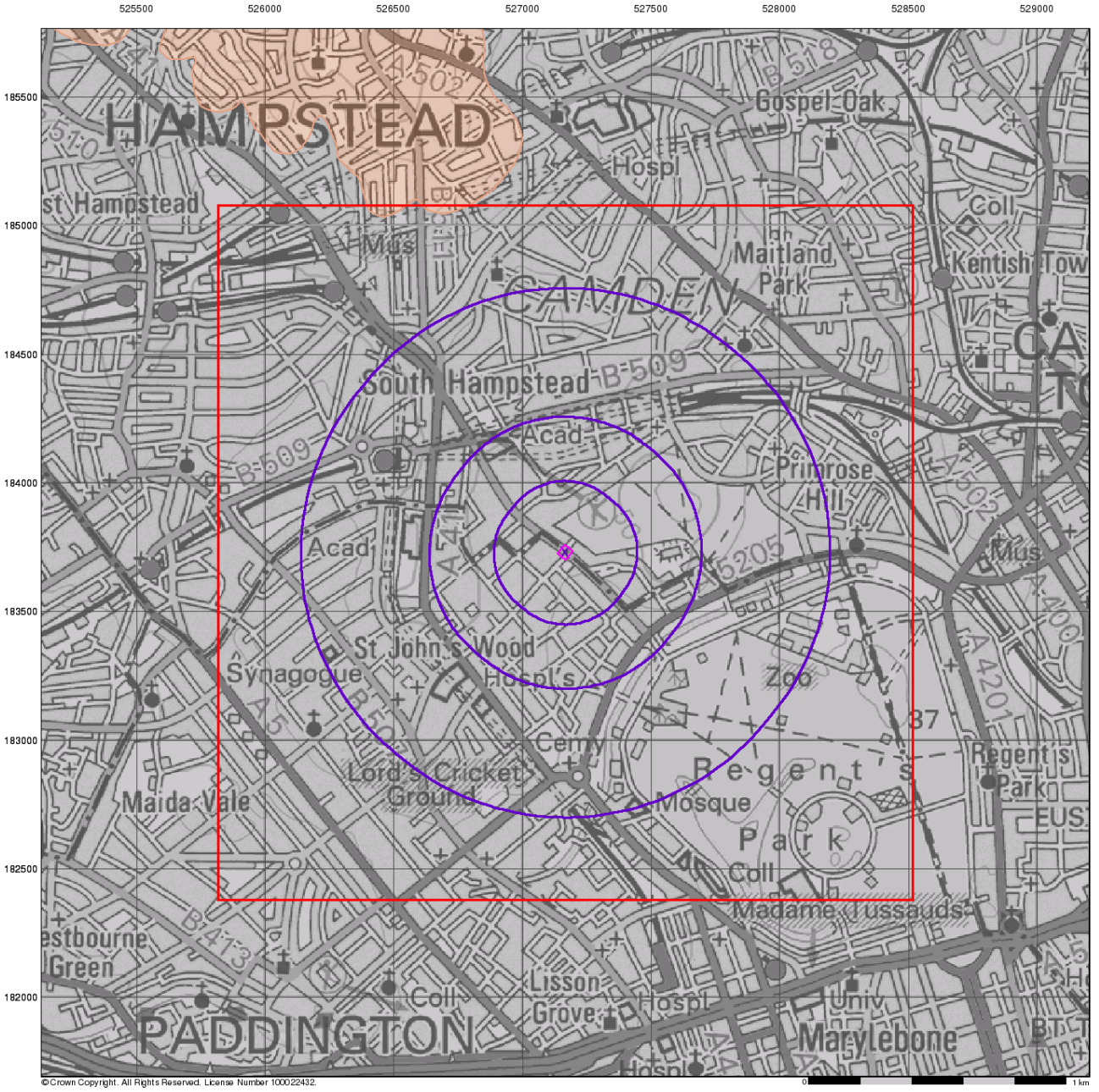


GEA

Bedrock Aquifer Designation

General

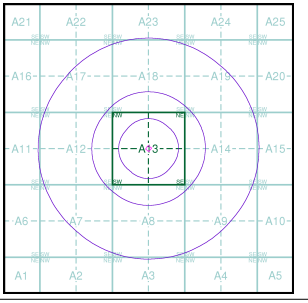
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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



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Slice:	A
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Search Buffer (m):	1000

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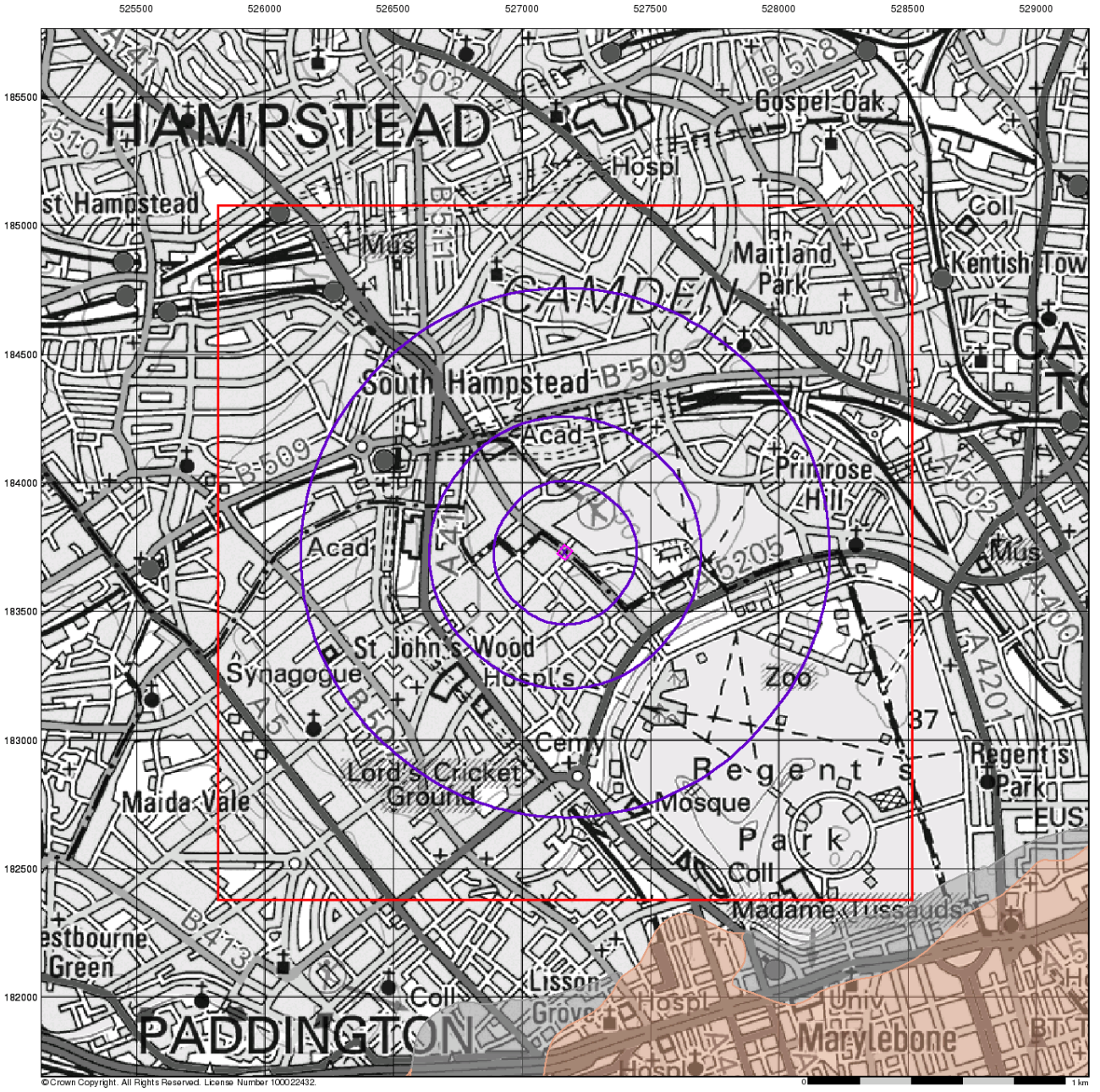


GEA

Superficial Aquifer Designation

General

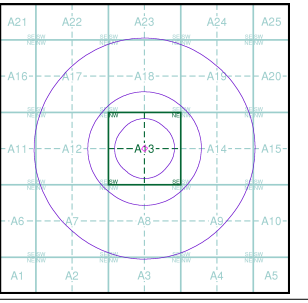
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

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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Site Details

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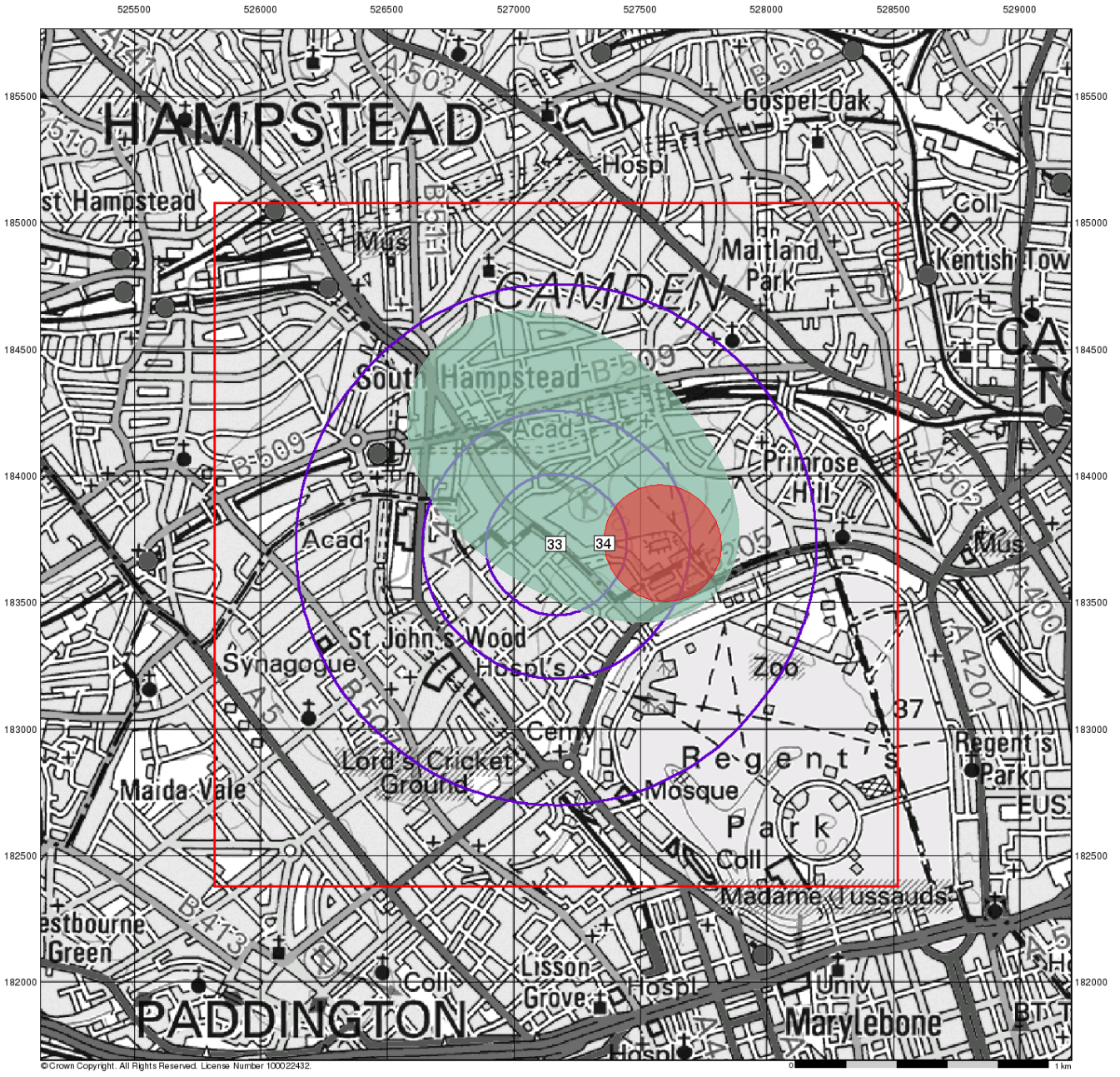


GEA

Source Protection Zones

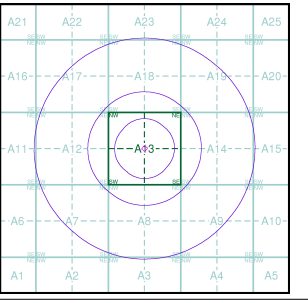
General

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



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Slice:	A
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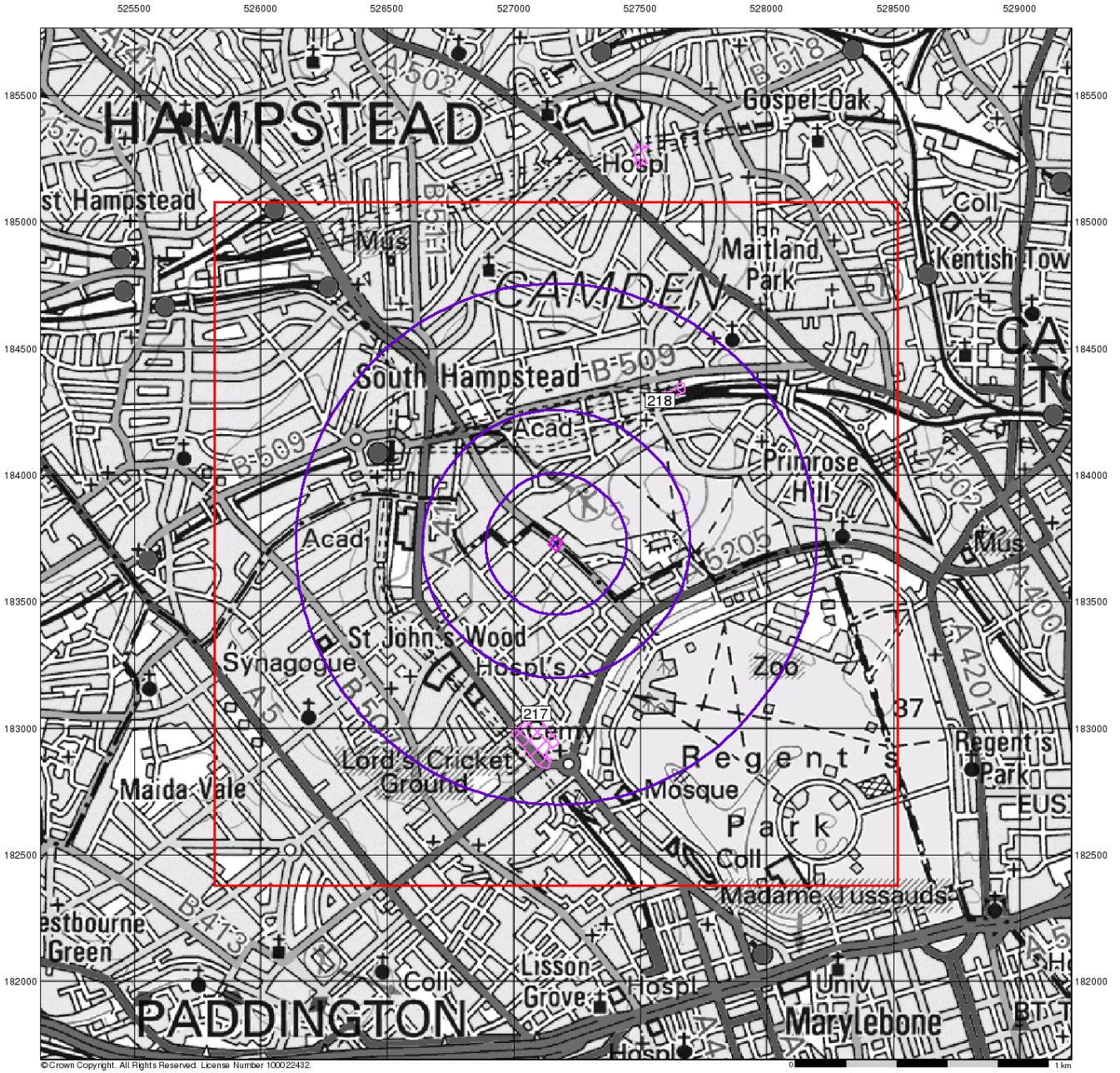


GEA

Sensitive Land Uses

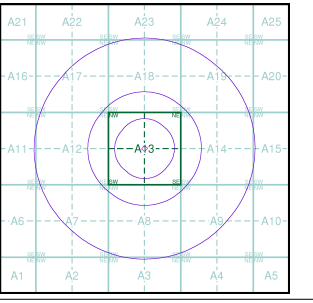
General

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

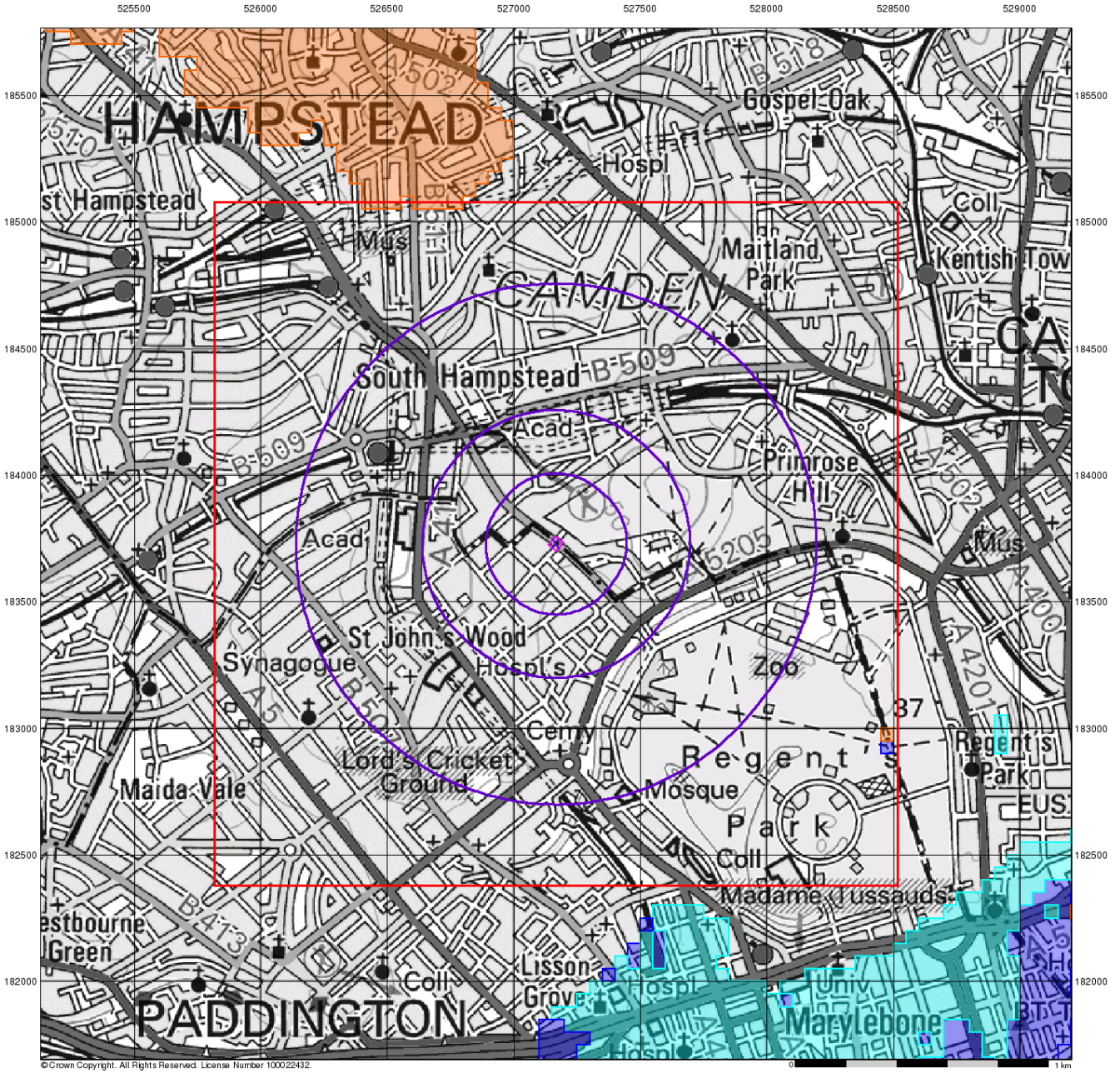


Order Details

Order Number:	292557463_1_1
Customer Ref:	J22076
National Grid Reference:	527170, 183730
Slice:	A
Site Area (Ha):	0.17
Search Buffer (m):	1000

Site Details

32-34, Avenue Road, LONDON, NW8 6BU



GEA

BGS Flood GFS Data

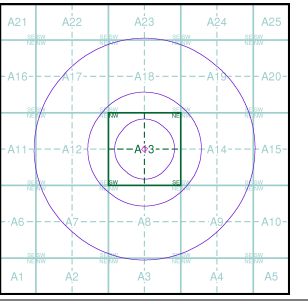
General

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



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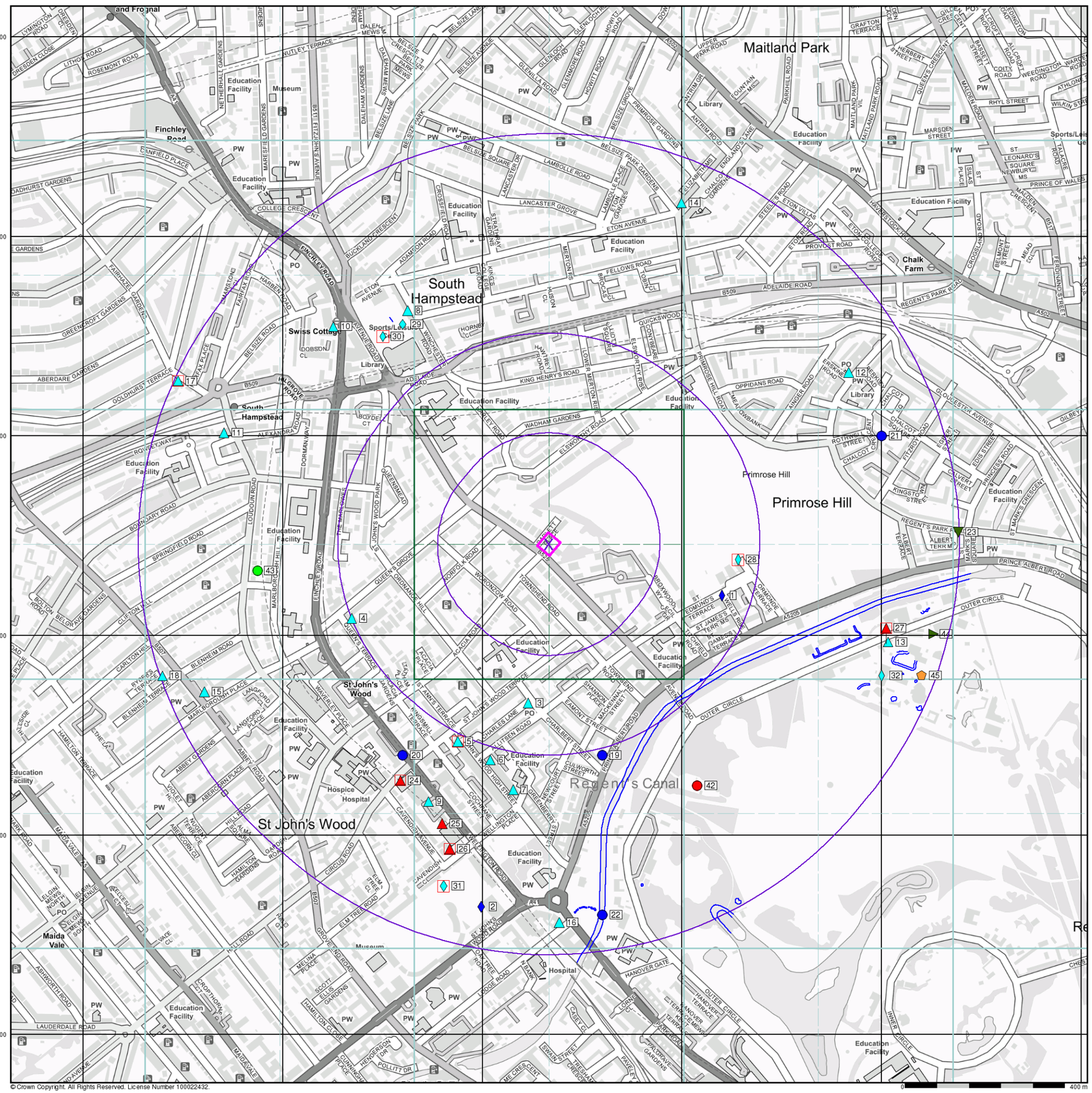
Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



GEA

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
- 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

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

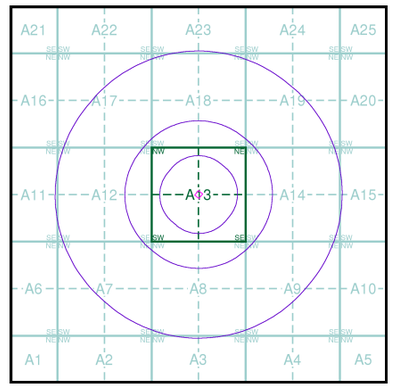
Geological

- BGS Recorded Mineral Site

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 (Location)
- 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

Site Sensitivity Map - Slice A



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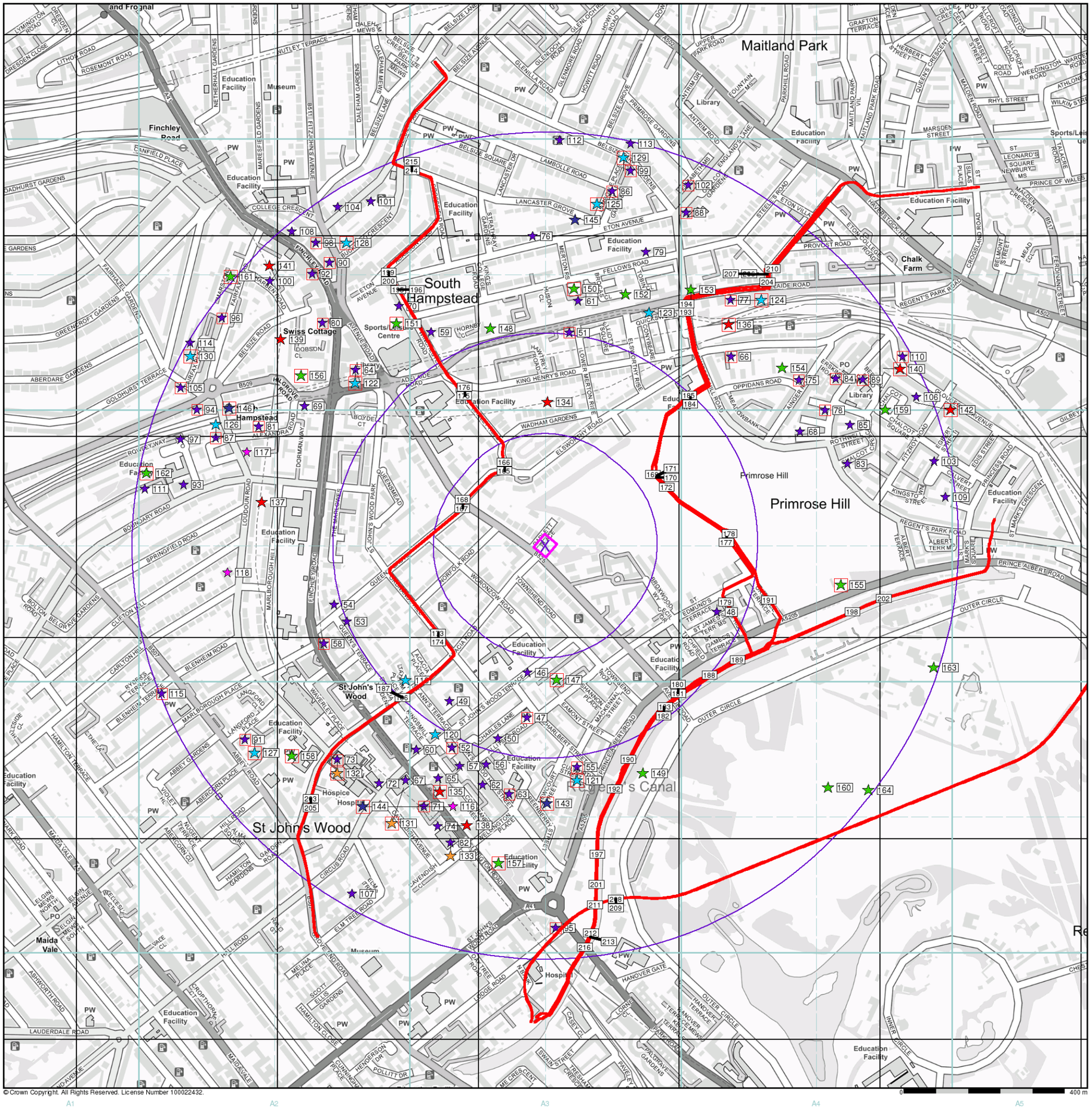


GEA

Industrial Land Use Map

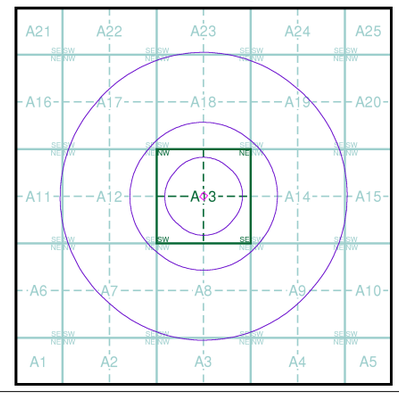
General

- 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



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