



Phase I Geo-Environmental Desk Study

Land at ASDA Havant

Larchwood Avenue
Havant
Hampshire
PO9 3QW

Prepared for:

Euro Garages Ltd

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ASDA HAVANT

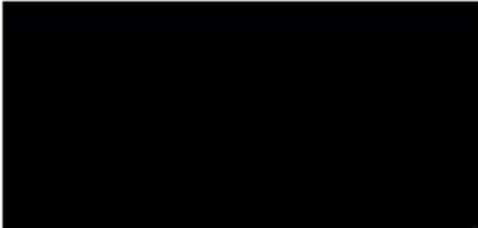
NON TECHNICAL CLIENT SUMMARY

This report presents the findings of a Phase I Geo-Environmental Desk Study which was carried out to identify potential contamination from previous or current uses of the site and surrounding area and to provide an initial assessment of geological and geotechnical aspects of the site and how the proposed development or surrounding environment might be affected.

- The site is currently an area of car parking associated with the ASDA superstore in Havant, Hampshire. The proposed development is for a drive -thru coffee shop with associated parking, a landuse which is not particularly sensitive to land contamination.
- The site is reported to be partially underlain by superficial head deposits (clay, silt, sand and gravel) overlying London Clay bedrock. A deeper bedrock of the upper chalk means the site lies within a source protection zone relating to subsurface activity which slightly increases the environmental sensitivity of the site.
- Historically the site was densely vegetated with woodland before the construction of the current car park, any made ground present would therefore likely have been placed as part of this development. Given the proposed development there is limited potential for contaminants of concern to cause plausible risks to future site users, however the potential presence for made ground warrants some precautionary measures to ensure safe development.
- These measures have been outlined within this report and comprise basic personal protection for ground workers, the use of barrier drinking water pipes if they are laid within anything but clean natural soils, and the inclusion of a nominal thickness (100mm minimum) of clean topsoil within future areas of peripheral soft landscaping to ensure an adequate growing medium. These measures are only deemed precautionary and are not considered to require any further verification from EPS, although documentation showing their completion should be retained should the local authority wish to view it.
- The report is considered sufficient to address the requirements of the planning process relating to contamination.

By their very nature, the above bullet points represent a simplified summary of our work and should not be relied upon to form the basis for key decisions for the proposed development. A full picture is provided in the following report, or alternatively give us a call and we'll talk you through it.

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The report has been written, reviewed and authorised by the persons listed above. It has also undergone EPS' in house quality management inspection. Should you require any further assistance regarding the information provided within the report, please do not hesitate to contact us.

The National Planning Policy Framework requires a competent person to prepare site investigation information, which is defined as a person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation. EPS considers that it fulfils these criteria and would welcome any request for staff CVs or case studies to demonstrate it.

As stated within DEFRA's Contaminated Land Statutory Guidance, with any complex risk assessment it is possible that different suitably qualified people may reach slightly different conclusions when interpreting the same information. EPS recognises this and considers the conclusions presented within this report to be robust and appropriate but input from the Local Authority and their judgement in line with this guidance would still be welcomed.

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1 INTRODUCTION

In September 2019, Environmental Protection Strategies Ltd (EPS) was commissioned by Euro Garages to complete a Phase I Geo-Environmental Desk Study on land at ASDA Havant, Larchwood Avenue, Havant, Hampshire, PO9 3QW ('the site'); see Figure 1.

The work was commissioned in order to fulfil pre-planning requirements relating to contamination for a new drive through coffee shop with associated parking and soft landscaping within an area of ASDA's current car park.

This report presents the findings, conclusions, and recommendations of the Phase I Desk Study undertaken for the site as instructed.

1.1 Objectives

The purpose of this desk study is to evaluate the potential contaminant linkages which may be active at the site in its current condition, or could become active in future, and to determine if any action is required to investigate them further or to break them.

This is achieved by carrying out the following activities:

- a) Examining the site history - late 1800s to present day, through collection of historical maps of the area, site records, records held by relevant local authorities, the Environment Agency and review of other information databases.
- b) Characterising the site's environmental and geological sensitivity through examination of existing geological, hydrogeological, topographical, and historical maps and aerial photographs of the area.
- c) Identifying Potential Areas of Concern (PAOCs) through a combination of historical map and data review.
- d) Consideration of any future plans for the site and the effects any proposed changes may have on contaminant linkages over time.
- e) Development of a Conceptual Site Model and Preliminary Risk Assessment to evaluate the potential risks posed by the site and make recommendations for any further work that may be required to ensure suitability for use and safe development. In accordance with the Environment Agency's *Land Contamination: Risk Management* (2019) and the *National Planning Policy Framework*.

1.2 Project Limitations and Constraints

The purpose of this report is to present the findings of a Phase I Geo-Environmental Desk Study conducted at the location(s) specified. When examining the data collected from the investigations made during the assessment, EPS makes the following statements:

This report does not include specific investigation for the presence of either Potential Asbestos Containing Material (PACM) or Japanese Knotweed at the subject site however, if obvious evidence of either is observed during EPS site walkover, details will be provided in this report. Specialist contractors should be commissioned to make detailed assessments and recommendations if these materials are suspected.

2 GEO-ENVIRONMENTAL SETTING

The following section provides a summary of the information collected in relation to the site location and history.

2.1 Site Location and Description

Detail	Description
Location	The site lies to the west of Havant, just east of junction 4 of the A3(M).
Grid Reference	NGR 469520, 107460
Topographic Elevation	Topographic surveys are being undertaken however the site appears to be mostly flat and lie at around 32m AOD. The ASDA superstore and car park sits in a slight depression, with embankments mainly along its western and southern boundaries.
Description of Site	The site is currently an area of asphalt surfaced car parking associated with the main ASDA store located to the west. On the western boundary is a small wooden fence with low lying shrubs. The northern boundary has dense shrubs up to the asphalt of the car park, with semi-mature deciduous trees behind. The eastern boundary has small shrubs lying in front of a tall fence with some larger, mature deciduous trees adjacent to the boundary. Within the site, on the eastern side there is an island of soft landscaping with two small Ash trees. Access is via the main entrance to the car park from the south western point of the development area. In the north west area of the site, there are a number of manhole covers, which indicate the presence of sub-surface structures.
Surrounding Land Use	North of the site are a number of retail and industrial units, including the ASDA petrol filling station (PFS) beyond which, a corridor of woodland extends north. Immediately west of the boundary is the majority of the ASDA super centre car park and then the store. To both the east and west of the study area, are densely developed residential areas.

A plan showing the site location is provided as Figure 1, the current site layout is detailed on Figure 2 and an aerial photograph is included as Figure 3. An indicative proposed development plan is included as Appendix A and relevant extracts of a Landmark Envirocheck report are included as Appendix B. These records and the assessment is based on the development site itself. Where an access route has been shown this has not been included within the assessment unless highlighted.

2.2 Environmental Setting

Detail	Description
Geology	Geological maps of the area show the entirety of the site to lie on a bedrock of London Clay Formation (clay, silt and sand). The north west of the site is recorded to include an overlying superficial Head deposit (clay, silt, sand and gravel).

Detail	Description																
Geology (continued)	Underlying the London Clay, and present at surface to the south are the Lambeth Group (Clay, silt and sand) and various units of the Upper Chalk. Information on the site's geological context is included as Appendix C. An historical borehole log (BGS archive) for a location within very close proximity to the site boundary indicates the ground conditions to comprise a firm to stiff brown fissured silty sandy Clay to a depth of 1.0m interpreted as Head, overlying a stiff brown/blue mottled silty sandy Clay with some pebbles to 4.0m, overlying a stiff blue silty sandy Clay to the extent of the borehole at 5.0m below ground level (bgl), both of the latter clay units were interpreted as London Clay. Rest groundwater levels were recorded at 2m bgl shortly after the borehole was drilled. This borehole log is also included in Appendix C.																
British Geological Survey (BGS)	One recorded mineral site is present within a 1km search radius. The Belmont Farm Chalk Pit was located around 950m south of the study area. The pit was an opencast quarry, extracting chalk and has now ceased to operate.																
Geological Hazards	<table><tr><th>Hazard</th><th>On Site Risk</th></tr><tr><td>Mining (non coal)</td><td>No Hazard</td></tr><tr><td>Collapsible Ground</td><td>Very Low</td></tr><tr><td>Compressible Ground</td><td>No Hazard</td></tr><tr><td>Ground Dissolution</td><td>No Hazard</td></tr><tr><td>Running Sand</td><td>Very Low</td></tr><tr><td>Landslide</td><td>Very Low (Low @173m NW)</td></tr><tr><td>Shrinking / Swelling Clay</td><td>Low (Moderate @180m SW)</td></tr></table>	Hazard	On Site Risk	Mining (non coal)	No Hazard	Collapsible Ground	Very Low	Compressible Ground	No Hazard	Ground Dissolution	No Hazard	Running Sand	Very Low	Landslide	Very Low (Low @173m NW)	Shrinking / Swelling Clay	Low (Moderate @180m SW)
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Radon	The Envirocheck indicates the site to lie in Lower Probability radon area where less than 1% of homes are estimated to be at or above the action level. Therefore, no radon protection measures will be needed.																
Hydrogeology	Groundwater vulnerability maps for the area show that the underlying superficial geology, where present, is classified as a Secondary Undifferentiated Aquifer with Medium Vulnerability, where the bedrock aquifer is unproductive. The site lies within Source Protection Zone 1c – a subsurface activity Source Protection Zone for local groundwater abstraction related to the deeper Upper Chalk bedrock which outcrops roughly 800m south. There are no groundwater abstractions located within 1000m, the nearest being located around 1.5km to the south east related to potable water supply. Groundwater vulnerability maps are included as Appendix D.																

Detail	Description		
Hydrology	A small surface water feature exist around 245m north west, possibly a small culvert. A stream is also present 300m south west.		
	The Envirocheck report lists two discharge consents within 500m. The two discharge consents relate to the same address 420m north and allow the discharge of other matter, trade effluent and site drainage to freshwater streams/rivers.		
	There are no surface water abstractions located within 1000m of the site boundary. The nearest is located approximately 1450m south east.		
	Review of the EA Flood Zone Map for the area indicates that the site lies within Flood Zone 1, which is defined as the area with a low potential risk of flooding from fluvial or tidal sources.		
	It should be noted that the EA maps do not take into account the presence of flood defences or flooding from poor drainage, or groundwater. A copy of the flood map for the site and surrounding area is also included within Appendix D.		
Landfill & Waste	The Envirocheck report shows the nearest historic landfill to the site was located approximately 420m south and received deposited waste including inert waste, likely associate with development of this residential area.		
	There are three non-water infilled land features of unknown origin possibly arising from quarry activity. These are located >900m north west, east and south of the development boundary.		
	Within 500m there are three water features that have been infilled. The closest is situated around 40m north east (running east-west) and was last identified on 1963 historic maps. The two more infilled water features were last located on 1898 historic mapping to be around 200m and 490m north east, respectively.		
Licensed Industrial Activity	The ASDA petrol filling station positioned 158m north holds an LA-PPC environmental permit as does a second PFS located 200m north east. In addition, the local authority have issued an air pollution control enforcement notice 80m west although it is not clear from the Envirocheck what the notice specifically related to.		
Industrial Land Use	The Envirocheck report lists 10 industrial land uses within 250m, the most pertinent of which are summarised below.		
	Land Use	Distance (Direction)	Status
	Caravan Servicing and Repairs	135m (N)	Active
	MOT Testing Centre	166m (NW)	Active
	Car Dealer and Garage Service	154m (NE)	Active and Inactive; respectively.
	Asda Havant Petrol Filling Station	158m (N)	Active
	Printers	170m (NW) & 225m (SW)	Active

Detail	Description
Pollution Incidents	There have been two pollution incidents to controlled waters within 300m of the site. The closest incident was located 20m west and was the result of oil lost into the drainage system. This incident occurred in February 1995. A second incident was recorded around 295m north west and is related to the spillage of industrial chemicals to an undisclosed water source in August 1994. In September 2018, there was a substantiated pollution incident located 221m north east, where a number of waste sources and atmospheric pollutants (smoke) caused a Category 3 – Minor incident impact to air and water and Category 2 – Significant incident to land.
Previous Investigation or Remediation	EPS are not aware of any previous site investigations or remedial works undertaken at the site.
Sensitive Land Use	The site lies within the Chichester, Langstone and Portsmouth Harbours Eutrophic Nitrate Vulnerable Zone where eutrophic water is identified as being at risk.

2.3 Site History

A summary of historical map data from 1868 to 2019 is summarised below. Key points are highlighted and copies of relevant historic maps and any others examined during the investigation are included in this report as Appendix E.

- Between 1868 and 1932, the site and the immediate surrounding area was completely covered in woodland. By 1933, the wider surrounding area began to see some residential development and by 1966, the vast majority of the surrounding area has seen significant residential development with associated infrastructure and the removal of large swathes of the pre-existing woodland.
- The main development around the study area came between 1957 and 1985. With an engineering works highlighted on historic maps to be located within 100m, which is shown to grow in size between 1979 and 1985. Simultaneous to the growth of the works, was the development of a hypermarket and car park around and within the study area. The mapping also shows embankments on the entrance road to the hypermarket complex, possibly indicating some raising of the land, however previous maps do indicate the site boundary to be on a higher elevation than its surrounding area.
- By 1985/87, according to mapping a second superstore had been developed to the north of the boundary, and the petrol filling station had been installed. The site then remained unchanged until 2006, when the hypermarket site was reconfigured, with a superstore being built within the same area but on the footprint that can be observed on the most modern maps available.

3 ENVIRONMENTAL CONCEPTUAL MODEL & PRELIMINARY RISK ASSESSMENT

The following section provides a review of the contaminant linkages that may be active at the site through the process of a Preliminary Risk Assessment, whereby EPS have examined the potential sources that may be present as a result of historic and / or current site activities and where potential interaction between these sources and the identified human / environmental receptors may occur.

3.1 Background

A Desk Study comprises the first stage of any geo-environmental assessment, the purpose of which is to determine what potentially contaminative activities may have occurred at the property or the surrounding area which may pose an environmental or geological risk to site users, the surrounding environment or proposed development, either at present or in the future.

The method used in this investigation to assess the environmental risk posed is based on the concept of 'contaminant linkage', which considers the following three factors:

Source	The location from which an environmentally hazardous / contaminative substance is, (or was,) derived.
Pathway	A route or mechanism via which a source could come into contact with a receptor to cause significant harm.
Receptor	An environmentally sensitive object or condition e.g. person, property, controlled water, or ecological system, which may be present now or in future.

If all three factors are identified, there is the potential for a 'contaminant linkage' to be active, which could result in significant harm being caused to the environment or human health.

3.2 Source Characterisation

The following potential contaminant sources have been identified at the site and in the surrounding area:

Potential Source	Source Description	Principal Contaminants of Concern
Current Site Use	In-fill material of unknown origin (Made Ground) used to level areas beneath the existing hardstanding.	PAH, Metals, ACM
Current and Historical Surrounding Land Use	Presence of two PFS' 150m and 200m to the north and north east.	TPH (Inc. BTEX)
	Current and historical industrial land use of the surrounding area including current printers and former engineering works around 150m north west.	VOC, TPH

Notes: PAH Polycyclic Aromatic Hydrocarbons ACM Asbestos Containing Materials
 TPH Total Petroleum Hydrocarbons BTEX Benzene, Toluene, Ethylbenzene Xylenes
 VOC Volatile Organic Compounds

3.3 Potential Receptors

A framework for the assessment of risks arising from the presence of contamination in soils has been produced by the Environment Agency and the Department for the Environment, Food and Rural Affairs (DEFRA) and is presented with the report: '*Using Science to Create A Better Place: Updated Technical Background to the CLEA Model – Science Report SC050021/SR3*'. This guidance document defines a series of standard land-uses which have been further developed into six generic landuses in the Category 4 Screening Levels project for Land Affected by Contamination (DEFRA/Contaminated Land: Applications in Real Environments (CL:AIRE) Project Report SP1010, 2014) which form a basis for the development of the Conceptual Site Model.

The proposed development plan for the site includes the construction of a drive thru coffee shop with associated car parking and soft landscaping. The soft landscaping is proposed in areas of current car parking around the site's periphery. This proposed land use has been considered as:

- Commercial

In view of the environmental setting, current and potential future land use of the site and surrounding sites, the potential receptors for any contaminant impact are discussed below:

Receptor	Site Specific Description
Human	Future site users, site workers involved in the site redevelopment, and those working and living in the surrounding area have the potential to be at risk from exposure to potential contaminants of concern (CoCs).
Groundwater	The site is reported to be underlain by Head deposits and London Clay. The London Clay is defined as an unproductive aquifer, however the superficial Head deposits are defined as secondary undifferentiated. The site also lies within a SPZ for nearby groundwater abstraction, thus underlying geology does have some resource potential and therefore groundwater should be considered as a potential receptor to site derived contaminants.
Surface Water	A number of surface watercourses are present within the surrounding area including streams to the north running into Hermitage Stream and eventually Storehouse Lake, however these water courses are around 250m from the site. The primary concern for this site should be considered as the groundwater within the underlying secondary aquifer however, if significant impacts to groundwater were to be encountered then further consideration should be given to the associated risk posed to nearby surface waters via lateral migration of contaminants in the subsurface.
Flora and Fauna	The proposed development includes the provision of marginal areas of soft landscaping. Some of the identified contaminants of concern are known to be phytotoxic and as such, the potential for this impact should be considered however this impact would be low and will be limited to the small verge areas.

Receptor	Site Specific Description
Buildings & Infrastructure	Subsurface structures are likely to be present at the site which may be adversely affected by the potential presence of the identified contaminants of concern. These include concrete used in building foundations, buried potable water supply pipes and other service lines and pipes.
Adjacent Land	The surrounding land use is a mixture of commercial to the north and residential to the east. As such, it is possible that there may be a risk from contamination to land more sensitive than that proposed on site.

3.4 Potential Pathways

Where contaminants may be present in soil, there are a number of potential pathways that enable human receptors to come into contact with or be exposed to them. The most direct pathways, considered under current UK legislation, can be summarised as follows:

- Direct ingestion of contaminated soil
- Ingestion of household dust
- Ingestion of contaminated vegetables
- Ingestion of soil attached to vegetables
- Dermal contact with contaminated soil
- Dermal contact with household dust
- Inhalation of fugitive soil dust
- Inhalation of fugitive household dust
- Inhalation of vapours outdoors
- Inhalation of vapours indoors

Clearly, not all of these potential pathways apply for every standard land-use. For example, ingestion of contaminated vegetables will not apply to land uses other than residential with plant uptake and allotments.

However in addition to direct exposure pathways, a number of physical transport mechanisms / pathways may also exist at a site that allow remote or less accessible contaminants in soil or groundwater to reach human or environmental receptors both at a site and beyond the site boundary. These include the following:

- Downward and lateral movement of contaminants in soil either by gravity or through being 'leached' by percolating rainwater.
- Lateral migration of contaminants dissolved in groundwater.
- Direct seepage or leaching of contaminants from soil into subsurface drains or supply pipework.
- Volatilisation of contaminants from groundwater or unsaturated soils into buildings or outdoor air.

Through examination of the standard land use and environmental setting at each site, the presence of pathways and transport mechanisms described above must be considered when assessing whether a contaminant linkage may plausibly be active, and therefore be included in the conceptual site model.

3.5 Summary of Contaminant Linkages

Considering the site use and environmental setting, and the proposed land use; the plausible contaminant linkages that require further investigation are summarised in the following table:

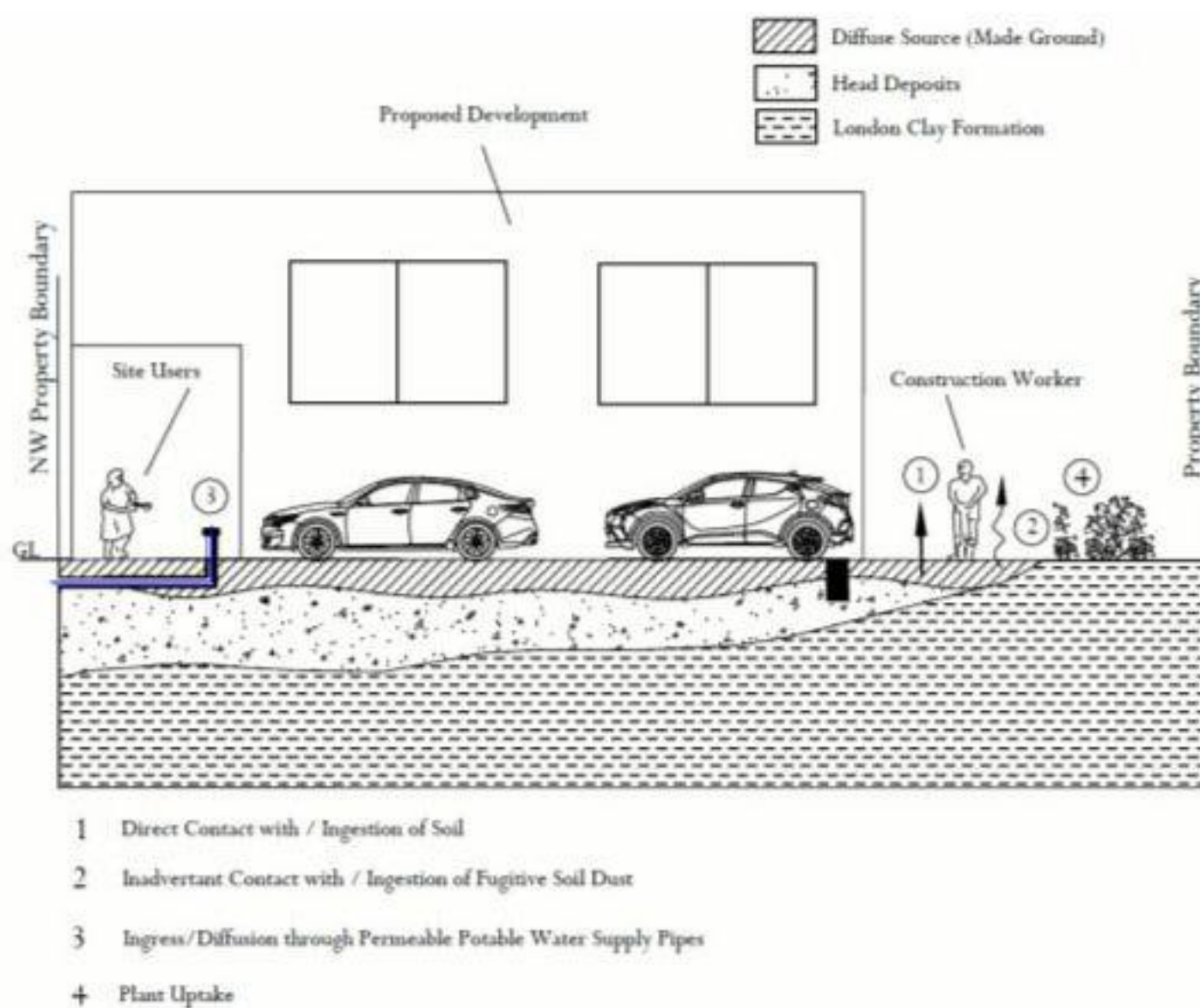
Source	Pathway	Receptor
Contaminated soil (Made Ground)	Direct contact and inadvertent ingestion by eating or smoking with dirty hands & inhalation of fugitive dusts	Construction workers during redevelopment & Site Users
	Ingress / diffusion through permeable potable water supply pipes	Site Users
	Direct uptake via root systems	Plants

The following comments are made with respect to contaminant linkages which have been considered through development of the conceptual model, but have not been concluded as 'plausible' – i.e. through which a significant possibility of significant harm could occur to an identified receptor.

- PAHs and metals have been identified as contaminants of concern associated with any made ground used to level areas below hardstanding, however these contaminants are considered to be relatively immobile in the environment by virtue of their very low solubility and volatility. In addition, the underlying ground conditions are recorded to have a dominant clay component to them and therefore are likely to have very low permeability. The site surface is proposed to be predominantly impermeable asphalt and unlikely to be suitable for any drainage in the form of soakaways, therefore contaminants of concern are unlikely to migrate vertically through unsaturated soils. The risk to groundwater (or surface waters) from site-derived contaminants of concern has therefore been discounted.
- Due to the low permeability of underlying soils restricting the movement of contaminants in the sub-surface, it is unlikely that contaminants of concern pose a risk future site-users from surrounding industrial and commercial land uses.
- Any sources of contamination encountered at the site (i.e. the made ground) are not anticipated to extend to significant depths and risks to buried structures including foundation from contaminants such as petroleum hydrocarbons have been discounted.

The following diagram provides an illustration of the plausible contaminant linkages that may be active at the site and which may need further investigation or control to ensure safe development:

ASDA Havant– Illustrative Conceptual Site Model



4 GEOTECHNICAL GROUND MODEL

Geological records indicate the ground conditions to comprise head deposits and the London Clay Formation, although given the existing development some made ground is anticipated to be present at the surface. A conceptual geotechnical ground model is provided in the table below which assesses design elements, anticipated strata and ground conditions:

Element	Anticipated Strata	Parameter(s)	Anticipated Conditions
Foundations	Made Ground	Allowable Bearing Pressure	Not appropriate as a bearing strata
		Settlement	High sensitivity
		Volume Change	Depends upon the soil composition
	Head Deposits	Allowable Bearing Pressure	85kN/ m ²
		Settlement	Moderate Sensitivity
		Volume Change	Low to moderate volume change potential
	London Clay	Allowable Bearing Pressure	Maximum of 125kN/m ²
		Settlement	Moderate sensitivity / Long term consolidation under loading
		Volume Change	High volume change potential
Drainage	Made Ground	Permeability	Not suitable for infiltration drainage
	Head		Unlikely to be suitable for infiltration drainage
	London Clay		Unlikely to be suitable for infiltration drainage
Concrete Grade	Made Ground	Grade	Low to moderate risk of high sulphate levels
	Head		Low to moderate risk of high sulphate levels
	London Clay		High risk of high sulphate levels.

Potential Hazard	Comment
Trees & Vegetation	A number of large trees have been noted around the border of the site as well as some smaller trees within the boundary and as underlying materials are expected to be cohesive, this could lead to deepening of foundations
Below Ground Structures	Site imagery highlighted the presence of a number of manhole covers around the site we may be related to a drainage system.
Excavation Stability	Made ground materials are expected that are likely to be unstable in unsupported excavations, underlying cohesive depots may be stable for a short period but should not be relied upon.
Slopes	The site is predominantly flat.

5 CONCLUSIONS & RECOMMENDATIONS

This Phase I Desk Study has identified that generally the site appears low risk in terms of contamination. A small number of plausible contaminant linkages have the potential to become active through the proposed commercial development as a result of any made ground used to level areas of hardstanding for the current car parking.

The proposed enduse is not sensitive to contamination and the identified risks are not considered likely to pose unacceptable risks in accordance with the Environment Agency's Land Contamination: Risk Management (LC:RM) guidance, so the implementation of precautionary control measures is recommended just to ensure safe development, as outlined below:

To ensure risks to groundworkers from potentially contaminated shallow soils are mitigated during redevelopment works, all construction workers operating at the site should be advised of the potential exposure to made ground in the subsurface. Appropriate health and safety precautions should also be adopted during any excavation works to avoid exposure to soils such as adequate PPE and the provision / use of welfare and washing facilities.

All new drinking water supplies should be installed within clean natural soils, rather than any made ground. If they are to be installed in the made ground they will need to be aluminium barrier pipes resistant to ground contamination, for more guidance see the UK Water Industry Research Report 10/WM/03/21 - "Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites".

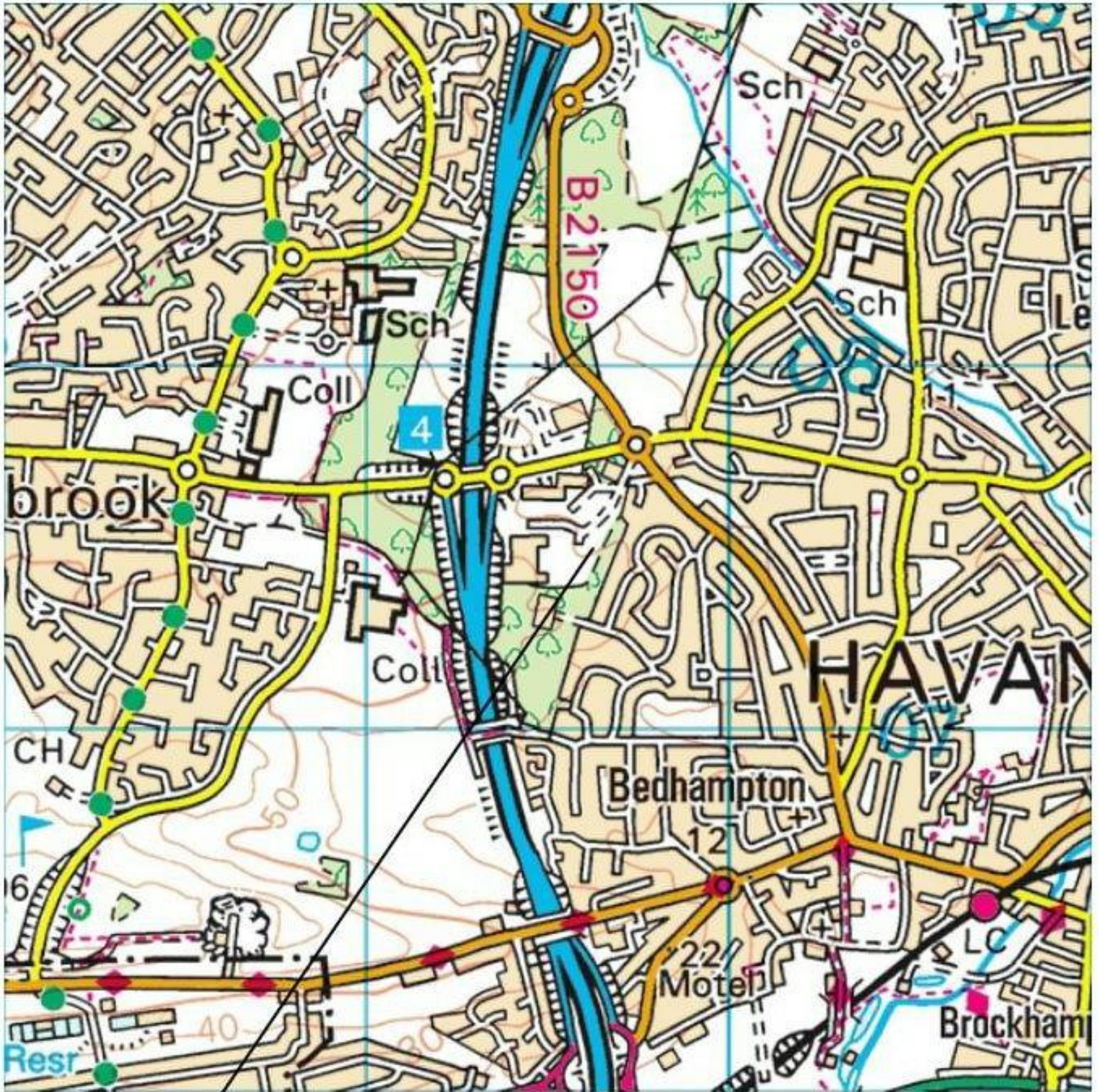
In areas of future soft landscaping, to ensure an adequate growing medium a nominal thickness of at least 100mm clean topsoil should be installed within those areas. The soil should be a clean, non-waste imported material. Records should be retained including delivery notes and details of the provider.

Any palpable evidence of contamination encountered during exposure of shallow soils beneath the site during redevelopment work should be reported to EPS so that an inspection can be made and appropriate sampling and assessment work carried out. A method statement is included in Appendix F.

The above measures are precautionary and are not considered to require any further verification by a consultancy such as EPS, although photographic records should be retained, along with records of soil movements (waste transfer and soil delivery) as well as the form of drinking water pipe used should the local authority or Environment Agency wish to view them.

It is recommended that a copy of this report be forwarded to the Environmental Health Department of Havant Borough Council for inclusion into their land quality records. It is considered that this report addresses the issue of contamination for the proposed development.

FIGURES



Approximate Site Location

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Title: Site Location Plan

Land at ASDA Havant
Larchwood Avenue
Havant
Hampshire
PO9 3QW

Fig. 1

Scale: NTS

Drawn By: DC

Approved By: MB

Job Number: UK19.4632B

Dwg No: havant/0919/01

Date: September 2019



Approximate Site Boundary

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Title: Current Site Layout

Land at ASDA Havant
Larchwood Avenue
Havant
Hampshire
PO9 3QW

Fig. 2

Scale: NTS

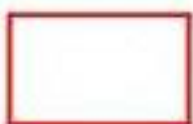
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Dwg No: havant/0919/01

Date: September 2019



Approximate Site Boundary

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Title: Aerial Photograph

Land at ASDA Havant
Larchwood Avenue
Havant
Hampshire
PO9 3QW

Fig. 3

Scale: NTS

Drawn By: DC

Approved By: MB

Job Number: UK19.4632B

Dwg No: havant/0919/01

Date: September 2019

APPENDICES

APPENDIX A

Proposed Development Plan



SERVICE ROAD

DRIVE THROUGH
COFFEE

COLLECTION
WINDOW

WAITING BAY

CUSTOMER PARKING

1

10

OUT

11

16

CUSTOMER PARKING

IN

ASDA CAR PARK

SCHEDULE OF AREAS

DEVELOPMENT AREA	0.178 Hectare / 0.439 Acre
Coffee DT - GIA	204m ² / 2200ft ²
Customer parking	16 Bays (inc' 1no. DDA bay)

GENERAL NOTES

This drawing has been prepared for feasibility purposes only & has been prepared of existing record data information.

Do not scale off this drawing - if dimensions are required contact Jennings Design Ltd.

Site boundary has been shown for indicative purposes only, overlay of ownership boundary is to be confirmed upon receipt of title documentation.

CDM 2015 - Designer

There are no unusual hazards or risks on site other than those specified on the drawing or below;

1. Title to be confirmed - acquisition boundary shown for indicative purposes only.
2. Topographical & Subscan survey to be completed.
3. Public Utility Searches to be completed.

----- To be surveyed & leveled*



SITE LOCATION PLAN

Not to Scale

STATUS

FEASIBILITY SCHEME

CLIENT

Euro Garages

DRAWN BY

MDB

ISSUE DATE

July '19

SCALE

NTS @ A3

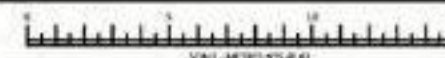
PLAN NUMBER

190759-SK1

REVISION

ADDRESS

ASDA HAVANT
Larchwood Ave,
Havant,
Hampshire, PO9 3QW



JENNINGS DESIGN LTD

York House Valley Court
Canal Road
Bradford
West Yorkshire BD1 4SP

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Tel: 01274 395 422
Email: office@jcn305.com



APPENDIX B

Surrounding Land Use



General

- Specified Site
- Specified Buffer(s)
- Seismic Reference Point
- Map ID
- General of Type of Location
- Filter
- Overhead Transmission Line

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 Filing to Authorities Processes
- Prosecution Filing to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Subsided Pollution Incident Register
- Water Abstraction
- Water Industry Act Return

Hazardous Substances

- COMAH Site
- Explosive Site
- HMRS 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 (Burrows Area)
- EA Historic Landfill (Other)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Location)
- Licensed Waste Management Facility (Other)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site (Other)
- 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 (Non-water)
- Registered Landfill Site (Non-water)
- 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 - Segment A13



Order Details

Order Number: 215765235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Plot Buffer (m): 100

Site Details

Site at 469520, 107460

Landmark
INFORMATION GROUP

Tel: 0144 844 1932
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Order Number: 215765235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site at 469520, 107460

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APPENDIX C

Geological Context

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

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	RTDU	River Terrace Deposits (Undifferentiated)	Sand, Silt and Clay	Not Supplied - Quaternary
	HEAD	Head	Clay And Gravel	Not Supplied - Quaternary
	RMD	Raised Marine Deposits	Sand and Gravel	Not Supplied - Quaternary
	BTFU	Beach and Tidal Flat Deposits (Undifferentiated)	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian
	WTT	Wittering Formation	Sand, Silt and Clay	Not Supplied - Ypresian
	LC	London Clay Formation	Sand	Not Supplied - Ypresian
	BOSA	Bognor Sand Member	Sand	Not Supplied - Eocene
	LMBE	Lambeth Group	Clay, Silt and Sand	Not Supplied - Thanetian
	POK	Portsmouth Chalk Formation	Chalk	Not Supplied - Campanian
	SPCH	Spitisbury Chalk Member	Chalk	Not Supplied - Campanian
	TACH	Tarrant Chalk Member	Chalk	Not Supplied - Campanian
	NCK	Newhaven Chalk Formation	Chalk	Not Supplied - Senonian
	LPOK	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver	Chalk	Not Supplied - Turonian

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
		Chalk Formation and Portsmouth Chalk Formation (Undifferentiated)		



Geology 1:50,000 Maps

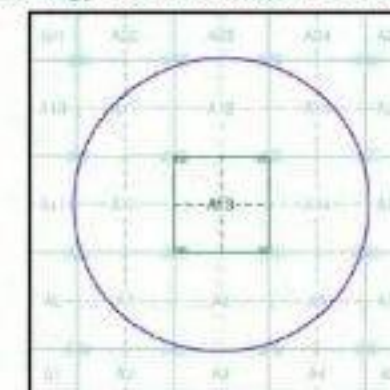
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published 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:	316
Map Name:	Parham
Map Date:	1998
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Not Supplied
Landslip:	Available
Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

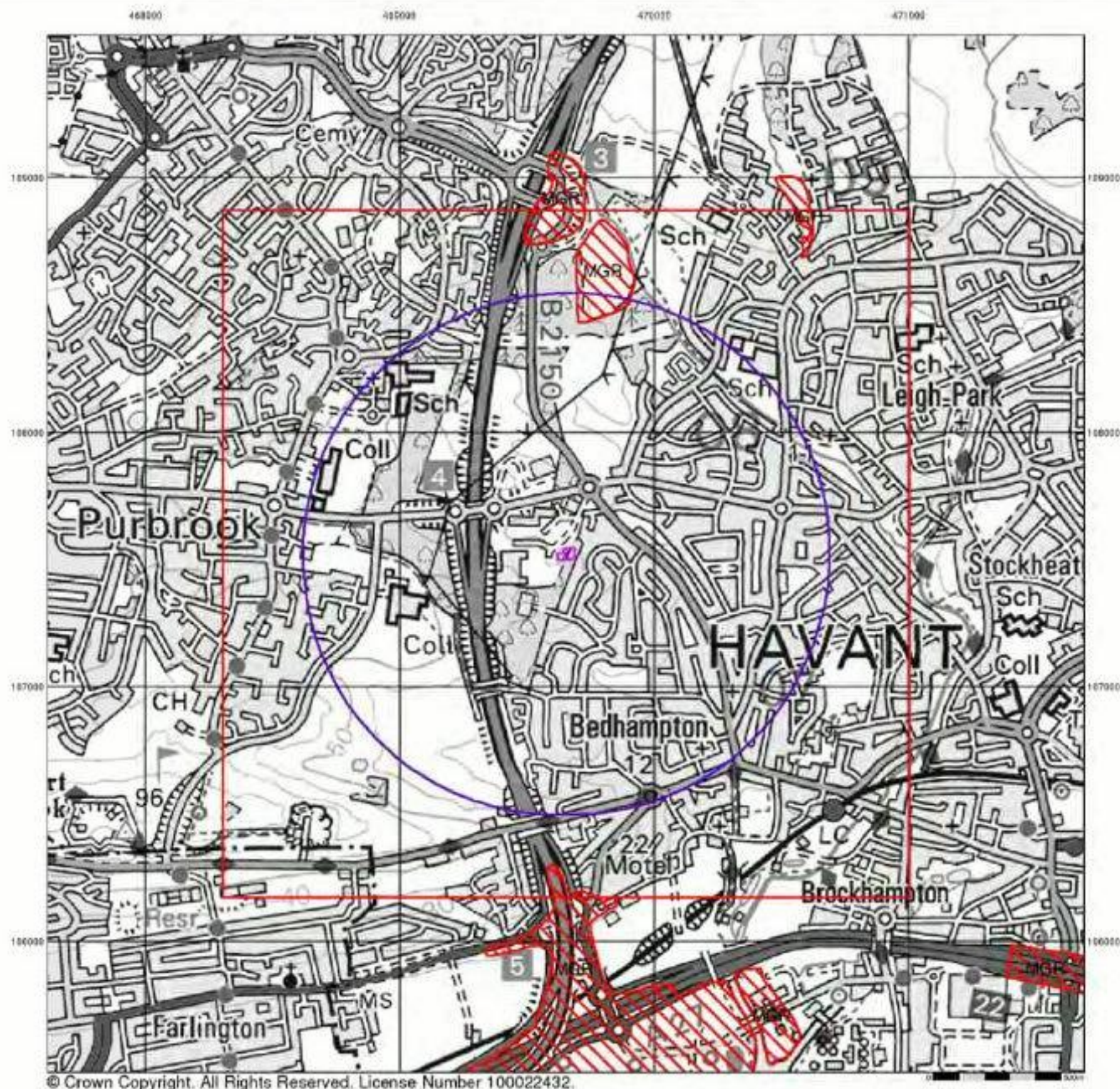
Order Number:	215765235_1_1
Customer Reference:	UK19.46326
National Grid Reference:	469650, 107520
Site:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details:

Site at 469520, 107460

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INFORMATION GROUP

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Artificial Ground and Landslip

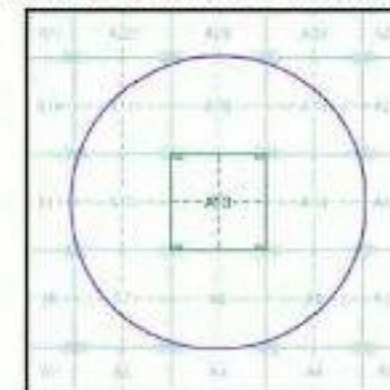
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



Order Details:

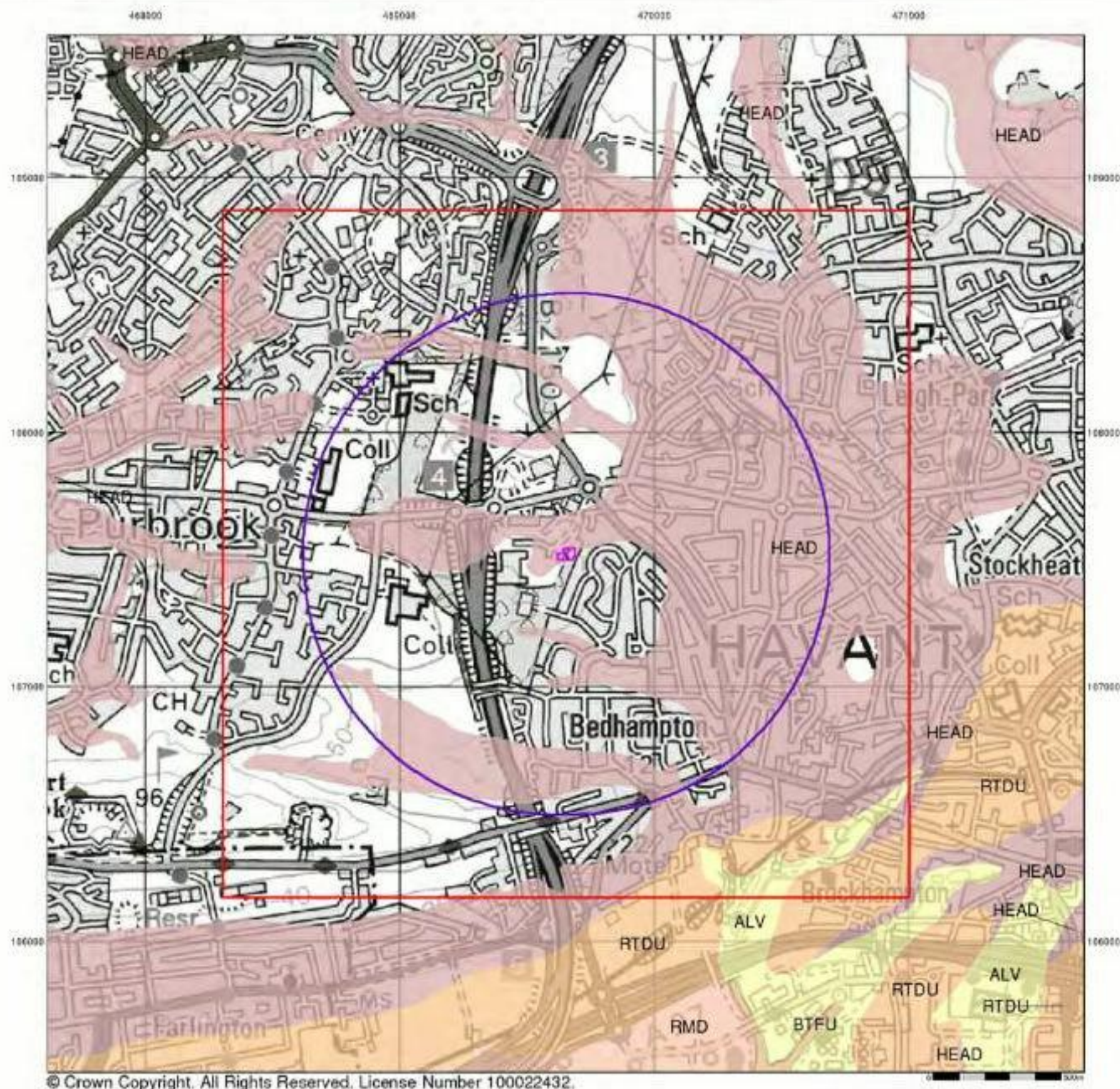
Order Number:	215765235_1_1
Customer Reference:	UK19.46326
National Grid Reference:	469650, 107520
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details:

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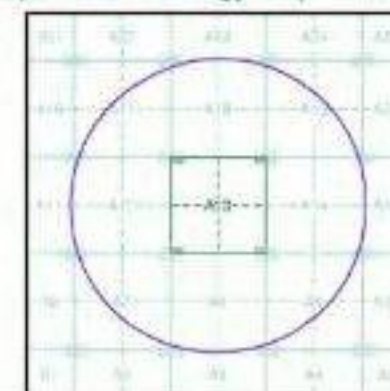
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



Order Details:

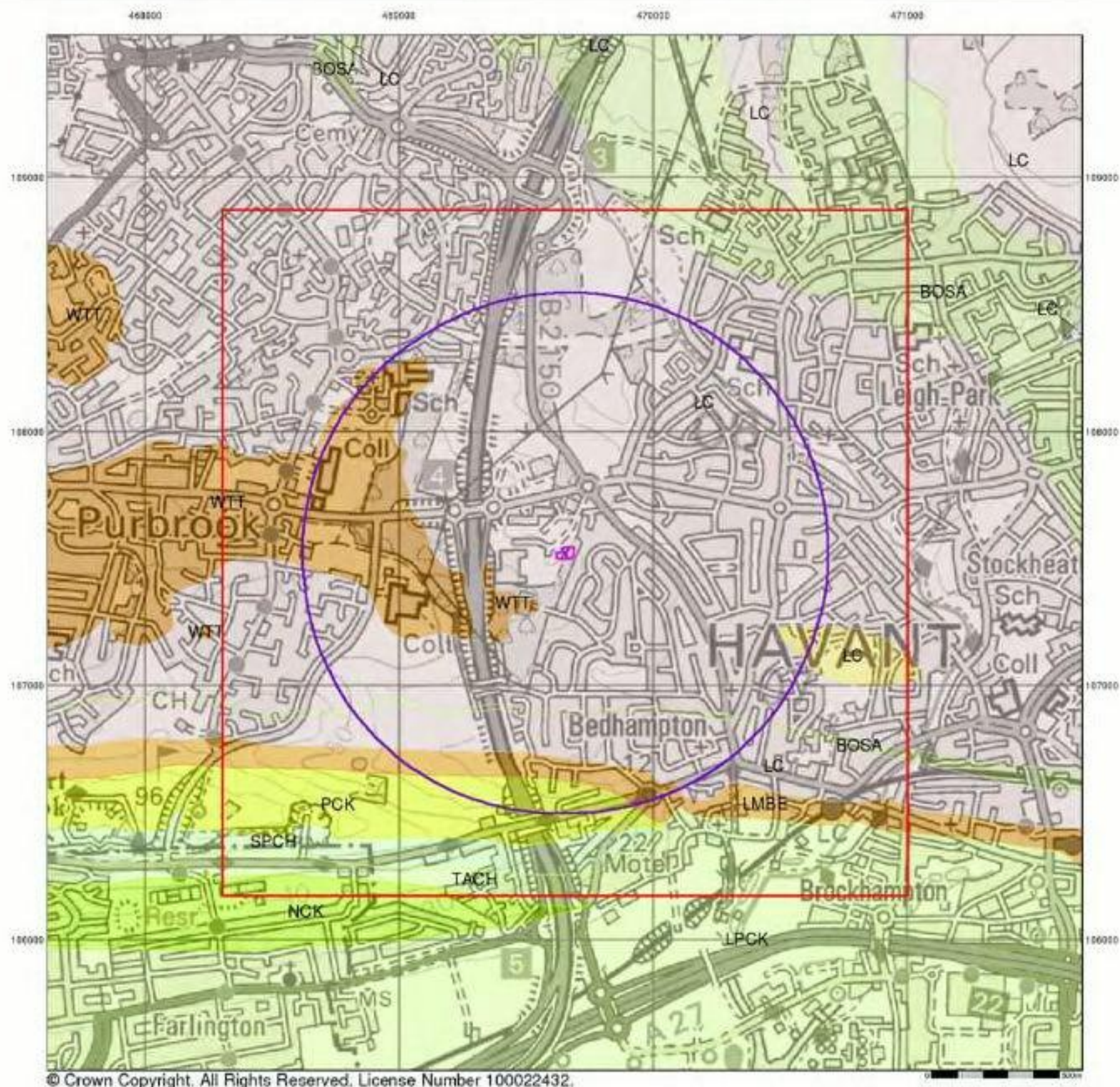
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Customer Reference:	UK19.46326
National Grid Reference:	469650, 107520
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details:

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Bedrock and Faults

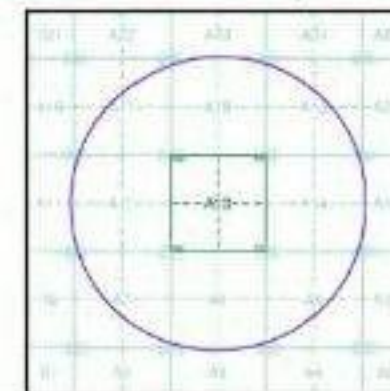
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



Order Details:

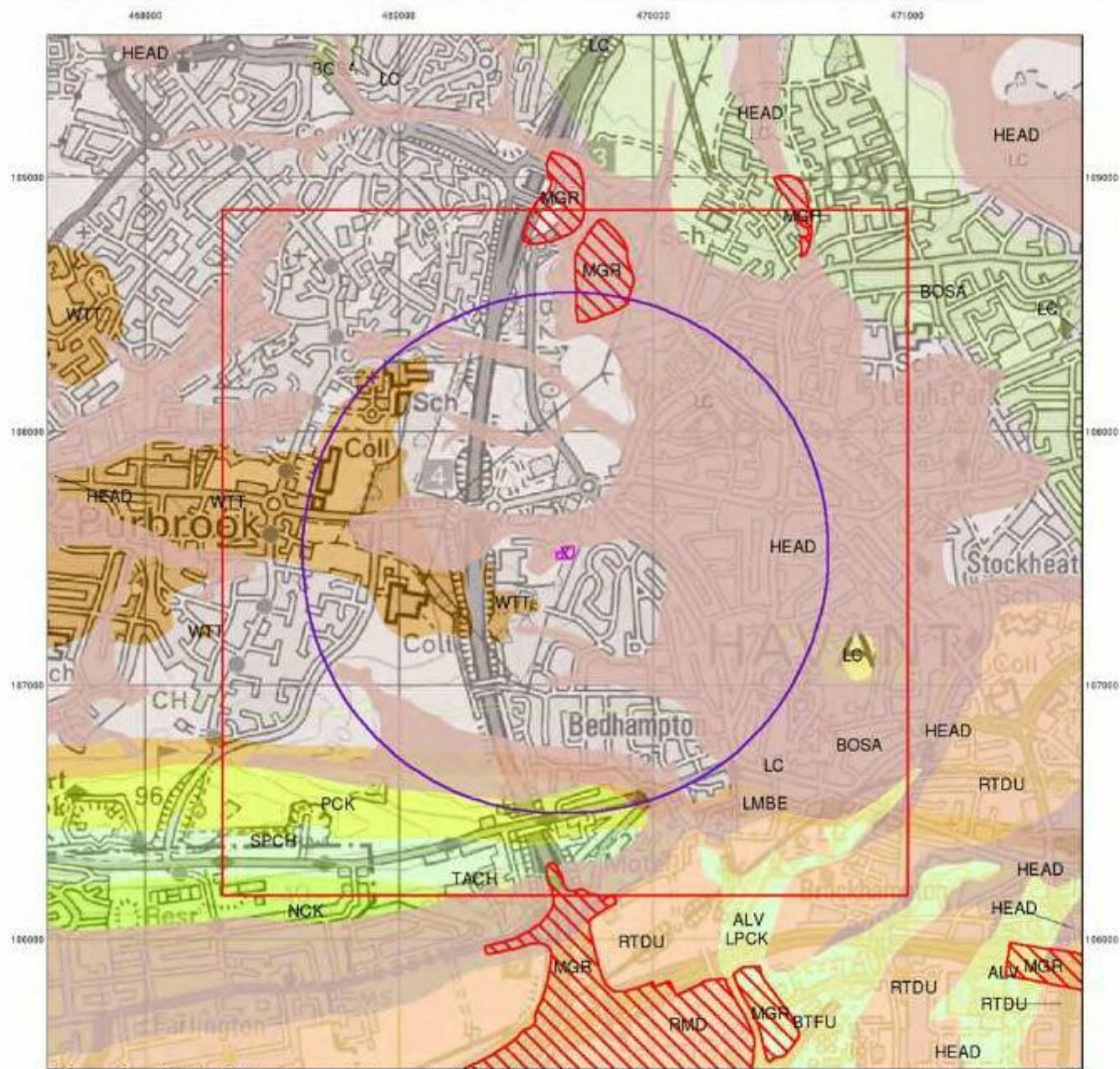
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Customer Reference:	UK19.46326
National Grid Reference:	469650, 107520
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details:

Site at 469520, 107460

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Combined Surface Geology

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

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

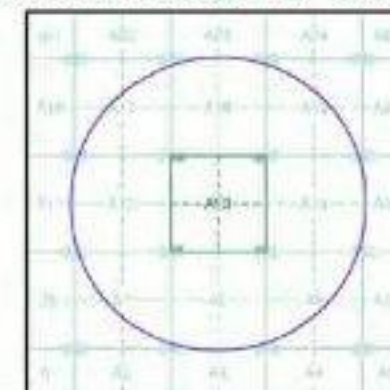
Additional Information

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

Contact

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

Combined Geology Map - Slice A



Order Details:

Order Number:	215765235_1_1
Customer Reference:	UK19.46326
National Grid Reference:	469650, 107520
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details:

Site at 469520, 107460

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Web: www.mindcheck.co.uk

GROUND EXPLORATIONS LTD.

BOREHOLE NO. 8

SU66 NE/210

Contract Name **Proposed PIMCO Hypermarket**

Report No. **8011/MCB/IAB**

NGR 6962 0751

Client **Bowden, Sillett & Ptnrs.,**

Site Address

Address **62, Carter Lane,**

Littlepark,

City of London,

Havant,

EC4V 5EA.

Hampshire.

Standing Water Level **4.0 m**

Method of Boring **Clay cutter**

Water Struck **None**

Diameter **150 mm**

Ground Level **27.0 m A.O.D. (Approx)**

Start **30.3.79.** Finish **30.3.79.**

Perforated Casing

Remarks **Standing water level measured 2 hours after completion of drilling**

JARS m		CORES m		BULK m	
1791 0.1		1793 1.0		1797 3.0	
1792 0.5		1795 2.5		1800 4.5	
1794 1.5		1798 4.0			
1796 3.0					
1799 4.5					
Water					
Description				Thickness	Depth
				m	m
TOPSOIL (soft brown silty clay with humus and roots)				0.1	0.1
Firm/stiff brown fissured silty/sandy CLAY with roots				0.9	1.0
Stiff brown/blue mottled fissured silty/sandy CLAY with some black pebbles				3.0	4.0
Stiff blue fissured silty/sandy CLAY				1.0	5.0
TOTALS				5.0	5.0

Notes 1. Descriptions are in accordance with B.S. Code of Practice C.P. 2001

Clients are requested to compare with samples submitted.

2. Core samples are nominally 102mm diameter and 460mm long.

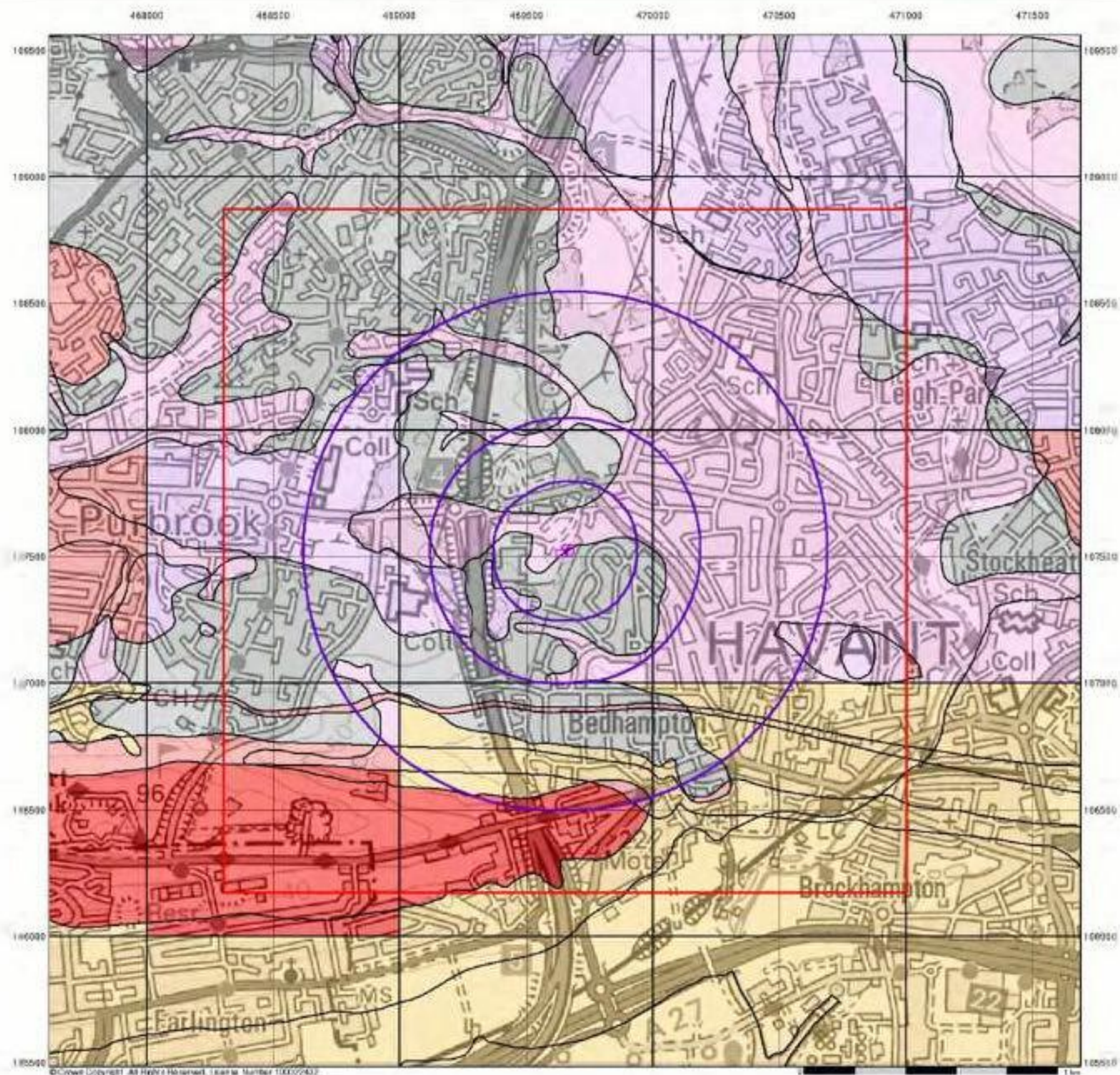
Depths shown are to top of sample.

HEAD

LONDON
CLAY

APPENDIX D

Groundwater Vulnerability and Flood Maps



Groundwater Vulnerability

General

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

Agency and Hydrological

Bedrock Aquifers

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

Superficial Aquifers

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

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

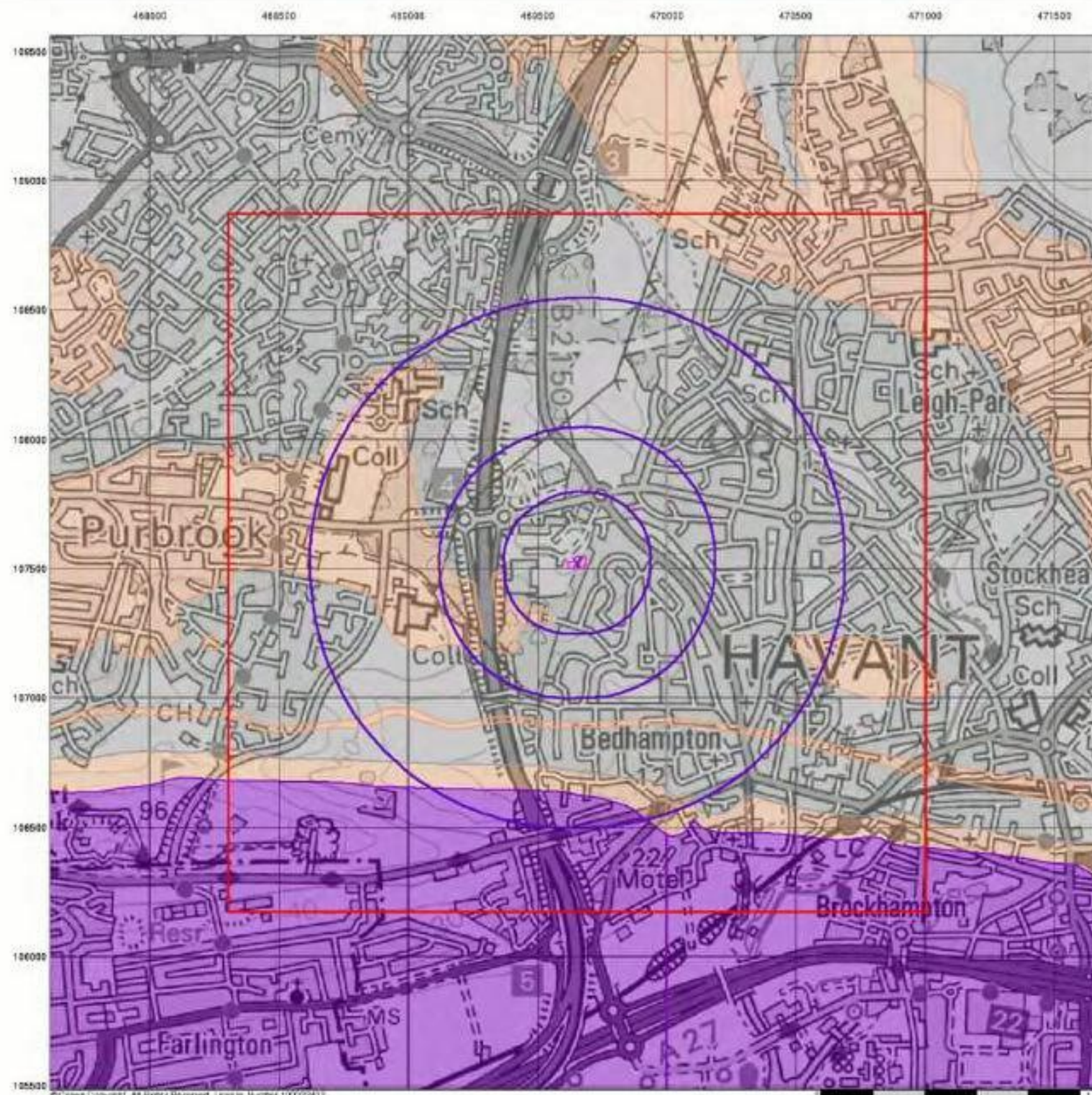
Order Number: 215765235_1_1
 Customer Ref: UK19.46326
 National Grid Reference: 469650, 107520
 Slice: A
 Site Area (Ha): 0.26
 Search Buffer (m): 1000

Site Details

Site at 469520, 107460

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Bedrock Aquifer Designation

General

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

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

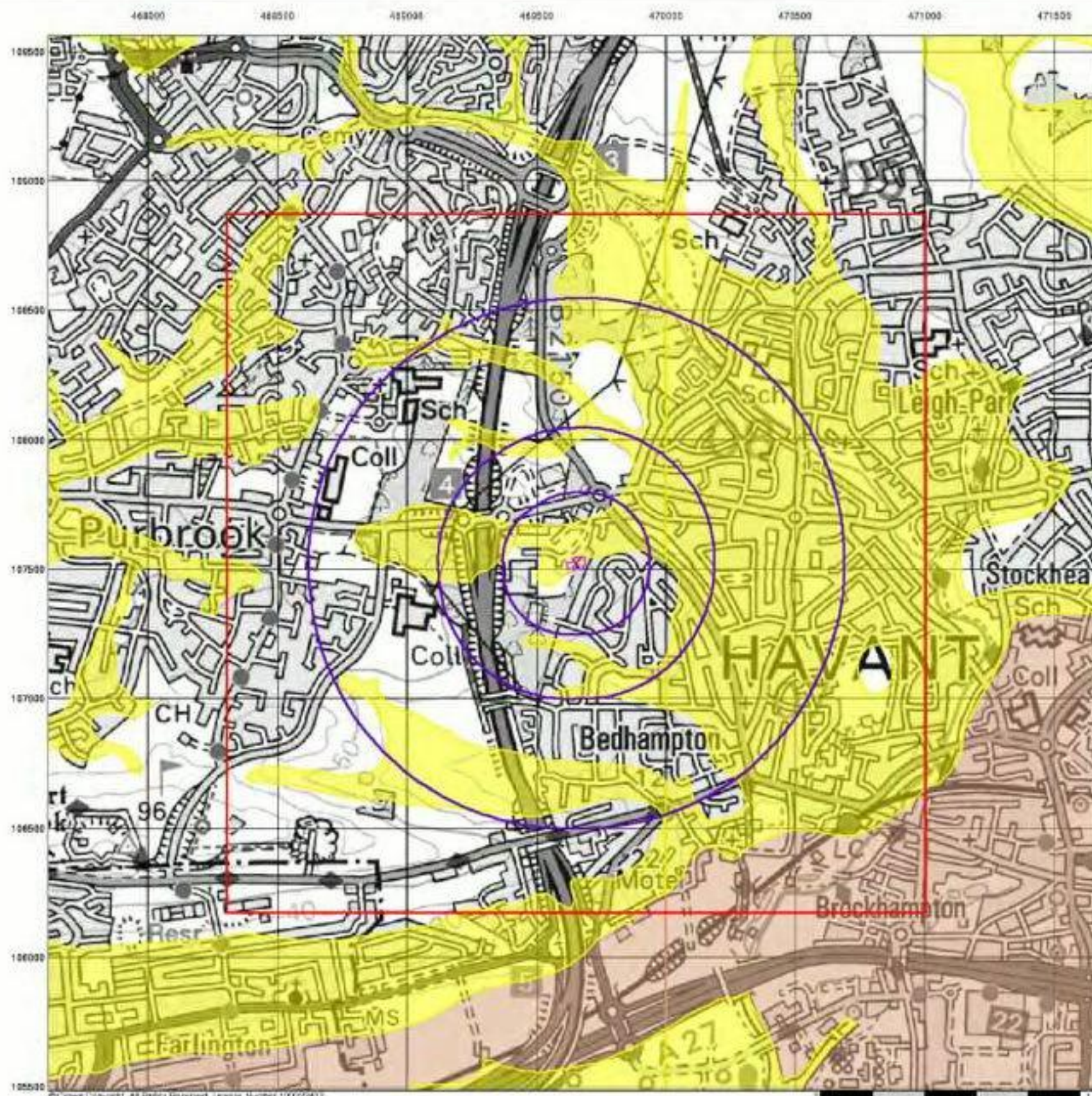
Order Number: 215765235_1_1
 Customer Ref: UK19.46326
 National Grid Reference: 469650, 107520
 Slice: A
 Site Area (Ha): 0.26
 Search Buffer (m): 1000

Site Details

Site at 469520, 107460

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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 Landship)

Site Sensitivity Context Map - Slice A



Order Details

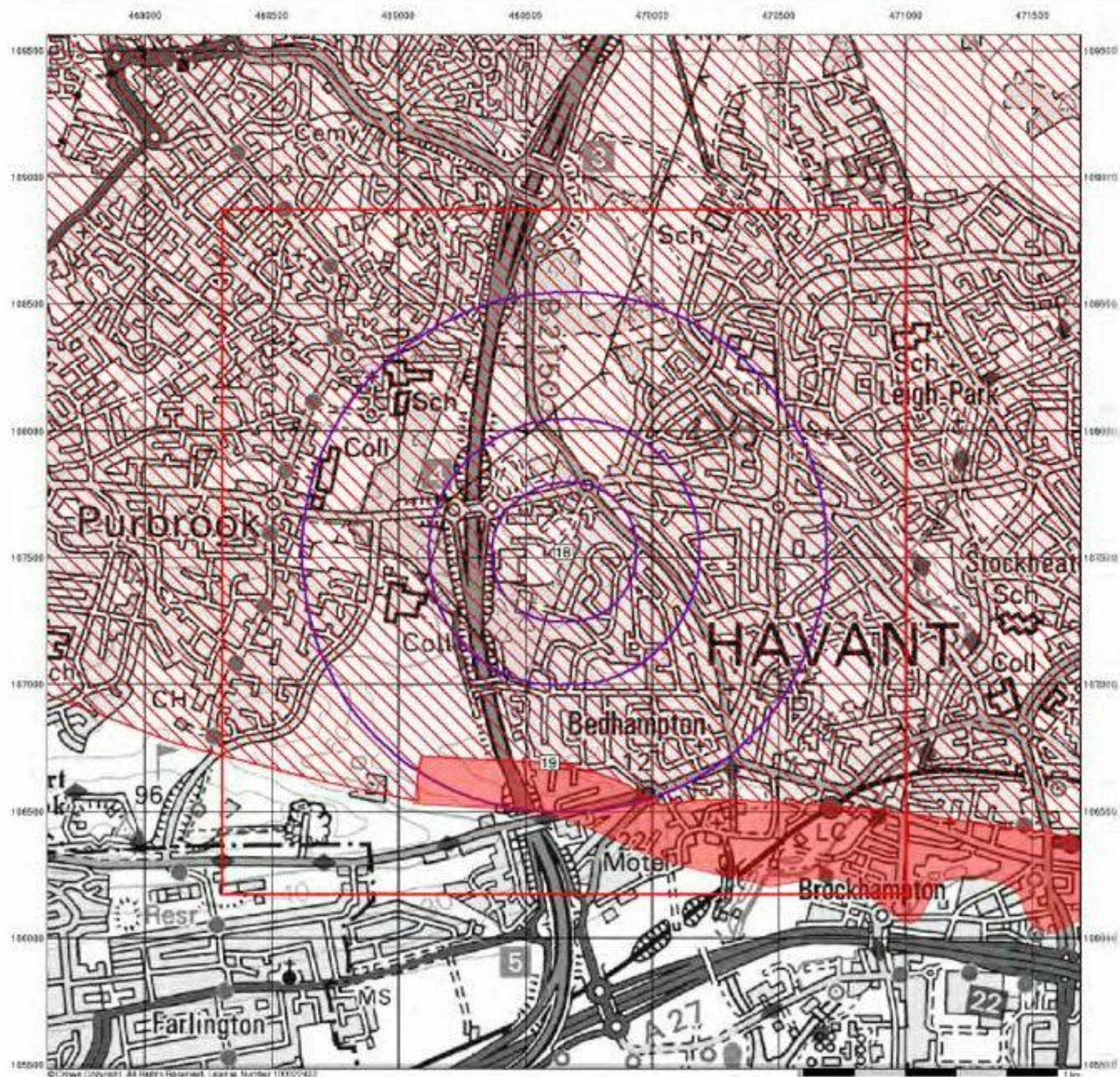
Order Number: 215765235_1_1
 Customer Ref: UK19-46326
 National Grid Reference: 469650, 107520
 Slice: A
 Site Area (Ha): 0.26
 Search Buffer (m): 1000

Site Details

Site at 469520, 107460

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Source Protection Zones

General

- Specified Site
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



Order Details

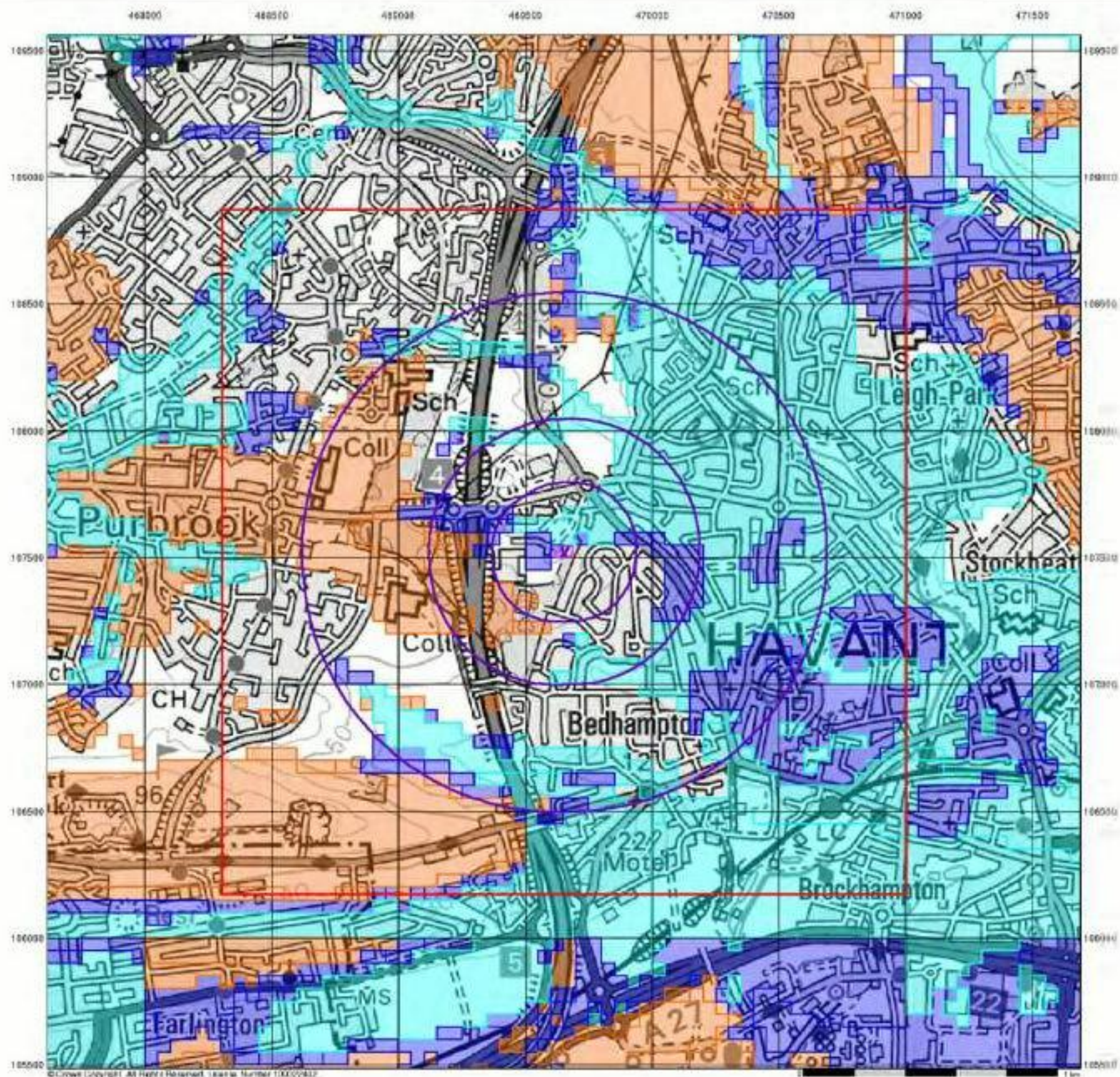
Order Number:	215765235_1_1
Customer Ref:	UK19-46326
National Grid Reference:	469650, 107520
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details

Site at 469520, 107460

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Web: www.environmental.co.uk



BGS Flood GFS Data

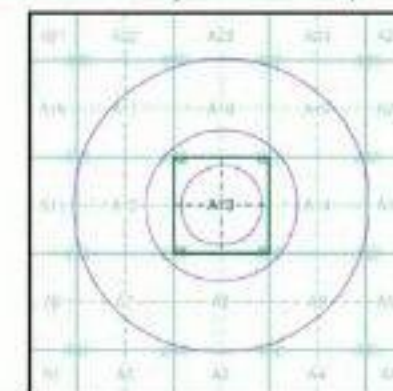
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 215765235_1_1
 Customer Ref: UK19 46326
 National Grid Reference: 469650, 107520
 Slice: A
 Site Area (Ha): 0.26
 Search Buffer (m): 1000

Site Details

Site at 469520, 107460

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 INFORMATION GROUP

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 Web: www.landmark.co.uk



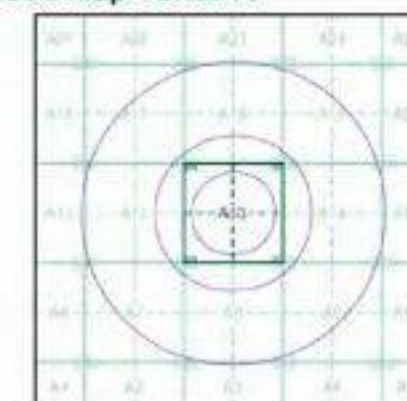
General

- Specified Site
- Specified Buffer(s)
- Dealing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

Order Number: 215765235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Site at 469520, 107460

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APPENDIX E

A Selection of Historic Maps



Hampshire & Isle Of Wight

Published 1870

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 215785235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Site at 469520, 107460

Landmark
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Web: www.environmental.co.uk



Hampshire & Isle Of Wight

Published 1932

Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1898 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

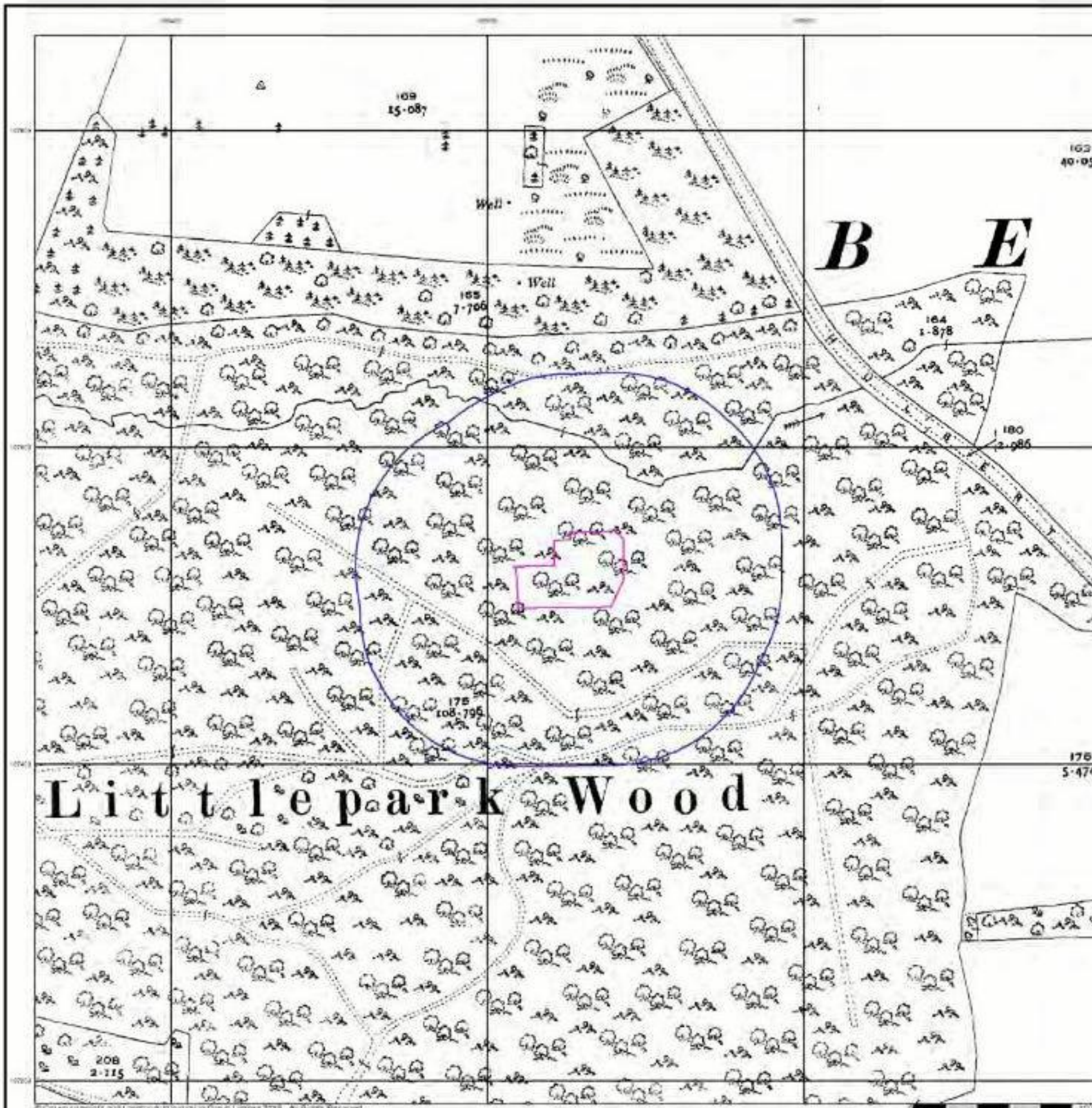
Order Number: 215785235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 100

Site Details

Site at 469520, 107460

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Web: www.environment.co.uk





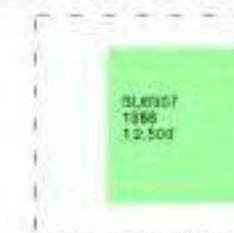
Ordnance Survey Plan

Published 1966

Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly field at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1898 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 215785235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.25
Search Buffer (m): 100

Site Details

Site at 469520, 107460

Landmark
INFORMATION GROUP

Tel: 0844 844 1052
Fax: 0844 844 1051
Web: www.environmental.co.uk



Large-Scale National Grid Data

Published 1993

Source map scale - 1:1,250

Large Scale National Grid Data superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the forerunners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SU8907NW 1993 1:1,250	SL8957NE 1993 1:1,250
SU8907SW 1993 1:1,250	SL8957SE 1993 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 215785235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 100

Site Details

Site at 469520, 107460

Landmark
INFORMATION GROUP

Tel: 0844 844 5052
Fax: 0844 844 5051
Web: www.environmental.co.uk



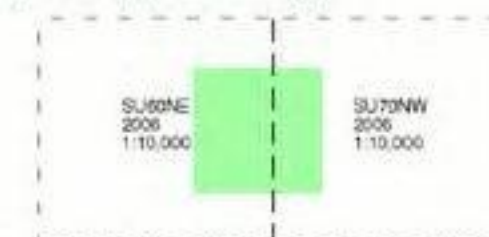
10k Raster Mapping

Published 2006

Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 215785235_1_1
Customer Ref: UK19.4632b
National Grid Reference: 469650, 107520
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Site at 469520, 107460

Landmark
INFORMATION GROUP

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APPENDIX F

Method Statement for Unexpected Contamination



METHOD STATEMENT

ACTIONS TO BE TAKEN IN THE EVENT OF DISCOVERING UNEXPECTED CONTAMINATION DURING INTRUSIVE GROUNDWORKS

If at any point during intrusive groundworks at a site, evidence of unforeseen contamination is encountered in the form of significant noxious odours, discolouration, or instability within soils or sheen/ discolouration in groundwater, the following actions will be taken:

- Intrusive works in the immediate area of the impacted ground will be suspended and the continuation of work in other areas of the site will be considered within the context of the site specific health & safety plan.
- Environmental Protection Strategies Ltd (EPS) will be contacted and appraised of the situation so that arrangements can be made to characterise the impact and determine what action may be necessary in addition to the scheduled site works. Where possible / health & safety plan permits, digital photographs of the impacted ground will be taken and emailed to EPS at the address below to assist in the initial assessment
- It may well be necessary for EPS to attend site to undertake visual inspection and obtain samples for field and/or laboratory analysis, although the actions taken will be dependent on the nature of what is encountered
- In cases where EPS consider the unforeseen contamination likely to pose a significant risk of significant harm to adjacent site users or local environmental receptors, the local authority and the Environment Agency will be informed of the situation and the actions being taken
- Once appropriate action has been agreed and undertaken, a written summary will be produced by EPS for submission to the Local Authority, (and where relevant, the Environment Agency) in accordance with planning requirements. The submission will include details of work undertaken, analytical results of investigative and validation samples obtained and conclusions and recommendations for any further actions considered necessary
- Where regulatory bodies have been involved, site works should only recommence following their agreement and in all cases should only recommence when the site manager considers it safe to do so within the context of the site specific health & safety plan.

EPS Contact Details:

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Will Evans	Director	Tel: 0781 253 9655
Steve Bullock	Director	Tel: 0786 694 9221

Email: info@epstrategies.co.uk (Automatically forwarded to the above and office-based personnel)



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