



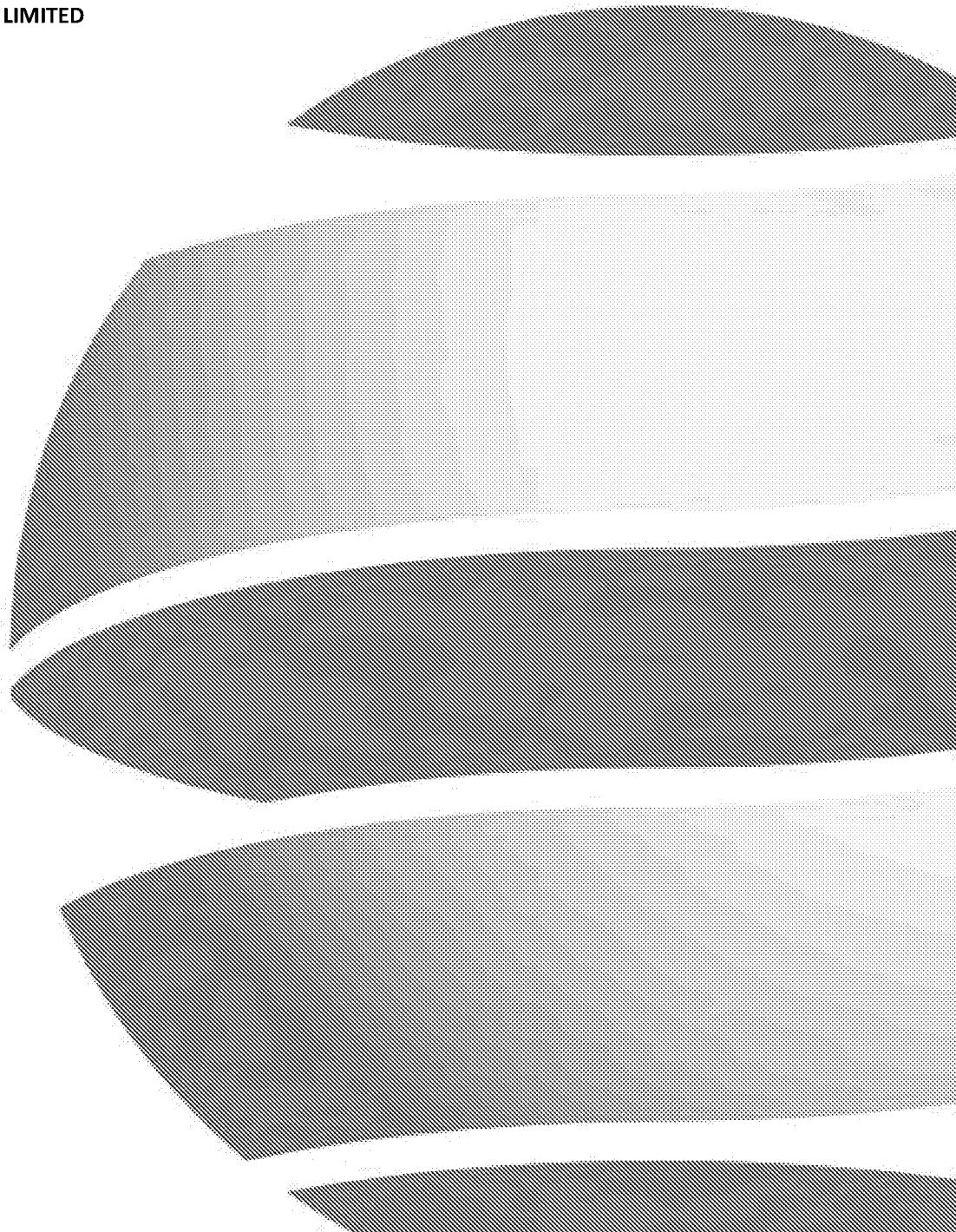
Geo-Environmental

DESK STUDY & GROUND INVESTIGATION REPORT

**for the land EAST of TYE LANE, WALBERTON,
WEST SUSSEX, BN18 OPS**

on behalf of

WATES DEVELOPMENT LIMITED



Report:	DESK STUDY & GROUND INVESTIGATION REPORT
Site:	LAND EAST OF TYE LANE, WALBERTON, WEST SUSSEX, BN18 OPS.
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**CONTENTS**

1.0	INTRODUCTION.....	1
1.1	General.....	1
1.2	Form of Development	1
1.3	Objectives.....	1
1.4	Standards	1
1.5	Conditions	2
2.0	DESK STUDY.....	4
2.1	Site Walkover Survey.....	4
2.2	Historic Data.....	4
2.3	Geology	6
2.4	Hydrogeology.....	6
2.5	Hydrology.....	8
2.6	Sensitive Land Uses	9
2.7	Radon.....	9
2.8	Ground Gases	9
2.9	Environmental Data	10
2.10	Geotechnical Data	10
2.11	Generic Contamination	11
2.12	Previous Ground Investigations	11
3.0	PRELIMINARY RISK ASSESSMENT	12
3.1	Geotechnical Factors	12
3.2	Preliminary Environmental Conceptual Site Model & Risk Assessment	12
3.2.1	Methodology.....	12
3.2.2	Summary of Plausible Sources	13
3.2.3	Summary of Plausible Pathways.....	13
3.2.4	Summary of Plausible receptors	14
3.3	Preliminary Risk Assessment Summary	15
4.0	GROUND INVESTIGATION.....	16
4.1	Scope of Works	16
4.2	Investigation Strategy	16
4.3	Geotechnical Testing & Rationale	18
4.4	Geochemical Testing & Rationale	18
4.5	Ground Gas and Groundwater Monitoring.....	18
5.0	ENCOUNTERED CONDITIONS.....	19
5.1	Soils	19
5.2	In-situ Testing.....	19



5.2.1	Soakage Testing.....	19
5.2.3	DCP Tests	20
5.3	Groundwater.....	20
5.4	Ground Gases	20
5.5	Obstructions	20
5.6	Soil Geochemical Analysis.....	20
5.7	Geotechnical Laboratory Testing.....	21
6.0	ENGINEERING CONSIDERATIONS	22
6.1	Traditional Foundations.....	22
7.0	QUANTITATIVE RISK ASSESSMENT	24
7.1	Introduction.....	24
7.2	Human Health.....	24
7.2.1	End Users	24
7.2.2	Adjacent Land Users	25
7.3	Plant Uptake	25
7.4	Water Supply Pipes	26
7.5	Groundwater and Controlled Waters	26
7.6	Ground Gases	26
7.8	Environmental Assessment Conclusions.....	27
8.0	REFINED CONCEPTUAL SITE MODEL	28
8.1	General.....	28
8.2	Sources	28
8.3	Pathways.....	28
8.5	Risk Evaluation of the Proposed Development	29
8.5.1	Risk to Human Health: Soils/Ground Gases.....	29
8.5.2	Risk to Groundwater	29
8.5.3	Risk to Building Materials & Services: Soils	29
8.6.1	Reuse of Material	31
8.6.2	Reuse of Waste.....	31
8.6.3	Disposal to Landfill	31
8.6.4	Waste Acceptance	32
8.7	Discovery Strategy.....	32

FIGURES

- FIGURE 1: Site Location Plan
 FIGURE 2: Trial Hole and DCP Location



APPENDICES

APPENDIX A:	Desk Study Information
APPENDIX B:	Engineering Logs
APPENDIX C:	Groundwater and Ground Gas Monitoring
APPENDIX D:	Geochemical Laboratory Results
APPENDIX E:	Geotechnical Laboratory Results and DCP results
APPENDIX F:	CLEA Model Output and ESI Statistical Analysis

1.0 INTRODUCTION

1.1 General

Geo-Environmental Services Limited, 'Geo-Environmental', was instructed by Wates Developments Limited to undertake an investigation of the geotechnical and environmental factors pertaining to the proposed development of the land at Tye Lane, Walberton, West Sussex, BN18 0PS (Figure 1). The centre of the site was located at National Grid Reference 497330, 106210.

1.2 Form of Development

The investigation is understood to inform an outline for planning permission for proposed residential development comprising new dwellings together with private and communal gardens, public open space, access roads and other associated infrastructure.

1.3 Objectives

The investigation was undertaken to support assessment for the key development elements as described in Section 1.2, including:

- Foundation assessment and preliminary design
- Geotechnical assessment
- Soakage testing
- Pavement design
- Sub-surface concrete design
- Ground stability
- Ground gas hazard assessment
- Ground contamination assessment

As part of the geo-environmental investigation, a desk study was undertaken. The desk study has been used to form of a conceptual site model and a Preliminary Risk Assessment (PRA) in accordance with CLR11. The data from the ground investigation (Phase II) stage were then to form the basis of a subsequent Tier 1 Generic Quantitative Risk Assessment (GQRA) and clarification of the conceptual site model. The objective of the risk assessments was to evaluate the risks posed to the proposed redevelopment, adjacent land uses, and the wider environment, in the context of the existing planning regime.

1.4 Standards

Where practicable, the ground investigation and subsequent environmental assessments were undertaken in accordance with the following documents and guidance:

- British Standards Institute - Code of Practice for Site Investigations (BS5930:2015).
- British Standards Institute - Code of Practice for the Characterisation and Remediation from Ground Gas in Affected Developments (BS8485:2007).
- British Standards Institute - Eurocode 7 – Geotechnical Design - Parts 1 & 2 (BS EN1997-1:2004 & BS EN1997-2:2007).
- British Standards Institute - Investigation of Potentially Contaminated Sites - Code of Practice (BS10175:2011).
- British Standards Institute - Soils for Civil Engineering Purposes (BS1377:1990).



- Building Research Establishment - The Performance of Building Materials in Contaminated Land (BRE255) (1994).
- Building Research Establishment – Soakaway Design (Digest 365) (1991).
- Construction Industry Research and Information Association - Assessing risks posed by hazardous ground gases to buildings (C665) (2007).
- Department for Communities and Local Government - National Planning Policy Framework (2012).
- Department for Environment Food and Rural Affairs and Environment Agency - Model Procedures for the Management of Contaminated Land (CLR11) (2004).
- Department of Environment - Industry Profiles (1995 - 1996).
- Environment Agency - Guidance for waste destined for disposal in landfills (2006).
- Environment Agency - Guidance on Requirements for Land Contamination Reports (2005).
- National House Building Council, Environment Agency & Chartered Institute of Environmental Health - Guidance for the Safe Development of Housing on Land Affected by Contamination (R&D Publication 66) (2008).
- National House Building Council - Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present (10627-R01[04]) (2007).
- National House Building Council – Standards, Chapter 4.1 Land Quality - Managing Ground Conditions (1999).

1.5 Conditions

This report does not purport to be a “Geotechnical Design Report” as defined in Clause 2.8 of Eurocode 7 (Geotechnical Design BS EN 1997-1:2004) and some of the data used to support this preliminary geotechnical assessment may not be fully compliant with that design code. It is considered possible that further detailed ground investigations could be required to facilitate the detailed geotechnical design process and should be carried out on a structure specific basis if necessary.

The data collected from the investigations have been used to provide an interpretation of the environmental conditions pertaining to the site. The recommendations and opinions expressed in this report are based on the data obtained. Geo-Environmental takes no responsibility for conditions that either have not been revealed in the available records, or that occurs between or under points of physical investigation. Whilst every effort has been made to interpret the conditions, such information is only indicative and liability cannot be accepted for its accuracy.

It should be noted that in particular the concentrations and levels of mobile liquid and gaseous materials are likely to vary with time. The results obtained may therefore only be representative of the conditions at the time of sampling. This report should not be taken as any guarantee that a site is free of hazardous or potentially contaminative materials.

Information contained in this report is intended for the use of the Client, and Geo-Environmental can take no responsibility for the use of this information by any party for uses other than that described in this report. Geo-Environmental makes no warranty or representation whatsoever expressed or implied with respect to the use of this information by any third party. However, it is acknowledged that the Client upon grant of planning permission, intends to dispose of all or part of the site(s), it is a condition of the appointment that Geo-Environmental must, at the appropriate time enter into an agreement for the assignment of full rights to copy and use together with full benefits of our work to whomsoever the Client chooses and this will be to more than one company at no cost to the Client. The benefits include any PI insurance cover or collateral warranty. Geo-Environmental does not indemnify the Client or any third parties against any dispute or claim arising from any finding or other result of this investigation report or any consequential losses.



Assessment criteria or other parameters developed for the evaluation of contamination on this site are based on a number of assumptions regarding exposure and toxicology, and exposure to contaminants and levels of adverse effects may therefore vary. Whilst every care and expertise has been employed in the development of such criteria, no liability is accepted in this respect. Other criteria or guidance on the development of assessment criteria may be published in the future, and no liability is accepted in this respect.

2.0 DESK STUDY

The findings of the Phase I desk study are presented in the following section. Copies of the historical maps and other information obtained as part of the desk study are presented in Appendix A. Comments made in the following section regarding possible ground conditions on the site are based on the dataset presented in Appendix A.

2.1 Site Walkover Survey

The site was situated to the north of the town of Walberton, between Tye Lane and Yapton Lane and comprised an approximately 11.27Ha irregularly shaped parcel of open farmland. At the time of the walkover and intrusive works, the main part of the site had been recently seeded, with new grass growing over the majority of the site. A cluster of mature and young trees was located in the south eastern corner of the site with a further mature tree located in the centre of the site close to the southern boundary. The site was bounded by a number of young and mature trees, ditches, shrubs and hedges as well as fencing surrounding the entire site. The site was generally flat land with no noticeable slopes.

Access to the site was through the adjacent Avisford Park Golf Course and through a gate on the north eastern corner of the site.

2.2 Historic Data

Historical maps dating back to 1875 were obtained as part of the desk study for the proposed development area and these are presented Appendix A. A summary of the apparent key features noted on the map extracts both on the site and within the local area is presented in Table 2.1.

Date	On-Site	Off-Site
1875z	The site was indicated to comprise open agricultural fields containing a number of trees, including a cluster of trees in the south western area of the site. The site was shown to have been separated into a number of smaller plots by boundaries in the south western area and in the eastern and south eastern areas of the site.	The surrounding area was mostly agricultural fields, open land and areas of forestry. Avisford House was located c. 10m north of the site boundary. A school was located c. 60m to the south of the site with some residential properties located adjacent. A church (St. Marys Church) and associated grave yard were located c. 350m to the south The built up residential area of Walberton was located c. 250m south and a brewery was located c. 200m south of the site.
1880	No significant changes noted.	A farm labelled Binsted Farm was mapped c. 490m E. A windmill (flour) was located c. 930m north-west of the site. A brick field was labelled c. 900m north-west of the site boundary.
1897z	A pathway was mapped which ran from the western area of the southern boundary through the centre of the site and out through the centre of the northern boundary. A tank was labelled in the north eastern area of the site, likely to be for water irrigation or	A farm labelled Pigeon House Farm was mapped c. 250m south-west of the site boundary. A pond was shown to have been constructed c. 20m north of the site boundary within the Avisford House property.

	animal welfare purposes.	
1899	The site was shown to have been separated into three separate plots by a boundary in the south western corner and a second boundary running roughly north to south through the centre of the site. The tank is no longer indicated.	A farm labelled Walberton Farm was mapped c. 700m south-east of the site boundary. The brick field (c. 900m north-west on 1880 map) was labelled disused.
1912z	No on-site boundaries were mapped.	No significant changes noted.
1914	No significant changes noted.	Binsted Farm (c.490m E on 1880 map) was labelled as Church Farm.
1914	No significant changes noted.	No significant changes noted.
1914	No significant changes noted.	No significant changes noted.
1914	No significant changes noted.	No significant changes noted.
1938-1939z	The path through the centre of the site was no longer mapped.	Significant residential development was shown to have occurred immediately east and south east and south of the site as well as a number of residential properties constructed along Tye Lane to the west of the site.
1947 (Aerial)	No significant changes noted.	Residential development was shown to have occurred c.500m west of the site boundary.
1951	No significant changes noted.	No significant changes noted.
1961-1962	No significant changes noted.	No significant changes noted.
1967	Incomplete mapping. No significant changes noted.	Incomplete mapping. No significant changes noted.
1974z	No significant changes noted.	Arundel Road (A27) c. 500m North was shown to have undergone development to create a wider road. Further residential development was shown to have occurred c. 100m south, south-east and south-west of the site within the built up area of Walberton. A farm labelled Hooe Farm was mapped c. 300m north-west of the site boundary. The school (c. 60m S on 1875 map) was shown to have moved into the larger plot of land immediately south of the site boundary.
1979	No significant changes noted.	A caravan park was mapped c. 100m north-east of the site boundary.
1980	Incomplete mapping. No significant changes noted.	Incomplete mapping. No significant changes noted.
1977-1984z	No significant changes noted.	No significant changes noted.
1989-1990z	Incomplete mapping. No significant changes noted.	Incomplete mapping. No significant changes noted.
1992	Incomplete mapping. No significant changes noted.	Incomplete mapping. No significant changes noted.
1992z	Incomplete mapping. No significant changes noted.	Incomplete mapping. No significant changes noted.
1994z	No significant changes noted.	No significant changes noted.
1999z (Aerial)	No significant changes noted.	No significant changes noted.

2000	No significant changes noted.	No significant changes noted.
2006	No significant changes noted.	A plot of land c. 700m north-west of the site boundary was shown to have been divided into separate smaller plots.
2017	No significant changes noted.	No significant changes noted.

Table 2.1 Summary of Historical Map extracts

In summary, the site has been used for agricultural purposes from the earliest mapping period to the present day. No significant construction or development of the site was shown to have occurred with the exception of a pathway through the centre of the site and a number of site boundaries dividing the site into separate plots throughout the site's history. The historical maps indicated that there are unlikely to be any significant on-site sources of contamination. The nearest potentially contaminative sources have been identified within the area occupied by the farm buildings c.250m south-west of the site boundary (Pigeon House Farm) and c. 300m north-west of the site boundary (Hooe Farm).

2.3 Geology

With reference to British Geological Survey (BGS) mapping, the geology of the site was anticipated to comprise River Terrace Deposits (undifferentiated) and some Raised Beach Deposits (1) in the north-western corner over the London Clay Formation.

The rivers of the south-east of England, including the River Thames and its tributaries, have been subject to at least three changes of level since Pleistocene times. One result has been the formation of a complex series of **River Terrace Deposits**. The deposits are generally found at an elevation close to or higher than that of the existing rivers, and generally comprise sands and gravels of roughly bedded flint or chert gravels varying degrees of coarseness.

Raised Beach Deposits have been described as shingle, sand, silt and clay; may be bedded or chaotic; beach deposits may be in the form of dunes, sheets or banks - [generic description]; now above the level of the present shoreline as a result of earth movement or a general fall in sea level.

London Clay comprises a stiff grey fissured clay, weathering to brown near surface. Concretions of argillaceous limestone in nodular form (Claystones) occur throughout the formation. Crystals of gypsum (Selenite) are often found within the weathered part of the London Clay, and precautions against sulphate attack to concrete are sometimes required.

The lowest part of the formation is a sandy bed with black rounded gravel and occasional layers of sandstone and is known as the Basement Beds.

2.4 Hydrogeology

Aquifers

With reference to information obtained from the Environment Agency, the following aquifer designations were identified on site:

Deposit Type	Geological Formation	Aquifer Designation
Superficial	River Terrace Deposits	Secondary "A"
Bedrock	London Clay	Unproductive Strata

Table 2.2 Summary of Aquifer Designations

Secondary 'A' aquifers comprise permeable layers which are capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

Unproductive Strata comprise rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

Source Protection Zones

The Environment Agency website indicated that the site is situated outside of any Source Protection Zone (SPZ) with the nearest SPZ (Type: Zone III) located 931m NW of the site boundary.

An SPZ is a protection zone placed around a well or borehole that supplies groundwater of potable quality, and an SPZ is divided into three zones defined as follows:

- Zone I - Travel time (of water) of 50 days or less to the groundwater source.
- Zone II - Either 25% of the source area or a travel time of 400 days whichever is greater.
- Zone III - The total area needed to support the discharge and abstraction from the protected groundwater source.

Licensed Groundwater Abstractions

Six licensed groundwater abstractions were reported within a 1km radius of the site the details of which are outlined in Table 2.3.

Location	Use	Permit start date	Permit end date	Distance
W P Wyatt & Son Point A At Woodlands Farm, Slindon	General Agriculture: Spray Irrigation – Direct.	10th June 2009	not supplied	823m NW
W P Wyatt Point A At Woodlands Farm, Slindon	General Agriculture: Spray Irrigation – Direct.	2nd January 1979	not supplied	823m NW
Walberton Nursery Llp Point A At Walberton Nurseries, Walberton,	General Agriculture: Spray Irrigation – Direct.	1st April 2016	not supplied	849m S
Walberton Nursery Llp, Point A At Walberton Nurseries, Walberton,	General Agriculture: Spray Irrigation – Direct.	17th April 2014	not supplied	849m S
D Tristram T/A Walberton Nurseries, Point A At Walberton Nurseries, Walberton,	General Agriculture: Spray Irrigation – Direct.	16th June 2009	not supplied	849m S
D Tristram T/A Walberton Nurseries, Point A At Walberton Nurseries, Walberton,	General Agriculture: Spray Irrigation – Direct.	2nd April 1998	not supplied	849m S

Table 2.3 Groundwater Abstractions within 1km of the site



2.5 Hydrology

Surface Water Features

According to the Envirocheck dataset the nearest water feature is located some 6m to the east of the site, though this remains unidentified.

Flood Risk

The Desk Study identified the site to be located in an area with the potential for groundwater flooding to occur at the surface, and of properties situated below ground level with some of the site classified as an area of limited potential for groundwater flooding to occur.

Licensed Surface Water Abstractions

There are no licenced surface water abstractions within 1km of the site boundaries.

Licensed Discharge Consents to Surface Water

There were three licensed discharge consents to surface waters recorded within a 500m radius of the site boundary:

- Mr A Breton, domestic property (single) (incl. farm house), Ryders', Hedgers Hill, Walberton Ryders, Hedgers Hill. Discharge type: Sewage Discharges - Final/Treated Effluent - Not Water Company into Freshwater Stream/River, issued date: 2nd July 2003, revocation date: not supplied. 263m NE.
- West Sussex County Council, property type undefined, Church Farm, Binstead. Discharge type: Other Matter-Surface Water into Freshwater Stream/River, issued date: 28th September 1962, revocation date: 11th May 1995. 396m E.
- L. Wishart Esq. property type undefined, Church Farm, Binsted. Discharge type: Trade Discharge - Process Water into Freshwater Stream/River, issued date: 2nd January 1985, revocation date: 20th March 1996, 406m E.

Pollution Incidents to Controlled Waters

The desk identified two pollution incidents to controlled water within 500m of the site boundary:

- Avisford Golf Club, BINSTEAD, Receiving water: Potential River. Pollutant: No Pollutant, 04th August 1999. Category 3 – Minor Incident. 217m E.
- Stream At, Walberton Mill Lane, Receiving water: not given. Pollutant: Oils Unknown (Note: Heating Oil), 10th November 1992. Category 3 – Minor Incident. 307m W.

Licensed Discharge Consents to Land

There are two recorded licensed discharge consents to land within 500m of the site:

- W W Smart, Land At Lazy W, Yapton Lane, Walberton, property type: sport, amusement & recreation. Discharge type: Sewage Discharges - Final/Treated Effluent - Not Water Company into land, 38m NE.
- St Mary's Church Council, Walberton, property type: Church. Discharge type: Sewage Discharges - Final/Treated Effluent - Not Water Company into land, 425m S.

2.6 Sensitive Land Uses

A search of environmentally sensitive land uses including Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar Sites, World Heritage Sites, Environmentally Sensitive Areas, Areas of Outstanding Natural Beauty (AONB), National Parks, Nitrate Sensitive Areas (NSA), and Nitrate Vulnerable Zones (NVZ) were undertaken as part of the Desk Study.

Four environmentally sensitive areas were identified within 1km of the site:

- South Downs (National Park), 139m NE.
- South Downs (Environmentally Sensitive Areas), 605m N.
- West Stubbs Copse, Ancient Woodland (Plantation on Ancient Woodland). 933m N
- Threecorner Copse, Ancient Woodland (Ancient and Semi-Natural Woodland). 978m NE.

The site was indicated to occupy an area designated as a Nitrate Vulnerable Zone (Aldingbourne Rife Nvz). A Nitrate Vulnerable Zone is a conservation designation of the Environment Agency for areas of land that drain into nitrate polluted waters, or waters which could become polluted by nitrates.

2.7 Radon

With reference to the Envirocheck data report the site is indicated to be in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level), however, the BGS states that in this location, radon protection measures are not required in the construction of new dwellings or extensions.

2.8 Ground Gases

A search of historic and authorised landfill sites, waste treatment, transfer and disposal sites was undertaken as part of the Desk Study. Such sites may form an artificial source of ground gases, such as carbon dioxide and methane, where wastes are buried or disposed of to landfill. Four such sites were located within 500m of the site, details of which are outlined in Table 2.4.

Location	Type	Specified waste	Date	Distance
Tye Lane, Walberton, Sussex	Historical Landfill Sites	Deposited Waste included Inert, Commercial and Household Waste	31st December 1955 to 31st December 1960	375m NW
Fontwell, Sussex	Historical Landfill Sites	Deposited Waste included Inert Waste	3rd May 1988 to 15th July 1988	434m NW
Hooe Farm, Tye Lane, Walberton	Local Authority Recorded Landfill Sites	Not Supplied	Not Supplied	487m NW
Not supplied	Potentially Infilled Land (Water)	Unknown Filled Ground (Pond, marsh, river, stream, dock etc)	Not Supplied	421m E

Table 2.4 Summary of Historical and Authorised Landfill sites within 500m of the site

2.9 Environmental Data

Searches of other various environmental databases were made as part of the desk study, including air pollution control sites, Part IIA contaminated land, Integrated Pollution Control (IPC) and Integrated Pollution Prevention and Control (IPPC) sites, registered radioactive substances, COMAH sites, explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS) sites, planning permissions for sites involving hazardous substances, contemporary trade directories and fuel station registers.

One Local Authority Pollution Prevention and Controls site was identified:

- Turnpike Motors, The Street, Walberton, ARUNDEL, West Sussex, BN18 0PG. Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input. 102m SW

In addition, the following potentially contaminative contemporary trade directory entries were identified within a 250m radius of the site boundary:

- Name: Cathedral Fire Ltd, Abbatoirs, Apple Acre, Avisford Park Road, Walberton, Distance from site: 19m SE. Status: Inactive.
- Name: Christine Llewellyn, Furniture - Repairing & Restoring, Rosslyn Cottage, The Street, Walberton, Arundel, Distance from site: 75m SW. Status: Inactive.
- Name: Art On Tiles, Tile Manufacturers, Hollytree Cottage, The Street, Walberton, Arundel, Distance from site: 81m SW. Status: Inactive.
- Name: Swanbourne Auto Works , Mot Testing Centres , The Street, Walberton, Arundel, Distance from site: 100m SW. Status: Active.
- Name: Turnpike Motors, Garage Services, The Street, Walberton, Arundel, Distance from site: 102m SW. Status: Inactive.
- Name: Universal Race Technology Ltd, Car Component Manufacturers , William Booker Yard,, The Street, Walberton, Arundel, Distance from site: 120m SW. Status: Inactive.
- Name: Bevis Digitech Ltd, Machinery - Industrial & Commercial Inactive , William Booker Yard, The Street, Walberton, Arundel, Distance from site: 120m SW. Status: Inactive.
- Name: Stephen Butler Blinds, William Booker Yard, The Street, Walberton, Arundel, Distance from site: 140m SW. Status: Inactive.
- Name: Poppies, Cleaning Services - Domestic, Avisford Park House, Tye Lane, Walberton, Arundel, Distance from site: 174m NW. Status: Active.

Furthermore, one Fuel Station Entry was identified within the Envirocheck datasheets within 250m of the site boundary: Turnpike Motors, The Street, Walberton, Arundel. Distance from site: 102m SW. Status: Obsolete.

2.10 Geotechnical Data

A mining and ground stability datasheet is included within the appended Envirocheck data.

The site lies within an area considered by the Coal Authority as being in an area that might not be affected by coal mining.

The nearest recorded natural cavities were a sinkhole and a solution pipe some 949m beyond the north-eastern boundary.

National databases for a number of different geological hazards have been compiled by the BGS, and a summary of the hazard data pertaining to the site itself is presented on Table 2.5, though due to the size of the site and the variation in lithologies of the formations present, the risk ratings within the following table should be treated with caution:

Hazard	Designation
Collapsible Ground	Low
Compressible Ground	No Hazard
Ground Dissolution	No Hazard
Landslide	Very Low
Running Sand	Very Low
Swelling Clay	No Hazard

Table 2.5 Summary of BGS Geological Hazards

2.11 Generic Contamination

The site has a history of rural and agricultural land use and was located within a semi-rural/agricultural area. These land uses are not covered by the National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) publication '*Guidance for the Safe Development of Housing on Land Affected by Contamination*' (2008), which provides a summary of industrial profiles (1995 - 1996) published by the former Department of the Environment (DoE) (now part of the Department for Environment, Food and Rural Affairs [DEFRA]).

No significant potentially contaminative land uses were identified in the surrounding area. However, the near surface soils may have been impacted by heavy metals and organic pollutants such as poly-aromatic hydrocarbons (PAHs) through direct placement/introduction of materials such as ash, clinker or the like during the historic use of the site and through aerial deposition. Heavy metals may also be present due the possible placement of sewage sludge as part of agricultural fertilisation processes whilst pesticides may also be a potential hazard.

2.12 Previous Ground Investigations

Groundwater monitoring was undertaken by Geo-Environmental on the subject site between 30th January 2017 and 11th April 2017. During this investigation which consisted of seven site visits, groundwater was encountered within two out of eight monitoring locations at relatively shallow depths of around 0.61mbgl and 2.26mbgl and it was concluded that this represented trapped perched water bodies rather than the actual groundwater table.

3.0 PRELIMINARY RISK ASSESSMENT

Based on the findings of the desk study the following sections summarise the anticipated geotechnical and environmental factors likely to impact the site.

3.1 Geotechnical Factors

The following factors that might impact the geotechnical condition of the site were:

- The possible presence of shrinkable soils on the site, which may affect foundation design and construction where trees are present.
- The possible presence of solution features within the chalk strata.
- The presence of shallow groundwater and/or perched water beneath the site.
- The presence of laterally and vertically variable strata.

3.2 Preliminary Environmental Conceptual Site Model & Risk Assessment

3.2.1 Methodology

A Preliminary Risk Assessment (PRA) and Conceptual Site Model (CSM) have been prepared in accordance with CLR11 based on information obtained as part of the Desk Study. Possible risks associated with potential sources of contamination and sensitive receptors identified have been qualitatively assessed following a source-pathway-receptor (pollutant linkage) approach in accordance with current UK protocols.

A risk may only exist where a plausible pollutant linkage is present, and where the quantity or concentration of a contaminant is sufficient so as to pose harm. Under the statutory definition, "Contamination" may only strictly exist where contaminants pose a risk of harm to a receptor. Risk may be defined as a function of the likelihood and severity of any adverse effects arising from contamination. The risk classification has been assessed in accordance with CIRIA C552 (Rudland *et al.*, 2001). A summary of how the risks are derived and their definitions are presented in Tables 3.1 and 3.2.

		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

Table 3.1 Risk Ratings Matrix

Risk Rating	Definitions
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 already undertaken) 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 already undertaken) is required and remediation 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 either 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.
Moderate to low risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is unlikely that any such harm would be severe, or if any harm were to occur it is probable that the harm would be relatively mild.
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 low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Table 3.2 Risk Rating Definitions

3.2.2 Summary of Plausible Sources

Possible sources of contamination identified or discounted as part of the Desk Study are summarised in Table 3.3.

Source	Description	Contaminants	On/Off Site
Current land uses	Background chemical quality of near surface soils	Possible elevated metals, organic and inorganic contaminants, and pesticides	On
Offsite historical landfill sites.	Migration of associated , artificially generated ground gases.	Possible elevated methane, carbon dioxide and reduced oxygen.	Off

Table 3.3 Possible Sources of Contamination

3.2.3 Summary of Plausible Pathways

The plausible pathways are summarised in Table 3.4.

Pathway	Description
Direct Contact	Soil, dust and vegetable ingestion, dermal contact and dust inhalation.
Soil Gas Inhalation	Inhalation of soil gas both inside and outside of buildings.
Vertical & Lateral Migration	Contaminant movement both vertically through leaching/gravity and horizontally along preferential pathways or with groundwater.
Root Uptake	Uptake of soil and waterborne contaminants by plants.
Chemical Attack	Attack of buried plastics and concrete by aggressive ground conditions.

Table 3.4 Possible Contamination Pathways

3.2.4 Summary of Plausible receptors

Potential receptors associated with the site and its development, identified or otherwise discounted, are summarised in Table 3.5.

Receptor	Description	Comments	Plausible
End Users	Residential end users of the proposed redevelopment	The proposed redevelopment includes private and communal gardens and areas of soft landscaping	Yes
Adjacent Land Users	Sensitive land uses identified within the immediate vicinity	Adjacent land uses to the south are predominantly residential with a school located immediately south of the site.	Yes
Soft Landscaping	Areas of planting including lawns, shrubs, trees, etc.	Areas of soft landscaping are proposed as part of the redevelopment	Yes
Water Supply Pipes	Plastics for potable water supply pipes may be laid in contact with contaminated soils	Significant depths of Made Ground are not expected across the site.	Yes
Building Materials	Buried concrete for foundations etc. may be laid in contact with contaminated soils	Significant depths of Made Ground are not expected across the site.	Yes
Groundwater	Controlled waters contained within the aquifer(s) beneath the site	The site lies upon a Secondary 'A' aquifer.	Yes
Surface Water	Controlled waters within lakes, rivers, and ponds, etc., or coastal waters	The nearest surface water feature is located c. 6m to the east of the site.	No
Sensitive Land Uses	Sensitive land uses or designations identified on site or in the vicinity	With the exception of an agricultural land designation (Eutrophic NVZ) on site, one such land use was identified within 500m of the site as part of the desk study (South Downs National Park, c. 139m NE).	No

Table 3.5 Possible Receptors of Contamination

Site workers involved in the preparation and construction of the development have not been considered in this assessment as the Principal Contractor is duty bound under the current CDM Regulations to undertake their own risk assessments with respect to their employees and develop safe systems of work.

Whilst the above sources and receptors have been identified, Table 3.6 (overleaf) summarises the identified plausible pollution linkages and a qualitative assessment of the risks based on the Desk Study research:

Potential Source/media	Potential Receptors	Potential Pathways	Probability	Consequence	Risk and Justification
On Site near surface soils & Made Ground/soil	End users	Direct contact	Likely	Mild	Moderate to Low Future residents are likely to come into contact with soils via direct contact in the private garden or tracked back in to the home. The consequence is likely to be mild.
	Adjacent land users	Direct contact	Low	Mild	Low There is a low likelihood of adjacent site users coming into contact with affected soils. The consequence is likely to be mild.
	Soft Landscaping	Root uptake	Likely	Minor	Low Root uptake is likely for plants but any consequence is likely to be minor.
	Water supply pipes	Chemical attack	Likely	Mild	Moderate to Low Water supply pipes are likely to come into contact with soils though significant contamination is not anticipated. The consequence is likely to be mild.
	Buildings and infrastructure	Chemical attack	Likely	Minor	Low Foundations and utilities will be placed within soils. However, the consequence is anticipated to be minor.
	Groundwater	Vertical migration	Likely	Minor	Low Groundwater is likely to be found within the superficial deposits beneath the majority of the site. However, the soils are unlikely to be significantly impacted by on site sources of mobile contamination. The risk of soils impacting the groundwater is considered to be low.
Off Site sources of contamination including ground gas	End users	Inhalation	Unlikely	Mild	Very Low No significant sources of ground gases have been identified either on or off site, with the nearest historical landfill site being circa 350m remote from the site boundaries.
	Soft Landscaping	Root uptake	Likely	Minor	Low Root uptake is possible for plants but any consequence is likely to be minor.

Table 3.6 Plausible Pollutant Linkages & Qualitative Risk Assessment

3.3 Preliminary Risk Assessment Summary

The PRA and CSM developed from the information gathered as part of the desk study process has identified several plausible pollutant linkages that exist in relation to the proposed redevelopment of the site. However, the preliminary risk rating for each linkage has been classified as moderate to low or low, and as such the site is considered overall as low risk.

4.0 GROUND INVESTIGATION

4.1 Scope of Works

In summary, the following scope of works for the intrusive investigation was proposed.

- Undertake a desk study to determine the site's historic uses and environmental setting. The desk study findings would be used to inform a Preliminary Risk Assessment for the site on the context of the proposed development/use.
- Attendance of a Geo-Environmental Engineer and technician for two days to set out and supervise the intrusive investigation, undertake sampling, in-situ testing and logging of recovered soils from exploratory holes.
- The construction of 6No. machine excavated trial pits to a depth of up to 3.00m bgl.
- Attendance of a road towable 250-500gallon water bowser for four days to supply water and crew for trial pit soakage tests.
- Undertake trial pit soakage tests in general accordance with BRE Digest 365 within approximately 6No. trial pits situated across the site.
- Construction of 12No. dynamic sampler boreholes to depths of up to 4.0m bgl, depending on drilling conditions, using a self-propelled track mounted rig.
- Installation of 6No. dual purpose ground gas and groundwater monitoring wells to depths of 4.00m to facilitate return monitoring on six occasions. Further monitoring may be required based on the findings of the desk study and intrusive investigation. The wells would be completed with a lockable cover fitted flush with adjacent ground.
- Approximately 12No. Dynamic Cone Penetrometer (DCP) tests (equivalent to CBRs) across the site.
- Geotechnical laboratory testing to support the geotechnical assessment for foundations, ground floor construction and buried concrete design.
- Geochemical laboratory testing for a suite of commonly occurring brownfield contaminants. Additional targeted analysis for pesticides is also included.
- Provision of preliminary data following completion of the intrusive investigation. This will include an initial assessment.
- Provision of a Ground Investigation Report detailing the findings of the desk study and preliminary risk assessment; the ground and groundwater conditions encountered ; the results of in-situ and laboratory testing; a geotechnical assessment for foundations, drainage, pavement and buried concrete; contamination assessment and recommendations for further action (if required).

Due to access restraints at the time of the fieldworks, only five trial pits were excavated (TP3 was omitted) and an additional window sampling borehole (WS13) was added to the scope.

4.2 Investigation Strategy

The Desk Study and Preliminary Risk Assessment identified near surface soils, and ground gases as potential contamination sources. The exploratory holes were located to provide broad coverage across the proposed development area.

The following tables summarise the strategy of the environmental (Table 4.1) and geotechnical (Table 4.2) investigations.

Environmental Area of Concern	Investigation	Positions
Arable fields	Windowless sampler boreholes and trial pits situated across the fields with regular sampling and laboratory analysis	All window sample boreholes and trial pits
Groundwater and ground gas. Potential off site sources of contaminants.	Groundwater and ground gas monitoring standpipes installed within a selection of window sample boreholes.	WS2, WS5, WS6, WS8, WS9 and WS11

Table 4.1 Summary of Environmental Investigation Strategy

Geotechnical Area of Concern	Investigation	Positions
Areas of proposed new buildings	Draft development proposals have been supplied and window sample boreholes and trial pits have been positioned to provide broad coverage of the scheme coupled with sampling and laboratory analysis.	All
Groundwater level	Standpipes installed within window sample boreholes across the site with three return monitoring visits. Groundwater observations made within all holes during drilling. Groundwater observations within the deep cable percussive boreholes.	WS2, WS5, WS6, WS8, WS9 and WS11
Drainage	Full scale BRE365 tests with trial pits	TP1-TP6 inclusive

Table 4.2 Summary of Geotechnical Investigation Strategy

A previous investigation carried out by GESL in January 2017, comprised the drilling of window sampling boreholes, together with the installation and monitoring of monitoring standpipes. The report is presented in Appendix A.

4.3 Geotechnical Testing & Rationale

Table 4.3 summarised the geotechnical laboratory testing undertaken in order to assess the geotechnical properties of the soils to aid foundation design and concrete specification.

Geotechnical Test	Rationale
Atterberg Limit	Assess volume change potential of more cohesive soil to aid the design of foundations
Grading Analyses	Assess Particle size distribution of more granular soils for classification purposes.
pH & Sulphate	Assess aggressivity of soil to building materials.
In-situ DCP tests	CBR results for road design parameters.

Table 4.3: Summary of Geotechnical Testing Strategy

4.4 Geochemical Testing & Rationale

In order to assess the general chemical quality of the strata encountered, samples of soils recovered from the exploratory holes were submitted for analysis for a range of potential contaminants selected on the basis of the findings of the desk study and supported by the joint National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) publication, 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008).

All soils samples were tested for VOC's on site using head space techniques. Soil samples were placed into plastic containers for general inorganic analysis and into amber jars for organic analysis. Samples were stored in temperature controlled conditions from sampling until receipt at the laboratory from which time sample preparation and storage was determined by testing requirements and in line with the laboratory's protocols.

Stratum	Suite	No. of Samples Analysed
Topsoil/Made Ground and sub-soil	GESL/4 (heavy metals, inorganics, TPH, Speciated PAH, Speciated TPH with RBCA Banding.	20
	Pesticides (Topsoil only)	5

Table 4.4: Summary of Geochemical Testing

4.5 Ground Gas and Groundwater Monitoring

Six return monitoring visits are planned at regular intervals in order to record ground gas concentrations in the standpipes installed the boreholes to coincide with both high and low atmospheric pressure, together with the depth of any water. To date a single round of gas monitoring has been undertaken and the results are discussed in Sections 5.4 and 7.6 of this report. Five further rounds are programmed over the next three months and the results will be sent as an addendum to this report.

5.0 ENCOUNTERED CONDITIONS

A factual record of the conditions encountered during the physical investigations of the site is presented in the following sections. The exploratory hole locations are shown on Figure 2 of this report.

The physical ground investigation works were undertaken on 2nd November 2017. Laboratory testing was undertaken by a UKAS and MCERTs accredited laboratory.

Unless stated otherwise, all depths are reported as metres below ground level (mbgl).

5.1 Soils

The investigation confirmed the anticipated superficial ground conditions of River Terrace Deposits. However, soils resembling that of the London Clay were absent.

Topsoil was encountered within all locations to depths of between 0.25mbgl and 0.50mbgl and generally comprised dark brown or brown silty clayey silty sand with roots and occasional flints.

In general, the River Terrace Deposits comprised sandy silty CLAY, with occasional flint gravel, sometimes grading to a clayey or sandy well-graded flint gravel and a gravelly sandy clay at depth. In boreholes WS8, WS10, WS11 and WS12, flint cobbles with chalk fragments and off-white silty clay was encountered at depth that may represent raised beach deposits.

For further details of the ground conditions encountered, reference should be made to the exploratory hole logs presented in Appendix B.

5.2 In-situ Testing

5.2.1 Soakage Testing

Full scale BRE365 soakage tests were carried out within trial pits. The results are tabulated in Table 5.2 below:-

Position	Soakage Rate	Geological Stratum
TP1	Insufficient Head Drop (no soakage)	River Terrace Deposits
TP2	6.75×10^{-4}	River Terrace Deposits
TP4	Insufficient Head drop (No soakage)	River Terrace Deposits
TP5	7.67×10^{-5}	River Terrace Deposits
TP6	1.11×10^{-4}	River Terrace Deposits

Table 5.2: Soakage Rates from BRE365 tests.

The results of the tests are discussed further in Section 6.5 of this report.

5.2.2 Pocket Penetrometer

Pocket penetrometer tests were undertaken within the clayey strata to measure the in-situ unconfined compressive strength. Generally the results indicated the soils tested to be of medium to high strength, with a general trend of increasing strength with depth.

5.2.3 DCP Tests

Dynamic Cone Penetrometer tests were undertaken at eight locations over the site to derive preliminary CBR values for road foundation design. The locations are as indicated in Figure 2. With a single exception, the results generally indicated CBR values ranging from 3% to 6% at an estimated formation level of 0.5mbgl.

These results are discussed further in Section 6.3 of this report.

5.3 Groundwater

Groundwater was not encountered within the window sampling boreholes or trial pits.

During the investigation undertaken in January 2017 where monitoring wells were installed across the site to depths of 4.0m, with the exception of isolated shallow perched groundwater bodies, groundwater was not encountered during the drilling or subsequent monitoring.

Monitoring standpipes were also constructed during the most recent phase of investigation and the initial monitoring visit has recorded standing water at depths of 2.44mbgl in WS2 and 3.37mbgl in WS9, though it is anticipated that this represents pockets of perched water within more gravelly River Terrace Deposits.

It should be noted that changes in groundwater levels do occur for a number of reasons including effects and variations in drainage. Such fluctuations may only be recorded by the measurement of the groundwater level within a standpipe or piezometer installed within appropriate response zones. Changes in groundwater level can have a direct effect on excavation stability and the more cohesive soils can soften under rising or high groundwater levels.

5.4 Ground Gases

Ground gas monitoring has been undertaken as part of the most recent investigation. The monitoring undertaken comprised spot sampling/measurement within six monitoring wells on a single occasion, with a further five planned to correspond with both high and low atmospheric pressure. The atmospheric pressure during the initial visit was 1010mb. No detectable methane concentrations have been identified in any of the wells. Carbon dioxide concentrations ranged between 0.1% and 4.1%. Oxygen concentrations were within normal limits and no positive flow rates or concentrations of VOC's were recorded.

The implications of the gas monitoring data are considered in Section 7.6 of this report. For further details, reference should be made to the ground gas assessment sheets in Appendix C.

5.5 Obstructions

No natural or artificial obstructions were encountered during the intrusive investigation.

5.6 Soil Geochemical Analysis

The geochemical results indicated the concentrations of all determinands to be below the relevant SGV/GAC for the proposed end use. Further interpretations and comments are made in Section 7 in this respect.

For full details of the chemical test results reference should be made to the laboratory report in Appendix F.

5.7 Geotechnical Laboratory Testing

Soil samples were selected for geotechnical testing depending on the proposed end use of the given area. The main elements of geotechnical testing were:

- Strength/stiffness profiling (in-situ testing)
- Soil Classification Tests
- Aggressive ground conditions

The results of the geotechnical testing are separated and presented in Table 5.7 into the key strata encountered, i.e. both cohesive and granular parts of the River Terrace Deposits.

Characteristic/Parameter	Laboratory Value
Plasticity Index (%)	13 - 26
Modified Plasticity Index (%)	3 - 22
Volume Change Potential [NHBC]	Low to medium (<i>en mass low</i>)
Grading Analyses Description	Silty sandy CLAY and very clayey silty sandy GRAVEL
pH	7.94 – 8.14
Water Soluble Sulphate	0.11 – 0.17

Table 5.7: Geotechnical test results for River Terrace Deposits

NOTE: Values are given for the full data range and should be reassessed for individual development or construction areas.

For full details of the geotechnical test results reference should be made to the laboratory report in Appendix E.

6.0 ENGINEERING CONSIDERATIONS

6.1 Traditional Foundations

Based on the ground and groundwater conditions encountered in the exploratory holes, traditional foundations are considered suitable for the proposed low rise development.

It is recommended that the River Terrace Deposits are classified *en masse* as being of LOW Volume Change Potential as defined by the NHBC Standards, Chapter 4.2.

Remote from existing trees and bushes and in areas where clay desiccation has not occurred, it is recommended that shallow foundations terminate within the River Terrace Deposits at a minimum depth of 0.75m below existing or final ground level. Foundations should pass through any Made Ground, disturbed ground, soft or very loose soils, desiccated clay soils and terminate wholly within the River Terrace Deposits.

Within the zone of moisture demand of any current, proposed or recently felled trees foundation depths should be deepened in accordance with the NHBC Standards, Chapter 4.2 for low volume change soils. Where calculated foundation depths exceed 2.50m, they will be required to be designed by a structural engineer.

On the basis of the information gathered from the ground investigation, a net allowable bearing capacity of 125kPa has been calculated for these soils in order to maintain settlements within tolerable limits. Foundations should be no less than 450mm in width.

Foundation excavations should be concreted or blinded as soon after excavation as possible. Where concreting could take place the following day it is recommended that excavations are not taken to full depth overnight and that the final 0.5m of cover is only removed immediately prior to concreting.

Due to the presence of shrinkable clay soils it is recommended that ground slabs are fully suspended.

6.2 Excavations

Both shallow and deeper excavations into the more cohesive soils of the River Terrace Deposits should remain relatively stable in the short to medium term.

Shallow excavations within the more granular natural soils should remain relatively stable in the short term, though some localised spalling may be anticipated. Longer deeper excavations are likely to become unstable, and will therefore require either battering to a safe angle or some form of temporary support.

The need for man entry into excavations should where possible be designed out. However, where this cannot be achieved a full risk assessment should be undertaken and man entry only permitted in accordance with an approved risk assessment, method statement and safe system of work.

6.3 Pavements

Based on the results of the DCP tests, design CBR values in general across the site should be considered between %3 and 6% at an estimated formation level of 0.5m below existing ground level.

The Transport and Road Research Laboratory Report (LR1132) entitled '*The Structural Design of Bituminous Roads*' (1984) cites an estimated equilibrium suction index of 3 to 6% for sandy clays and 4% for silty clays with Plasticity Indices ranging between 10% and 30% such as those of the River Terrace Deposits, assuming average

construction conditions and a low water table. It is recommended that a preliminary CBR value of 4% is adopted across the site.

Based on the results of the Atterberg Limit Tests, the soils at shallow depth should be generally considered as being non-frost susceptible for pavement design purposes.

It is possible that laboratory soaked CBR tests will be required by the local authority, with samples taken along the line of any proposed adoptable estate roads.

It is recommended that the formation level be proof rolled and any soft zones excavated and replaced with suitably compacted engineered granular or chalk fill.

6.4 Sub-Surface Concrete

The results of the tests carried out on the natural soils fell into Class DS-1. The results indicate that a site classification of ACEC class AC1 is applicable. The advice of this publication should be taken for the design and specification of all sub-surface concrete.

6.5 Soakaways

Full scale BRE365 soakage tests were carried out within the trial pits. The results are tabulated in Table 5.2 below:-

Position	Soakage Rate	Geological Stratum
TP1	Insufficient Head Drop (no soakage)	River Terrace Deposits
TP2	6.75×10^{-4}	River Terrace Deposits
TP4	Insufficient Head drop (No soakage)	River Terrace Deposits
TP5	7.67×10^{-5}	River Terrace Deposits
TP6	1.11×10^{-4}	River Terrace Deposits

Table 5.2: Soakage Rates from BRE365 tests.

The results of the tests carried out in the River Terrace Deposits were very variable. Caution should be taken when designing any shallow soakaways within the River Terrace Deposits, as the soakage rate will be very dependent on the clay content of the strata, which varied significantly both laterally and vertically across the site.

7.0 QUANTITATIVE RISK ASSESSMENT

7.1 Introduction

A Generic Quantitative Risk Assessment (GQRA) has been undertaken in accordance with CLR11. A GQRA may involve either direct comparison of soil and ground gas results with generic assessment criteria appropriate to the SPR linkage being assessed or comparison following statistical analysis depending on whether a targeted or non-targeted sampling strategy was adopted.

7.2 Human Health

7.2.1 End Users

The presence of a possible contaminant does not necessarily imply that a site or area is contaminated or that there is any unacceptable risk to human health. A Generic Quantitative Risk Assessment has been undertaken in accordance with CLR11, in order to evaluate any unacceptable risks posed to human health with respect to the proposed use of the site. It should be noted that this assessment is protective of the chronic long-term effects of contaminants, which is also likely to be protective of any possible immediate acute effects.

A quantitative risk assessment has been undertaken by comparing the results of the laboratory chemical testing of shallow soils against Site Specific Assessment Criteria (SSAC) generated using the Contaminated Land Exposure Assessment (CLEA) model v1.06 published by the Environment Agency, or against Generic Assessment Criteria (GAC) for a residential end use with plant uptake (private gardens).

The assumptions made as part of the CLEA v1.06 calculations for a residential end use with plant uptake are presented in Table 7.1.

Assumptions for SSAC Calculation (CLEA v1.06 Software)

	Assumptions			Comments
Land Use	Residential with home grown produce			Commensurate with proposed redevelopment.
Receptor	Female (res)			Default setting for land use.
Receptor Age	1 to 6			Default setting for land use.
Building	Small/Medium Terraced House			A conservative assumption of the private residences proposed.
Soil Type	Silty sandy loam	pH 6.9	SOM 2.55%	Based on an average of the chemical laboratory results.
Exposure Pathways	Oral	Direct soil & dust ingestion; consumption of home grown produce; soil attached to home grown produce		Default setting for land use.
	Dermal	Indoor & outdoor		Default setting for land use.
	Inhalation	Indoor & outdoor dust & vapour		Default setting for land use.
Occupancy	days/year	hours/day (indoors)	hour/day (outdoors)	Default settings for the critical receptor.
	180 - 365	19 - 23	1	

Table 7.1: Parameters used in CLEA Model V1.06 to derive SSAC

Statistical analysis of the data set has been undertaken in accordance with guidance contained in the CIEH/CL:AIRE report 'Comparing Soil Contamination Data with a Critical Concentration' (May 2008). If the

contamination status of the soils is considered in a planning context, the null hypothesis tested by the analysis is whether the true mean concentration is equal to or greater than the critical concentration for a given determinand, with the critical concentration being the relevant SSAC or GAC (the soil screening value) for that determinand in the context of the intended end use of the site. If the analysis shows that the true mean concentration is less than the critical concentration the null hypothesis can be rejected. The guidance recommends that for the null hypothesis to be rejected the analysis should show that there is a 95% (or higher) likelihood that the true mean concentration is below the critical concentration. Where this is the case the site is considered to be acceptable for the planned end use without the requirement for remediation.

The statistical analysis has found that for all of the determinands tested, the null hypothesis can be rejected with at least 95% confidence.

The guidance also provides an outlier test (Grubb's Test) which is undertaken prior to the statistical analysis in order to establish whether there are any anomalous results which could be 'hotspots'. Such results can be removed from the dataset prior to the statistical analysis, but only where there is evidence to support this from the conceptual site model.

Whilst the Grubb's Test revealed a number of statistical outliers, the concentrations were allow well below the relevant guide value.

Laboratory testing for the presence of asbestos has not recorded asbestos within any of the samples.

Targeted testing was also undertaken on the Topsoil for Pesticides, a potential contaminant of concern associated with the land use. The results revealed all of the results to be below the laboratory detection limits.

Targeted testing for speciated hydrocarbons with RBCA banding did not identify any concentrations of concern.

In summary, based on the results and the sites historical land use, together with the development proposals, it is considered that remedial works for the protection of the end user from contaminated soils are not warranted.

7.2.2 Adjacent Land Users

No evidence of any significant impact on the soil quality was revealed by the laboratory testing and therefore no significant pollutant linkage is considered to exist which would warrant remedial action to protect adjacent land users from soil based contamination within the subject site.

However, it is recommended that dust suppression techniques, e.g. damping down exposed soils, are employed during the demolition and construction phases on site in order to minimise the potential for airborne migration of specific hazards and to manage potential nuisance issues for adjacent land users.

7.3 Plant Uptake

Inter Departmental Committee for the Redevelopment of Contaminated Land (ICRCL) publication 70/90 entitled '*Notes on the Restoration and Aftercare of Metalliferous Mining Sites for Pasture and Grazing*' (1990) provides assessment criteria for a number of potentially phytotoxic contaminants in terms of new planting. Given that a suitable averaging area for soft landscaping may vary considerably between the root zones of grasses to that of a juvenile immature tree, no appropriate averaging area was applicable to this assessment. Therefore, the results of the chemical analysis were evaluated for this SPR linkage singularly.

The results of the chemical analysis for determinands known to pose a potential phytotoxic risk to plant growth are summarised in Table 7.2, together with the respective adopted Generic Assessment Criteria (GAC) for plant growth.

Determinand	Phytotoxicity GAC Value (mg/kg)	In excess of GAC?
Zinc	1000	No
Cadmium	50	No
Copper	250	No
Arsenic	1000	No

Table 7.2: Summary of Potential Phytotoxicity for Soft Landscaping

Therefore, remedial measures to protect plants from phytotoxic effects are not considered necessary.

7.4 Water Supply Pipes

The current guidance on selection of materials for water supply pipes to be laid in contaminated land is contained in UKWIR Report 10/WM/03/02 (re-issued 2010). However, the guidance is not mandatory and there has been concerns raised by various industry technical associations regarding the document and the methodologies proposed.

Although there are concerns regarding the document, in lieu of any further guidance in the first instance the results of this investigation have been compared with the proposed thresholds published in UKWIR Table 3.1. All results were below their respective thresholds. It is therefore highly unlikely that barrier pipe will be required for this site. However, the presumption in the guidance is that barrier pipe will be adopted for any brownfield site therefore it is recommended that the results of this investigation be presented to the water utility company as soon as reasonably practical in order to confirm the pipe material.

As a matter of good practice, and to maximise the protection to utilities, it is recommended that clean, granular backfill is used in service runs and that marker tapes are used for all buried services.

7.5 Groundwater and Controlled Waters

The site was underlain by a Secondary A Aquifer and non-productive strata and was located outside of any Source Protection Zone.

Groundwater was not encountered during the investigation and only perched water bodies were recorded during subsequent monitoring and, therefore, based on the ground and groundwater conditions encountered, together with the results of the desk study and geochemical test results, it is considered that the risk to groundwater or controlled water is very low.

7.6 Ground Gases

To date, one monitoring visit has been completed. The gas assessment sheets are presented in Appendix C. Recommendations on acceptable gas levels recorded in the ground beneath or adjacent to buildings are given in a variety of publications. For the purpose of this assessment, the results have been evaluated in terms of CIRIA C665 [2007], BS8485 [2007] and NHBC 10627-R01 (04) [2007].

The gas assessment considers the impact of gas at pressure in the ground, since a low concentration coupled with a high flow could present a greater hazard than a high concentration with little or no flow. On the basis of



the gas data collected to date and the gas assessment presented in Appendix C, it is considered that the site's gassing regime is preliminarily representative of Characteristic Situation 1 (BS8485 and CIRIA) and Green (NHBC). On this basis, gas protection measures are not required. A further five monitoring visits are planned over the next three months and the results will be sent as an addendum to this report.

7.7 Radon

Radon Protection measures are not required for any new structures at this site.

7.8 Environmental Assessment Conclusions

The results of the GQRA confirm that potential contaminants in the soil pose a very low risk to the human health of end users and adjacent site users.

The concentrations of potential phytotoxic contaminants in the soil pose no significant risk to plants.

The risk to groundwater and controlled waters from soil contamination is considered to be very low.

Based on the CSM and monitoring results to date, gas protection measures are unlikely to be required.

8.0 REFINED CONCEPTUAL SITE MODEL

8.1 General

The initial conceptual site model identified potential risks to human health, adjacent land users, vegetation, groundwater, surface water, building infrastructure, and water supply pipes from potential contaminants in the near surface soils.

8.2 Sources

Based on the site investigation data and available geochemical test results no exceedances of site specific assessment criteria were identified in the Topsoil or sub-soil.

8.3 Pathways

When considering the final end use of the site the following pathways for human health are viable:

Pathway	Description
Direct Contact	Soil, dust and vegetable ingestion, dermal contact and dust inhalation
Soil Gas Inhalation	Inhalation of soil gas both inside and outside of buildings
Vertical & Lateral Migration	Contaminant movement both vertically through leaching/gravity and horizontally along preferential pathways or with groundwater.
Root Uptake	Uptake of soil and waterborne contaminants by plants
Chemical Attack	Attack of buried plastics and concrete by aggressive ground conditions.

Table 8.1: Plausible Pathways

8.4 Receptors

In terms of human health receptors the geochemical test data were assessed against SSAC for a residential end use with plant uptake.

The site was underlain by Secondary A aquifers and non-productive strata. The site was not located within an SPZ.

The development would require the laying of new water supply pipes within the near surface soils.

Parts of the development will be landscaped and contain soft planting areas.



8.5 Risk Evaluation of the Proposed Development

The following evaluation of risk is based upon the current proposed development comprising a new housing estate.

8.5.1 Risk to Human Health: Soils/Ground Gases

The results of the GQRA indicate the soils pose a **Very Low** risk with respect to human health of both end users and adjacent site users. Therefore, no remedial measures are considered necessary for the site in this respect.

No significant concentrations of land gases have been encountered to date and based on the CSM and therefore preliminarily the site is therefore considered **Very Low** risk in this respect.

8.5.2 Risk to Groundwater

Therefore, based on the ground and groundwater conditions encountered, together with the results of the desk study and geochemical test results, it is considered that the risk to groundwater or controlled water is **Very Low**.

8.5.3 Risk to Building Materials & Services: Soils

The results of the chemical testing classified the soils as DS1 and AC-1 with respect to aggressive ground conditions. Therefore the site is considered **Low** risk with respect to buried concrete.

The presumption for brownfield sites is that a barrier pipe should be adopted, however the water utility company should be consulted regarding the findings of this investigation and the specification for the water pipes. The site is considered **Very Low** risk.

The refined conceptual site model is presented in Table 8.2, overleaf.



Potential Source/media	Potential Receptors	Potential Pathways	Probability	Consequence	Risk and Justification
On Site near surface soils & Made Ground/soil	End users	Direct contact	Unlikely	Mild	Very Low Soil contamination was not identified and therefore future residents are unlikely to come into contact with soils via direct contact in the private garden or tracked back in to the home.
	Adjacent land users	Direct contact	Unlikely	Mild	Very Low Soil contamination was not identified on the site and therefore there is a very low likelihood of adjacent site users coming into contact with affected soils.
	Soft Landscaping	Root uptake	Unlikely	Minor	Very Low No phytotoxic contamination identified by the investigation
	Water supply pipes	Chemical attack	Unlikely	Mild	Very Low No contaminants of concern identified.
	Buildings and infrastructure	Chemical attack	Likely	Minor	Low Foundations and utilities will be placed within soils. However, the consequence is anticipated to be minor.
	Groundwater	Vertical migration	Unlikely	Minor	Very Low Groundwater was not identified as a continuous body across the site and was only found in a minimal number of exploratory holes as a slight localised seepage. The risk of soils impacting the groundwater is considered to be very low.
	Surface Water	Lateral migration	Unlikely	Minor	Very Low Water courses (ditches) present on and immediately adjacent to the site. These are very limited features and are unlikely to be a significant pollutant receptor.
Ground Gas	End users	Inhalation	Unlikely	Medium	Very Low No significant sources of ground gases have been identified either on or off site. Initial monitoring has



Potential Source/media	Potential Receptors	Potential Pathways	Probability	Consequence	Risk and Justification
					indicated that gas protection is not required
	Soft Landscaping	Root uptake	Unlikely	Minor	Very Low Root uptake is possible for plants but any consequence is likely to be minor. Monitoring has indicated that gas protection is not required

Table 8.2: Refined Conceptual Site Model

8.6 Waste

8.6.1 Reuse of Material

In accordance with CL:AIRE Code of Practice (2011) materials are only considered waste if ‘they are discarded, intended to be discarded or required to be discarded by the holder’.

The Code of Practice therefore allows soils to be reused on site where the following criteria are met:

- Pollution of the environment and harm to human health is prevented in reusing the excavated materials
- The material are suitable for use (without any further processing)
- There is certainty of use and
- The quantity that is absolutely necessary (and no more) is used

In order to comply with the Code of Practice, a material management plan that confirms the above criteria are met has to be prepared. The material management plan must be reviewed by a ‘Qualified Person’ who then issues a declaration to the Environment Agency. Geo-Environmental can provide this service should it be required.

Where materials do not meet the required criteria, it may be possible to treat them under an environmental permit so that they made be re-used on site.

8.6.2 Reuse of Waste

Where material is discarded as waste, it may still be possible to reuse the waste on site under a standard rules environmental permit or a U1 waste exemption. However, strict limits on the volumes that can be reused apply in these cases.

8.6.3 Disposal to Landfill

Under current legislation, where wastes are to be disposed of to landfill they may depending on their classification require pre-treated. Pre-treatment shall comprise a chemical, physical (including sorting), thermal or biological process. The pre-treatment is required to change the characteristics of the waste, reduce its volume, reduce its hazardous nature, and facilitate its handling and enhance its recovery.



8.6.4 Waste Acceptance

The following information has been provided with respect to the disposal of arisings generated as part of the proposed development.

The majority of arisings generated from the site are likely to be suitable for disposal at an inert landfill. However, where soils are to be disposed of off-site the results of the chemical analysis should be provided to the proposed landfill site for confirmation of the classification and it may be necessary to undertake Waste Acceptance Criteria (WAC) analysis.

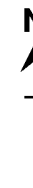
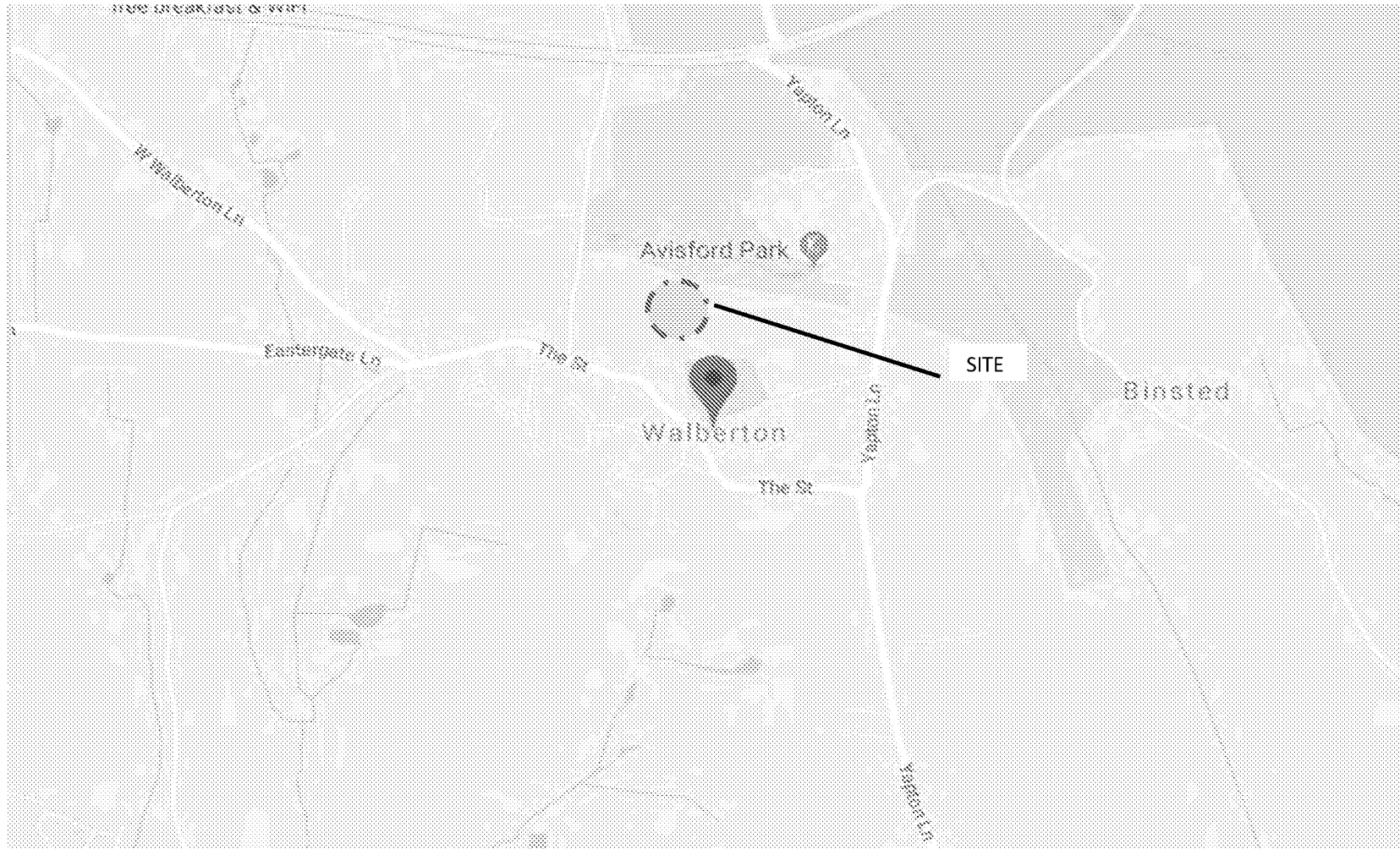
8.7 Discovery Strategy

Whilst an investigation has been undertaken on the site, it remains possible that unexpected soil conditions may be encountered during the process of any site demolition, clearance and construction.

Examples may include oily pockets within the soil, pockets of cement boarding or fibrous materials within the soil, black ashy materials, soils exhibiting strong odours, brightly coloured materials and former structures or brickwork.

Should previously undiscovered contamination be encountered during construction by the ground workers, this should be reported to the Site Manager immediately in order that any necessary inspection may be made. Records should be kept and samples submitted for analysis where conditions encountered are not as anticipated. The results of any such testing should be sent to the authorities for consultation.

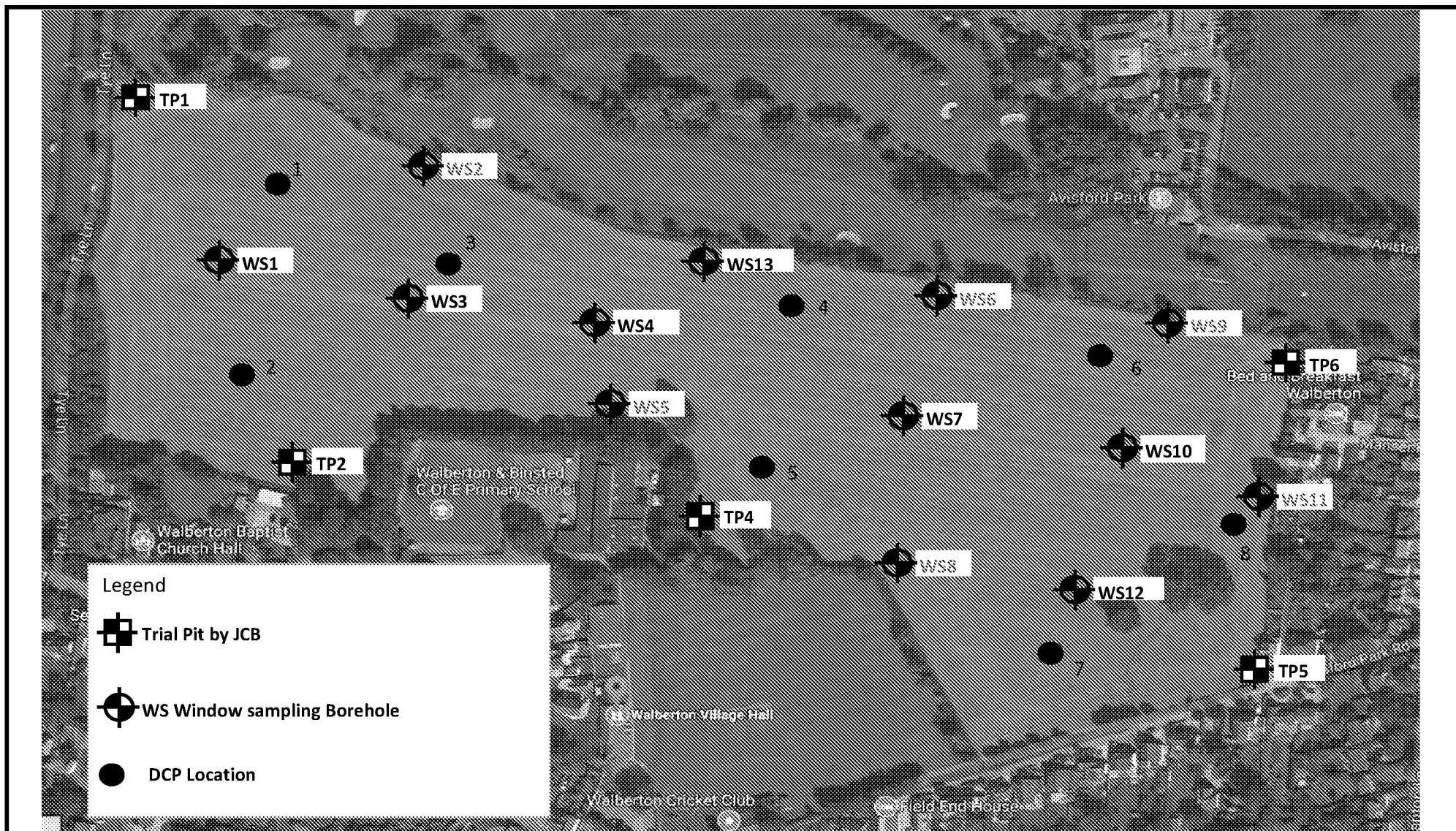
A copy of the discovery strategy should be lodged on site and provisions made to ensure that all workers are made aware of their responsibility to observe, report and act on any potentially suspicious or contaminated materials they may encounter.



Project:	Tye Lane, Walberton, West Sussex.			Title	Site Location	
Client:	Wates Developments			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net  Geo-Environmental		
Ref No:		Revision:	0			
Drawn:	GR	Date:				
Figure:	1	Scale:	Not To Scale			



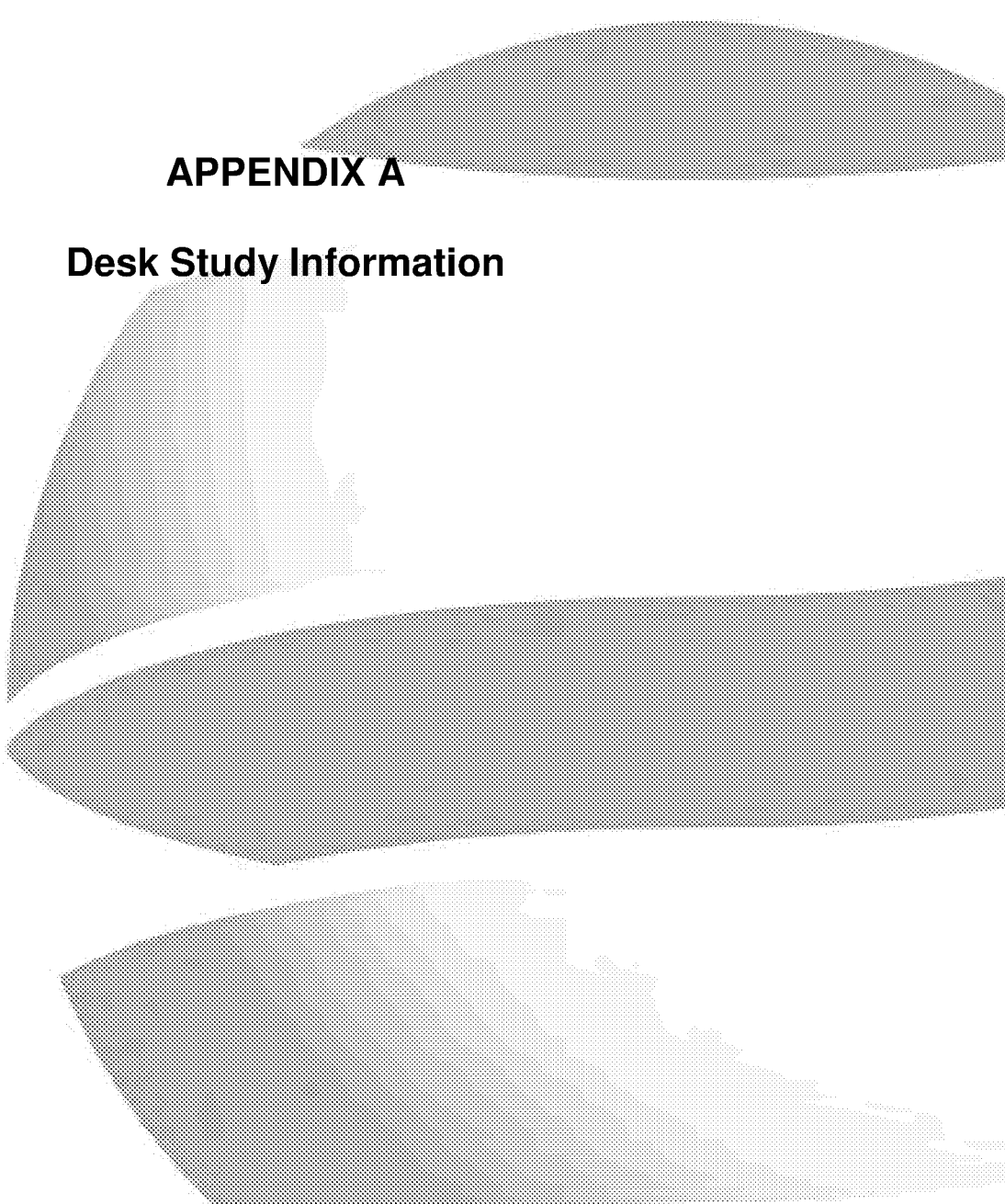
Geo-Environmental



Project:	Tye Lane, Walberton			Title	TRIAL HOLE and DCP LOCATIONS		
Client:	Wates Developments			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net		 Geo-Environmental	
Ref No:	GE16861	Revision:	0				
Drawn:	GE	Date:					
Figure:	2	Scale:	Not To Scale				

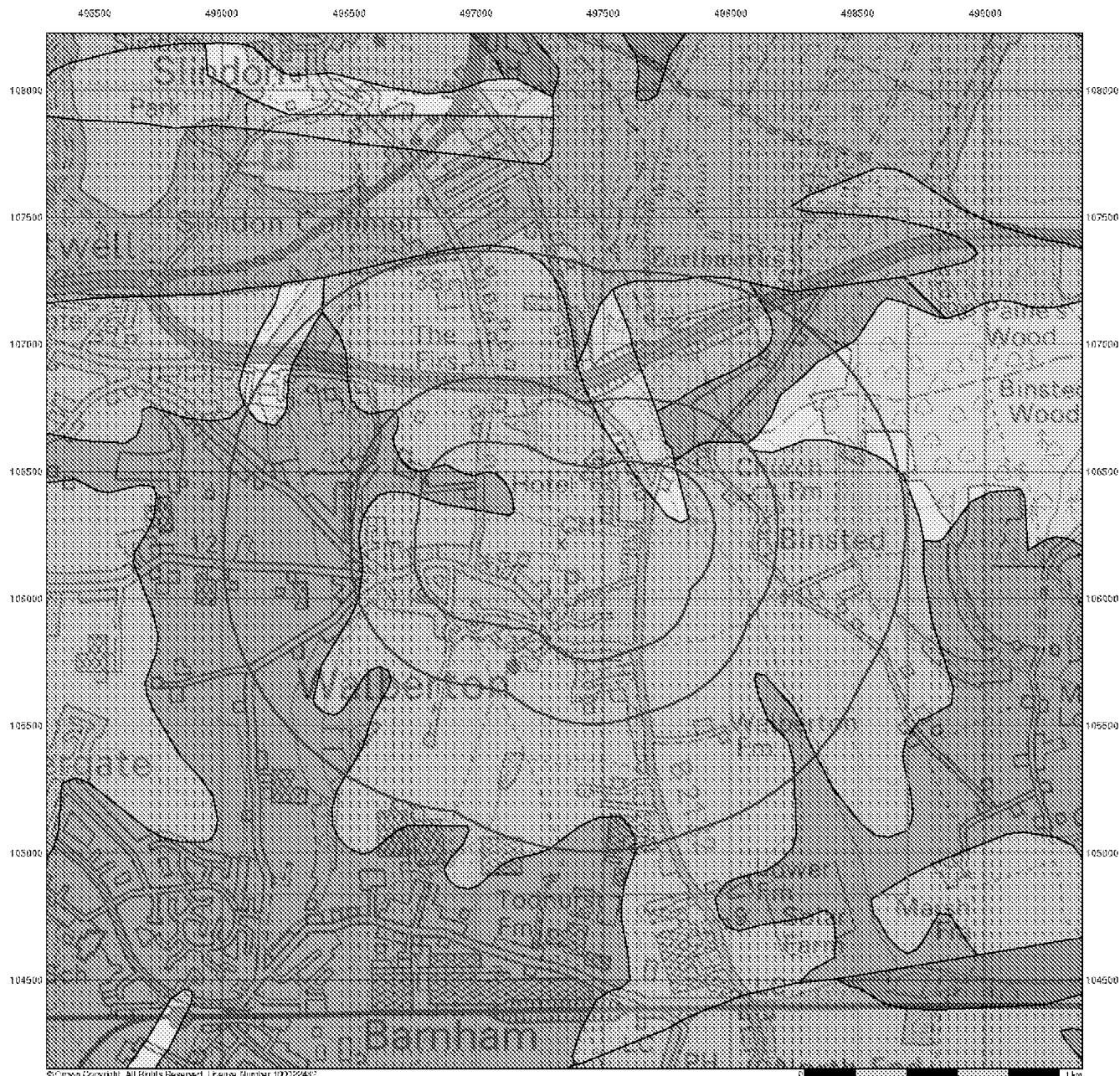


Geo-Environmental

A large, stylized, wavy graphic element in a light gray color with a fine grid pattern, resembling a ribbon or a stylized letter 'S', flowing from the top right towards the bottom left of the page.

APPENDIX A

Desk Study Information



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Geo-Environmental Groundwater Vulnerability

General

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

Agency and Hydrological

Geological Classes

**Major Aquifer
(Highly Permeable)**

- High (H) 1, 2, 3, U
- Intermediate (I) 1, 2
- Low

**Minor Aquifer
(Variably Permeable)**

- High (H) 1, 2, 3, U
- Intermediate (I) 1, 2
- Low

**Non Aquifer
(Negligibly Permeable)**

- Non Aquifer

Water or Sea

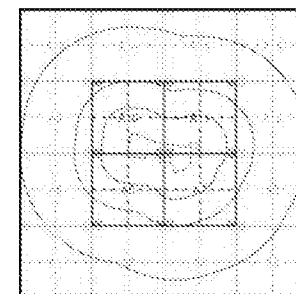
- Water or Sea

Drift Deposit

- Drift Deposit

Soil Classes

Site Sensitivity Context Map - Slice A



Order Details

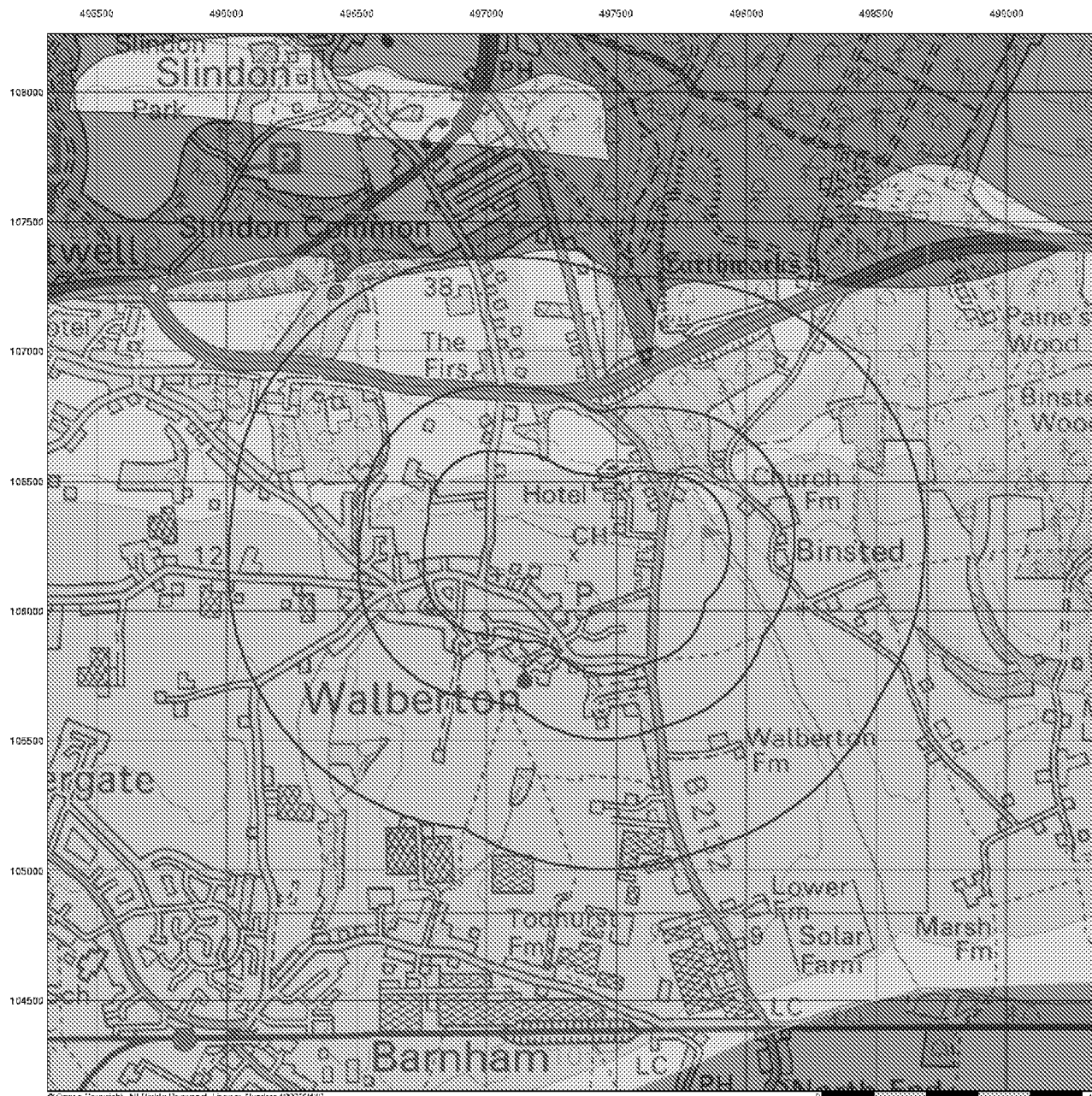
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Customer Ref: GE16861
National Grid Reference: 497330, 106210
Slice: A
Site Area (Ha): 11.27
Search Buffer (m): 1000

Site Details

Wessex House, Tye Lane, Walberton, ARUNDEL, BN18 0PS

Landmark
INFORMATION GROUP

Tel: 01444 544 5552
Fax: 01444 544 5551
Web: www.environment.co.uk



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Geo-Environmental Bedrock Aquifer Designation

General

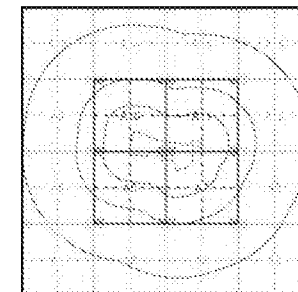
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

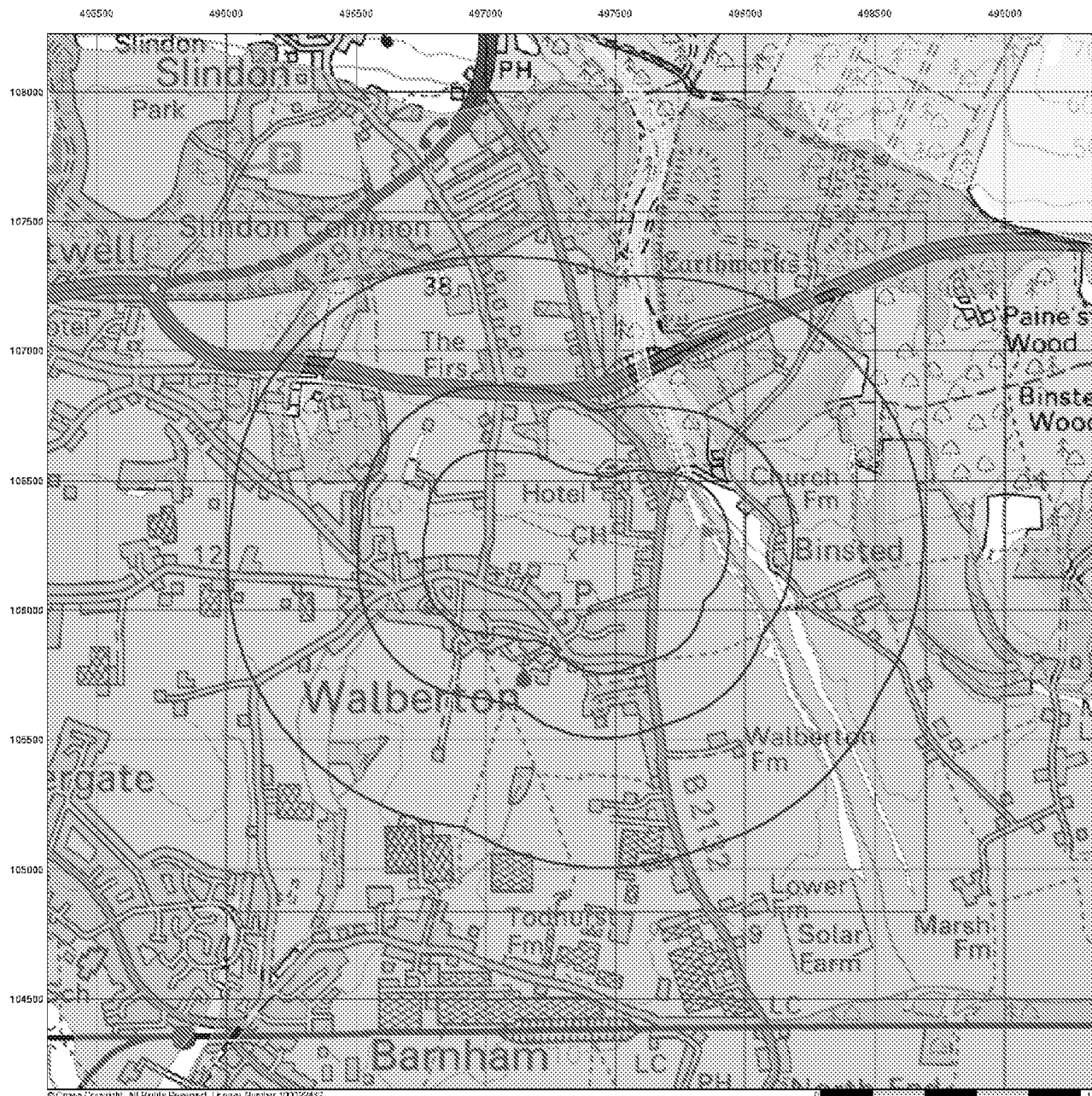
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Geo-Environmental Superficial Aquifer Designation

General

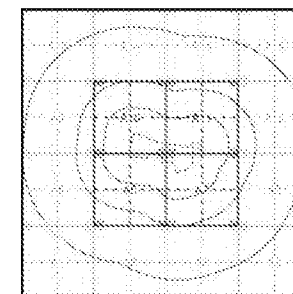
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- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

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

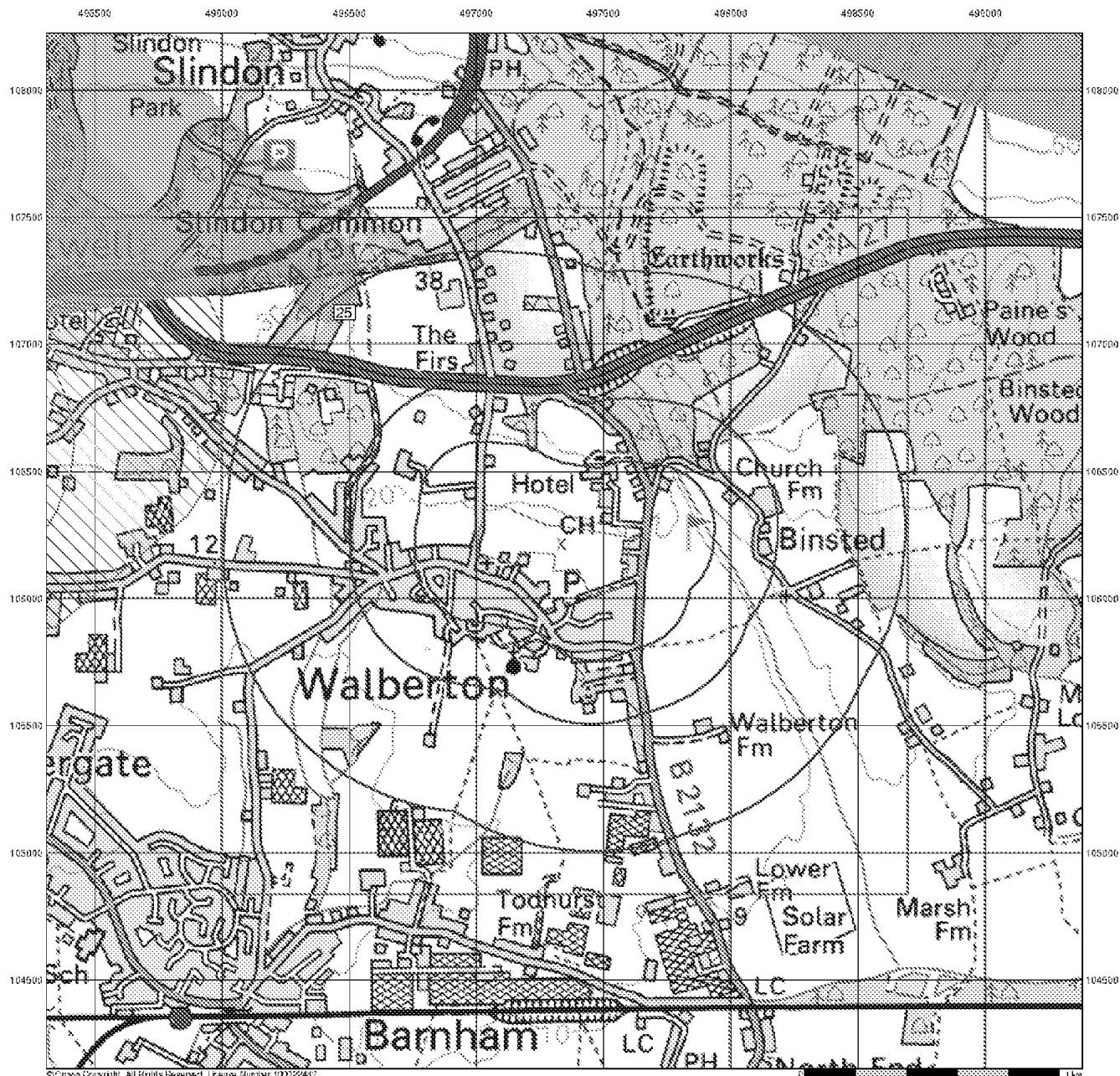
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 Search Buffer (m): 1000

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Geo-Environmental Source Protection Zones

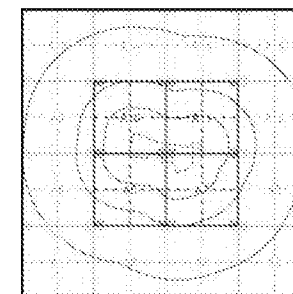
General

- 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)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



Order Details

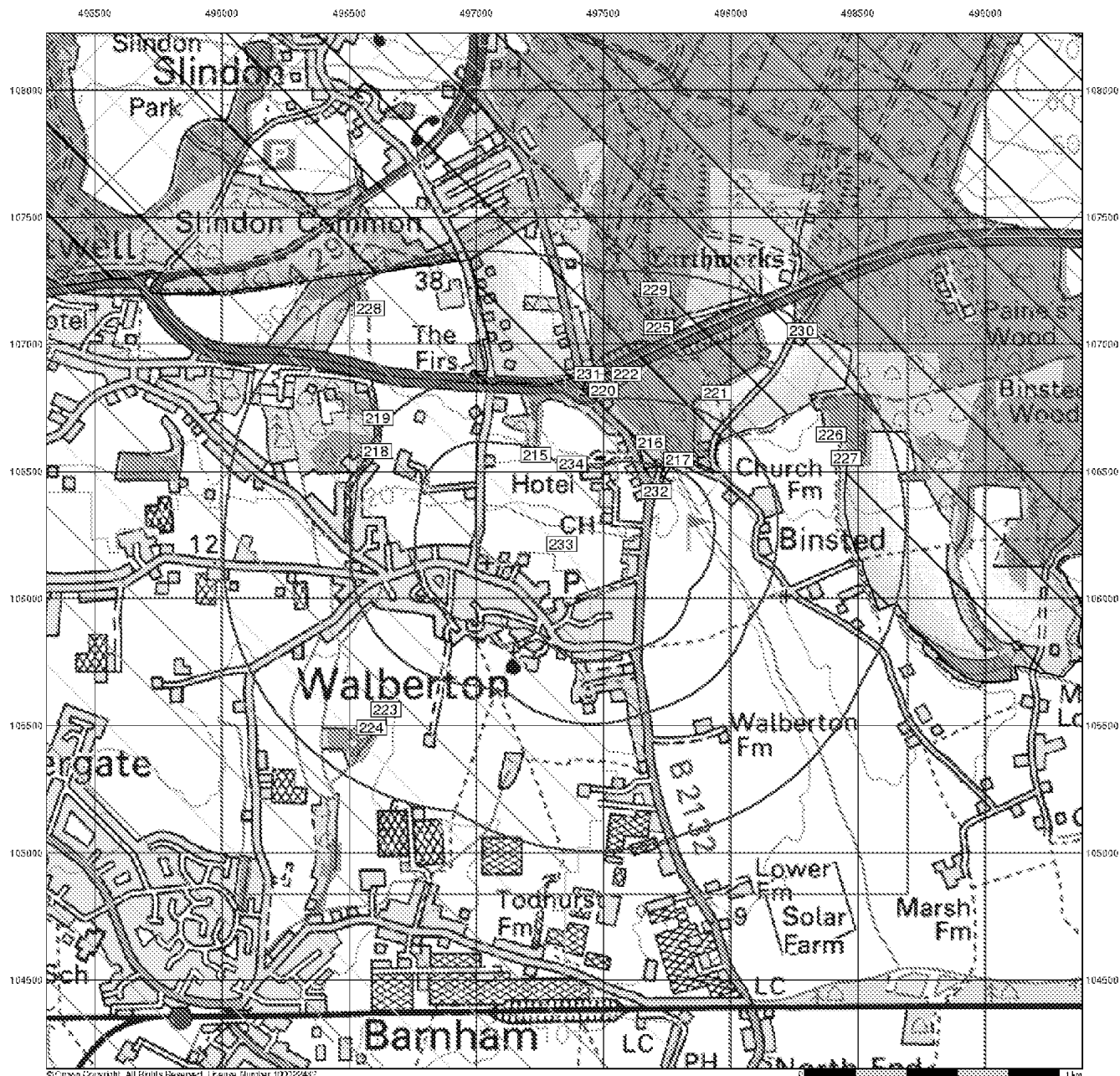
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 Slice: A
 Site Area (Ha): 11.27
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Geo-Environmental Sensitive Land Uses

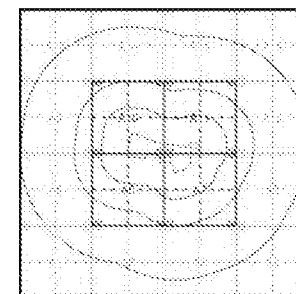
General

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

Sensitive Land Uses

- Ancient Woodlands
- 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

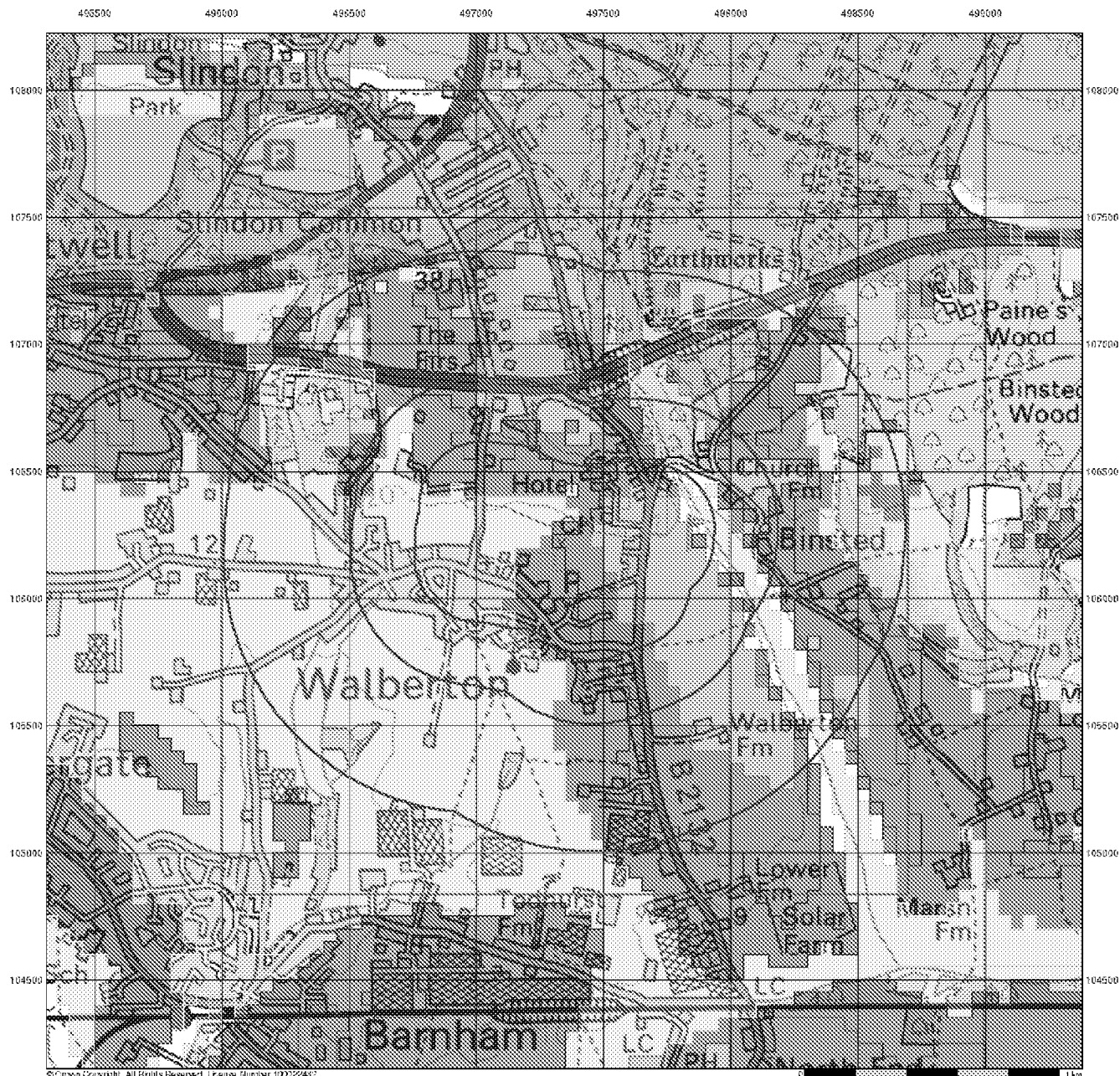
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 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

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Geo-Environmental

BGS Flood GFS Data

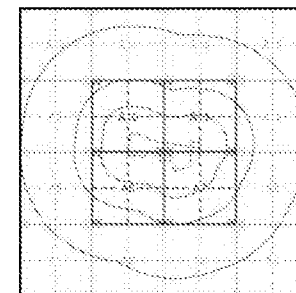
General

- 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: 143822756_1_1
 Customer Ref: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details

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Datasheet

Order Details:

Order Number:

143822756_1_1

Customer Reference:

GE16861

National Grid Reference:

497330, 106210

Slice:

A

Site Area (Ha):

11.27

Search Buffer (m):

1000

Site Details:

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Unit 7 Danworth Farm

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West Sussex

BN6 9GL

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	33
Hazardous Substances	-
Geological	36
Industrial Land Use	39
Sensitive Land Use	45
Data Currency	47
Data Suppliers	52
Useful Contacts	53

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 the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 3		1	4	21
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 9		1		
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 9		Yes		
Pollution Incidents to Controlled Waters	pg 9		1	1	3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 10				6 (*20)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 16	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 17	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 17	Yes	n/a	n/a	n/a
Source Protection Zones	pg 17				1
Extreme Flooding from Rivers or Sea without Defences	pg 17		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 17		Yes	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 17		33	26	74



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	pg 33			2	3
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 34	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 34			1	3
Potentially Infilled Land (Non-Water)	pg 34				4
Potentially Infilled Land (Water)	pg 34			1	
Registered Landfill Sites	pg 35				1
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
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 36	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 36	Yes	Yes		Yes
BGS Recorded Mineral Sites	pg 36				3
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
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	pg 37				1
Non Coal Mining Areas of Great Britain	pg 37		Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 37	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 37		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 38	Yes	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 39		9	14	13
Fuel Station Entries	pg 42		1		
Points of Interest - Commercial Services	pg 42		2	5	2
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 43	2	3	4	9
Points of Interest - Public Infrastructure	pg 44				1
Points of Interest - Recreational and Environmental	pg 44		2		
Gas Pipelines					
Underground Electrical Cables					



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 45		1	3	12
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 46				1
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks	pg 46		1		
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 46	1	1		
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
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A10SE (NW)	0	1	497300 106250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A10SE (W)	0	1	497334 106213
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A10SE (N)	0	1	497334 106250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SW (E)	0	1	497550 106300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A10SE (S)	0	1	497334 106200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SW (E)	0	1	497450 106213
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SW (NE)	28	1	497400 106300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SW (NE)	35	1	497450 106300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SW (NE)	111	1	497500 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SW (NE)	112	1	497600 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SW (N)	119	1	497350 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (NE)	138	1	497750 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (E)	167	1	497850 106300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (E)	168	1	497850 106213
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (E)	169	1	497800 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SW (NE)	216	1	497650 106500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SW (N)	230	1	497450 106500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (NE)	230	1	497750 106500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (E)	249	1	497900 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (NE)	261	1	497550 106550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (E)	276	1	497950 106350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11NW (N)	284	1	497350 106600



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (E)	293	1	497950 106400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (E)	300	1	497950 106100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (NE)	311	1	497600 106600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (E)	316	1	498000 106250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11NW (NE)	316	1	497650 106600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SE (E)	317	1	497950 106450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11NE (NE)	320	1	497700 106600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (E)	324	1	498000 106350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (E)	346	1	498000 106100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (NE)	347	1	497950 106500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (N)	362	1	497350 106650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (E)	367	1	498050 106300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (E)	367	1	498050 106213
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NE (NE)	381	1	497950 106550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (E)	394	1	498000 106000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (E)	417	1	498100 106213
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (E)	428	1	498100 106150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11NE (NE)	430	1	497900 106650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (E)	436	1	498050 106000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11NE (NE)	453	1	497850 106700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11NW (NE)	465	1	497650 106750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SE)	488	1	498050 105900



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (N)	496	1	497350 106800
1	Discharge Consents Operator: W W Smart Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA Location: Land At Lazy W, Yapton Lane, Walberton, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P03487 Permit Version: 1 Effective Date: 1st July 1991 Issued Date: 1st July 1991 Revocation Date: 28th February 1997 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A11SW (NE)	38	2	497560 106310
2	Discharge Consents Operator: Mr A Breton Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Ryders',Hedgers Hill, Walberton Ryders, Hedgers Hill, Walberton, West Sussex, Bn18 0lr Authority: Environment Agency, Southern Region Catchment Area: Adur Estuary & Freshwater Tributaries Reference: P11135 Permit Version: 1 Effective Date: 2nd July 2003 Issued Date: 2nd July 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib. River Arun Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A11SE (NE)	263	2	497790 106520
3	Discharge Consents Operator: West Sussex County Council Property Type: Undefined Or Other Location: Church Farm, Binstead, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: S01123 Permit Version: 1 Effective Date: 28th September 1962 Issued Date: 28th September 1962 Revocation Date: 11th May 1995 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 10m	A12SW (E)	396	2	498080 106270
3	Discharge Consents Operator: L. Wishart Esq. Property Type: Undefined Or Other Location: Church Farm, Binsted, Arundel, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P11076 Permit Version: 1 Effective Date: 2nd January 1985 Issued Date: 2nd January 1985 Revocation Date: 20th March 1996 Discharge Type: Trade Discharge - Process Water Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m	A12SW (E)	406	2	498090 106270



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: St Mary'S Church Council Property Type: CHURCH/MONASTERY/ABBEY/RELIGIOUS RETREAT/ASSOCIATION HQ Location: St Mary'S C Of E Church, Off The Street, Walberton, Arundel, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P04315 Permit Version: 1 Effective Date: 29th June 1992 Issued Date: 29th June 1992 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A6SE (S)	425	2	497130 105710
5	Discharge Consents Operator: R Peterson Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: The Garden House, Firgrove, Mill Road, Slindon Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P03550 Permit Version: 1 Effective Date: 24th April 1991 Issued Date: 24th April 1991 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A14SW (NW)	543	2	497000 106910
5	Discharge Consents Operator: Mr And Mrs N Wingham Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: The Coach House, Firgrove, Mill Road, Slindon Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P03549 Permit Version: 1 Effective Date: 24th April 1991 Issued Date: 24th April 1991 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A14SE (NW)	552	2	497030 106920
6	Discharge Consents Operator: Mr William Hislop Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Potwell Copse Arundel Road, Walberton, West Sussex, ,, Bn18 0qp Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: Npswqd010194 Permit Version: 1 Effective Date: 1st April 2010 Issued Date: 1st April 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Groundwaters Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A9NE (NW)	561	2	496559 106682



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	Discharge Consents Operator: lqc International Ltd Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Stoneyfield Farm, Slindon Stoneyfield Farm, Shellbridge Rd, Slindon, W.Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P09118 Permit Version: 2 Effective Date: 21st December 2012 Issued Date: 21st December 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A15SW (N)	672	2	497380 106980
7	Discharge Consents Operator: lqc International Ltd Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Stoneyfield Farm, Slindon Stoneyfield Farm, Shellbridge Rd, Slindon, W.Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P09118 Permit Version: 1 Effective Date: 11th May 2000 Issued Date: 11th May 2000 Revocation Date: 20th December 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 10m	A15SW (N)	672	2	497380 106980
7	Discharge Consents Operator: Omc Investments Limited Property Type: MAKING OF MOTOR VEHICLES+TRAILERS/CARS/CARAVANS Location: Camelia Court Shellbridge Road, Slindon Common, Arundel, West Sussex, Bn18 0lt Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: P12748 Permit Version: 2 Effective Date: 21st December 2012 Issued Date: 21st December 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Groundwater Via A Soakaway Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A15SW (N)	685	2	497390 106990
7	Discharge Consents Operator: Nissan (Uk) Limited Property Type: MAKING OF MOTOR VEHICLES+TRAILERS/CARS/CARAVANS Location: Camelia Court Shellbridge Road, Slindon Common, Arundel, West Sussex, Bn18 0lt Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: P12748 Permit Version: 1 Effective Date: 9th June 2006 Issued Date: 9th June 2006 Revocation Date: 20th December 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Underground Water Environment: Receiving Water: Groundwater Via A Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A15SW (N)	685	2	497390 106990



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Discharge Consents Operator: B J E Weir Esq Property Type: Undefined Or Other Location: Spindlewood, Yapton Lane, WALBERTON, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: N02731 Permit Version: 1 Effective Date: 25th June 1979 Issued Date: 25th June 1979 Revocation Date: 31st March 1997 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Located by supplier to within 100m	A3NE (S)	750	2	497700 105300
9	Discharge Consents Operator: Dr & Mg Tristan Property Type: Mixed Farming Location: Binsted Nursery, Binsted Lane, Binsted, Arundel West Sussex, Bn18 0ll Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: App/So/9su Permit Version: 1 Effective Date: 1st April 1999 Issued Date: 1st April 1999 Revocation Date: 1st April 1999 Discharge Type: Trade Discharge - Process Water Discharge: Into Land Environment: Receiving Water: Into Land Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A8NE (E)	753	2	498390 105980
10	Discharge Consents Operator: Mr Richard Hubble Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Dale Cottage Shellbridge Road, Slindon Common, Arundel, West Sussex, Bn18 0lt Authority: Environment Agency, Southern Region Catchment Area: The River Arun Reference: Npswqd005001 Permit Version: 1 Effective Date: 29th January 2009 Issued Date: 29th January 2009 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Ground Waters Via Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A15SW (N)	807	2	497444 107100
11	Discharge Consents Operator: Walberton Nursery Property Type: Mixed Farming Location: Walberton Nursery, Yapton Lane, Walberton, Near Arundel West Sussex, Bn18 0as Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: App/So/34su Permit Version: 1 Effective Date: 1st April 1999 Issued Date: 1st April 1999 Revocation Date: Not Supplied Discharge Type: Trade Discharge - Process Water Discharge: Into Land Environment: Receiving Water: Into Land Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A3NW (S)	819	2	497410 105190



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	Discharge Consents Operator: Sequoia Properties Ltd. Property Type: CONSTRUCTION OF BUILDINGS Location: Estate Development, West Walberton Lane, Walberton West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: S01403 Permit Version: 1 Effective Date: 3rd September 1965 Issued Date: 3rd September 1965 Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m	A9SW (W)	822	2	496200 106400
13	Discharge Consents Operator: Mr & Mrs.S.Snel Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Potwell Copse, Arundel Road, Walberton, Arundel West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P02335 Permit Version: 2 Effective Date: 21st December 2012 Issued Date: 21st December 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Varied under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A9NW (NW)	842	2	496250 106700
13	Discharge Consents Operator: Mr & Mrs.S.Snel Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Potwell Copse, Arundel Road, Walberton, Arundel West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P02335 Permit Version: 1 Effective Date: 16th June 1989 Issued Date: 16th June 1989 Revocation Date: 20th December 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m	A9NW (NW)	842	2	496250 106700
14	Discharge Consents Operator: West Sussex County Council Property Type: Undefined Or Other Location: A27 Trunk Road, Avisford/Potwell Copse, Fontwell , Nr Chichester West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: N01592 Permit Version: 1 Effective Date: 8th May 1979 Issued Date: 8th May 1979 Revocation Date: 31st March 1997 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Located by supplier to within 100m	A13SW (NW)	887	2	496300 106880



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Discharge Consents Operator: Fordingbridge Plc Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Fordingbridge Plc, Fontwell Fordingbridge Plc, Arundel Road, Fontwell, Arundel, West Sussex, Bn18 0sd Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: P12382 Permit Version: 1 Effective Date: 29th April 2005 Issued Date: 29th April 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch To Barnham Rife Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A9NW (NW)	935	2	496170 106750
15	Discharge Consents Operator: Fordingbridge Engineering Ltd Property Type: Undefined Or Other Location: Pencil Rough, FONTWELL, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: N02647 Permit Version: 1 Effective Date: 2nd April 1984 Issued Date: 2nd April 1984 Revocation Date: 31st March 1997 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Freshwater River Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Located by supplier to within 100m	A9NW (NW)	935	2	496170 106750
15	Discharge Consents Operator: P.C.Fisher Esq. Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Pencil Rough, Arundel Road, Fontwell , Arundel West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P02117 Permit Version: 1 Effective Date: 24th January 1989 Issued Date: 24th January 1989 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m	A9NW (NW)	957	2	496170 106800
16	Discharge Consents Operator: S E Healey Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Gracelands Farm, Walberton Gracelands Farm, Walberton, Arundel, West Sussex, Bn18 0qp Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: P12674 Permit Version: 1 Effective Date: 6th March 2006 Issued Date: 6th March 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Groundwater Via Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A9NW (W)	982	2	496100 106700



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	Discharge Consents Operator: Mrs M.G.Spoorth Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Danesfield, Shellbridge Road, Slindon , Arundel West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P03115 Permit Version: 1 Effective Date: 7th September 1990 Issued Date: 7th September 1990 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Into Land Environment: Receiving Water: Into Land Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A15NW (N)	983	2	497410 107300
17	Discharge Consents Operator: Mr Clive Smith Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Oakwood Cottage, Slindon Oakwood Cottage, Shellbridge Road, Slindon, West Sussex, BN18 0ne Authority: Environment Agency, Southern Region Catchment Area: Aldingbourne/Barnham Rife Reference: P12580 Permit Version: 1 Effective Date: 9th December 2005 Issued Date: 9th December 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Groundwater Via Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A15NW (N)	987	2	497390 107310
18	Local Authority Pollution Prevention and Controls Name: Turnpike Motors Location: The Street, Walburton, ARUNDEL, West Sussex, BN18 0PG Authority: Arun District Council, Environmental Health Department Permit Reference: 1887 Dated: 1st February 1992 Process Type: Local Authority Air Pollution Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input Status: Authorisation revokedRevoked Positional Accuracy: Automatically positioned to the address	A6NE (SW)	102	3	497051 106053
	Nearest Surface Water Feature	A11SW (E)	6	-	497495 106263
19	Pollution Incidents to Controlled Waters Property Type: Recreation & Sporting Location: Avisford Golf Club, BINSTED Authority: Environment Agency, Southern Region Pollutant: No Pollutant Note: Not Supplied Incident Date: 4th August 1999 Incident Reference: 2596 Catchment Area: Arun Receiving Water: Potential River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m	A11SE (E)	217	2	497900 106300
20	Pollution Incidents to Controlled Waters Property Type: Other General Premises Location: Stream At, Walberton Mill Lane Authority: Environment Agency, Southern Region Pollutant: Oils - Unknown Note: Heating Oil Incident Date: 10th November 1992 Incident Reference: 533 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Organic Industrial Waste Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10SW (W)	307	2	496700 106200



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	Pollution Incidents to Controlled Waters Property Type: Industrial: Other Location: Discharge To Ditch At, Royal Oak Public House, Yapton Lane Authority: Environment Agency, Southern Region Pollutant: Sewage - Septic Tank Effluent Note: Overflowing Septic Tank Serving Public House Incident Date: 9th November 1993 Incident Reference: 773 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Sewage - Other Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NW (N)	515	2	497450 106785
21	Pollution Incidents to Controlled Waters Property Type: Industrial: Other Location: Discharge To Ditch At, Royal Oak Public House, Yapton Lane, WALBERTON Authority: Environment Agency, Southern Region Pollutant: Sewage - Septic Tank Effluent Note: Overflowing Septic Tank Serving Public House Incident Date: 3rd November 1993 Incident Reference: 522 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Sewage - Other Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NW (N)	520	2	497450 106790
22	Pollution Incidents to Controlled Waters Property Type: Horticultural Location: Location Description Not Available Authority: Environment Agency, Southern Region Pollutant: Oils - Diesel (Including Agricultural) Note: Spillage Of Diesel Approx 1000 Litres Contained Incident Date: 8th September 1996 Incident Reference: 1874 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	913	2	496700 105300
23	Water Abstractions Operator: W P Wyatt & Son Licence Number: 10/41/542212 Permit Version: 101 Location: Point A At Woodlands Farm, Slindon Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: Water Abstracted May Be Used In Area Coloured On The Said Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 10th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SW (NW)	823	2	496840 107170
23	Water Abstractions Operator: W P Wyatt Licence Number: 10/41/542212 Permit Version: 100 Location: Point A At Woodlands Farm, Slindon Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: Water Abstracted May Be Used In Area Coloured On The Said Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 2nd January 1979 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14SW (NW)	823	2	496840 107170



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	Water Abstractions Operator: Walberton Nursery Llp Licence Number: 27/194a/R01 Permit Version: 1 Location: Point A At Walberton Nurseries, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: No Longer Applicable Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st April 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NW (S)	849	2	497640 105180
24	Water Abstractions Operator: Walberton Nursery Llp Licence Number: 27/194a Permit Version: 2 Location: Point A At Walberton Nurseries, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: No Longer Applicable Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th April 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NW (S)	849	2	497640 105180
24	Water Abstractions Operator: D Tristram T/A Walberton Nurseries Licence Number: 27/194a Permit Version: 1 Location: Point A At Walberton Nurseries, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: No Longer Applicable Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3NW (S)	849	2	497640 105180
24	Water Abstractions Operator: D Tristram T/A Walberton Nurseries Licence Number: 27/194 Permit Version: 100 Location: Point A At Walberton Nurseries, Walberton Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Shown Outlined Black On Attached Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd April 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3NW (S)	849	2	497640 105180



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Toddington Nurseries Limited Licence Number: 10/41/542209 Permit Version: 102 Location: At Lake Lane, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Water Abstracted Shall Only Be Used On Land And Buildings Marked In Pink On The Plan Accompanying The Licence Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 9th August 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SW (SW)	1035	2	496740 105160
	Water Abstractions Operator: Kirin Agribo Toddington Ltd Licence Number: 10/41/542209 Permit Version: 101 Location: At Lake Lane, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Water Abstracted Shall Only Be Used On Land And Buildings Marked In Pink On The Plan Accompanying The Licence Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2SW (SW)	1035	2	496740 105160
	Water Abstractions Operator: Southern Glasshouse Produce Ltd Licence Number: 10/41/542209 Permit Version: 100 Location: At Lake Lane, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Water Abstracted Shall Only Be Used On Land And Buildings Marked In Pink On The Plan Accompanying The Licence Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th June 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A2SW (SW)	1035	2	496740 105160
	Water Abstractions Operator: Walberton Nursery Llp Licence Number: 10/41/412006 Permit Version: 101 Location: Todhurst Barn, Yapton Lane, Walberton Authority: Environment Agency, Southern Region Abstraction: Agriculture: Horticultural Watering Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 24th January 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A3SW (S)	1049	2	497610 104970



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: D Tristram T/A Walberton Nurseries Licence Number: 10/41/412006 Permit Version: 100 Location: Todhurst Barn, Yapton Lane, Walberton Authority: Environment Agency, Southern Region Abstraction: Agriculture: Horticultural Watering Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3SW (S)	1049	2	497610 104970
	Water Abstractions Operator: Star Nurseries Ltd Licence Number: 27/176 Permit Version: 101 Location: Todhurst Rife At Star Nurseries, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined On Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th October 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1331	2	497700 104700
	Water Abstractions Operator: Star Nurseries Ltd Licence Number: 27/176 Permit Version: 100 Location: Todhurst Rife At Star Nurseries, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture and Nurseries: Spray Irrigation - Spray Irrigation Definition Order Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined On Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1331	2	497700 104700
	Water Abstractions Operator: Miss K H Fuente Licence Number: 10/41/542211 Permit Version: 101 Location: Point A At Stoneyfields Nurseries, Eastergate Lane, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: Water Abstracted May Be Used On Land Coloured Pink On Said Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st March 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1436	2	495590 105920



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr P H C Fuente Licence Number: 10/41/542211 Permit Version: 100 Location: Point A At Stoneyfields Nurseries, Eastergate Lane, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: Water Abstracted May Be Used On Land Coloured Pink On Said Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd January 1978 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1436	2	495590 105920
	Water Abstractions Operator: Fresh Acres Nurseries Ltd Licence Number: 10/41/412002 Permit Version: 100 Location: Todhurst Rife At Yapton Lane, Walberton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): 68 Yearly Rate (m3): 18181.6 Details: See Licence Map Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 29th June 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1454	2	497730 104580
	Water Abstractions Operator: Eric Wall Holdings Ltd Licence Number: 10/41/542208 Permit Version: 100 Location: Point B, Lake Lane, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: The Water Abstracted Shall Only Be Used On Land And Buildings On The Occupation Of The Licence Holder At Lake Lane, Barnham Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1468	2	497110 104580
	Water Abstractions Operator: Holly Lodge (Kingswood) Ltd Licence Number: 10/41/412201 Permit Version: 101 Location: Havenwood Caravan Park, Paines Wood, Binsted Authority: Environment Agency, Southern Region Abstraction: Private Water Supply: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: See Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th June 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1553	2	498940 107190



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr N P Bridge Licence Number: 10/41/412201 Permit Version: 100 Location: Havenwood Caravan Park, Paines Wood, Binsted Authority: Environment Agency, Southern Region Abstraction: Private Water Supply: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: See Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 9th December 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1553	2	498940 107190
	Water Abstractions Operator: Eric Wall Holdings Ltd Licence Number: 10/41/542208 Permit Version: 100 Location: Point A, Lake Lane, Barnham Authority: Environment Agency, Southern Region Abstraction: Horticulture And Nurseries: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 545 Yearly Rate (m3): 100000 Details: The Water Abstracted Shall Only Be Used On Land And Buildings On The Occupation Of The Licence Holder At Lake Lane, Barnham Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1605	2	496740 104570
	Water Abstractions Operator: Adviserate T/A Southdown Flowers Licence Number: 412002 Permit Version: Not Supplied Location: Adviserate Limited Authority: Environment Agency, Southern Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 68 Yearly Rate (m3): 18181 Details: Todhurst Rife (Trib Arun) 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	(S)	1698	2	498000 104400
	Water Abstractions Operator: G S Sercombe Licence Number: 10/41/542210 Permit Version: 100 Location: Point A At Gaston Farm, Slindon Authority: Environment Agency, Southern Region Abstraction: General Agriculture: 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: Water Abstracted To Be Used On Land Coloured Pink On The Said Map Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NW)	1759	2	496510 108050



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: T Luckin & Son Licence Number: 10/41/411020 Permit Version: 100 Location: Binsted Rife Nr Priory Farm Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): 182 Yearly Rate (m3): 2500 Details: See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 8th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1879	2	499460 105630
	Water Abstractions Operator: Keith Langmead Ltd Licence Number: 27/190 Permit Version: 102 Location: Point A On Binstead Rife, Wicks Farm, Yapton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Shown Outlined In Red On Licence Map Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 4th December 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SE)	1969	2	498810 104510
	Water Abstractions Operator: Keith Langmead Ltd Licence Number: 27/190 Permit Version: 101 Location: Point A On Binstead Rife, Wicks Farm, Yapton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Shown Outlined In Black On Licence Map Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st April 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SE)	1969	2	498810 104510
	Water Abstractions Operator: A.C. Langmead Ltd Licence Number: 27/190 Permit Version: 100 Location: Point A On Binstead Rife, Wicks Farm, Yapton Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Shown Outlined In Black On Licence Map Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 16th August 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(SE)	1969	2	498810 104510
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (H1) - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater Map Sheet: Sheet 45 West Sussex and Surrey Scale: 1:100,000	A10SE (NW)	0	2	497147 106342
	Groundwater Vulnerability Soil Classification: Soils of Intermediate Leaching Potential (I1) - Soils which can possibly transmit a wide range of pollutants Map Sheet: Sheet 45 West Sussex and Surrey Scale: 1:100,000	A10SE (W)	0	2	497334 106213



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A10SE (W)	0	1	497334 106213
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A10SE (W)	0	1	497334 106213
25	Source Protection Zones Name: Various Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13SE (NW)	931	2	496482 107126
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SE (NE)	195	2	497810 106450
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SE (NE)	195	2	497810 106450
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (E)	6	4	497495 106263
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	11	4	497098 106380
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (E)	15	4	497495 106273
29	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 25.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	21	4	497113 106399
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (E)	21	4	497496 106278



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	30	4	497176 106374
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	31	4	497140 106386
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	33	4	497136 106390
34	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 46.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	40	4	497456 106316
35	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 20.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	41	4	497196 106374
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	49	4	497213 106375
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	51	4	497427 106329
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 74.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (N)	55	4	497288 106352
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	56	4	497219 106374



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	60	4	497421 106331
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	61	4	497405 106337
42	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 13.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (N)	63	4	497295 106351
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (N)	67	4	497368 106346
44	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	67	4	497399 106340
45	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 17.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (N)	68	4	497379 106344
46	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 2.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	69	4	497395 106343
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 34.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A11SW (NE)	72	4	497395 106345
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	72	4	497198 106401



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	85	4	497209 106409
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SE (NW)	90	4	497239 106402
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 569.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (NE)	222	4	497848 106439
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 47.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (E)	226	4	497875 106404
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 163.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (E)	226	4	497893 106365
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (E)	246	4	497873 106436
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	247	4	497868 106444
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	247	4	497872 106437
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	248	4	497866 106446



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	248	4	497866 106446
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	254	4	497855 106466
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	254	4	497853 106467
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	254	4	497855 106466
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	255	4	497857 106464
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	268	4	497888 106452
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 20.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (E)	290	4	497970 106221
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 552.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (E)	290	4	497970 106221
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	295	4	497906 106471



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	300	4	497909 106475
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 112.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	300	4	497911 106475
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	303	4	497910 106480
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 0	A11SE (NE)	305	4	497910 106482
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 43.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A11SE (E)	308	4	497989 106228
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A12SW (E)	348	4	498030 106240
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 73.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9SE (W)	362	4	496667 106434
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10SW (NW)	364	4	496687 106506
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 549.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A6SW (SW)	369	4	496912 105803



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A10NW (NW)	377	4	496700 106561
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 67.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	381	4	496645 106036
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 68.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	435	4	496595 106018
79	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 52.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	437	4	496570 106148
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 51.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	437	4	496569 106144
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	437	4	496570 106148
82	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 38.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	439	4	496579 106058
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 190.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	443	4	496596 105992
84	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	454	4	496558 106085



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 623.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	552	4	496458 106096
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	555	4	497209 105509
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	587	4	497200 105478
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 326.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A15SW (NE)	589	4	497646 106875
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 273.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	592	4	497200 105472
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 97.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NE (W)	607	4	496449 105917
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 359.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5SE (SW)	609	4	496492 105833
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 2	A5SE (SW)	609	4	496492 105833
93	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 37.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A3NW (S)	631	4	497411 105378



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 66.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9SE (W)	663	4	496376 106511
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 50.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9SE (W)	663	4	496377 106512
96	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 6.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NE (W)	686	4	496364 106556
97	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 699.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5SE (W)	686	4	496401 105836
98	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 113.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	699	4	498205 105727
99	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 70.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	699	4	498205 105727
100	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 46.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NE (W)	706	4	496347 106569
101	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9SW (W)	708	4	496323 106472
102	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 14.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	736	4	496319 106580



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	743	4	496304 106554
104	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	743	4	496304 106553
105	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 52.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	745	4	496309 106579
106	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	745	4	496304 106562
107	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	745	4	496309 106579
108	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 256.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	745	4	496651 105504
109	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 187.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	746	4	496302 106559
110	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 33.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	764	4	497151 105306
111	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 48.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (W)	771	4	496298 106629



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
112	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	797	4	497137 105275
113	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 46.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	798	4	498263 105630
114	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 61.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	798	4	498263 105630
115	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	800	4	496284 106673
116	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 509.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A12SE (E)	809	4	498489 106360
117	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	813	4	496279 106694
118	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 25.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 2	A9NW (NW)	813	4	496279 106694
119	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 140.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	822	4	497120 105256
120	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 44.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	827	4	498253 105563



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
121	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 2	A9NW (NW)	831	4	496269 106716
122	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 305.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A16SW (NE)	834	4	498218 106918
123	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	841	4	498290 105593
124	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	841	4	498290 105593
125	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	841	4	498292 105594
126	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 329.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8NE (E)	842	4	498517 106142
127	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	847	4	498292 105584
128	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 31.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	849	4	496263 106746
129	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 96.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A8SW (SE)	849	4	498294 105583



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
130	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 120.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	852	4	496270 106764
131	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 2.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	853	4	496256 106738
132	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 166.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A12NE (E)	854	4	498453 106648
133	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 10.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	855	4	496253 106737
134	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 20.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A9NW (NW)	861	4	496244 106732
135	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 40.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	869	4	497177 105184
136	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A15SW (N)	872	4	497480 107156
137	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 69.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	876	4	496526 105427
138	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 16.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2NE (S)	885	4	497136 105182



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 55.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A13SW (NW)	888	4	496299 106881
140	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 74.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	897	4	497141 105167
141	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 206.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A13SE (NW)	898	4	496350 106962
142	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 90.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	901	4	496411 105483
143	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 35.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A4NW (SE)	914	4	498300 105482
144	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 120.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	932	4	496532 105358
145	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 60.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A4NW (SE)	932	4	498332 105495
146	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 25.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	960	4	497084 105121
147	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 178.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	964	4	497198 105068



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
148	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	965	4	496419 105394
149	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 125.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A1NE (SW)	967	4	496420 105391
150	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 294.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A4NW (SE)	969	4	498030 105192
151	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 156.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	974	4	497187 105069
152	OS Water Network Lines Watercourse Form: Reservoir Watercourse Length: 85.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	979	4	497211 105054
153	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 60.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	980	4	497290 105041
154	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 525.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A5NW (W)	982	4	496051 105932
155	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 28.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	982	4	497064 105106
156	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 52.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A4NW (SE)	985	4	498357 105440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
157	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 49.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rother and Arun Primacy: 1	A4NW (SE)	985	4	498357 105440
158	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 276.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: West Streams Primacy: 1	A2SE (S)	988	4	497206 105051



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
159	Historical Landfill Sites Licence Holder: Not Supplied Location: Tye Lane, Walberton, Sussex Name: Hooe Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20130 First Input Date: 31st December 1955 Last Input Date: 31st December 1960 Specified Waste: Deposited Waste included Inert, Commercial and Household Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 3800/8065 BGS Ref: Not Supplied Other Ref: WD27/223	A10NW (NW)	375	2	496853 106703
160	Historical Landfill Sites Licence Holder: Wyatt of Snetterton Limited Location: Fontwell, Sussex Name: Days Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20370 First Input Date: 3rd May 1988 Last Input Date: 15th July 1988 Specified Waste: Deposited Waste included Inert Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 3800/8136 BGS Ref: Not Supplied Other Ref: WD27/110, WA/10/87	A10NE (NW)	434	2	497049 106806
161	Historical Landfill Sites Licence Holder: J I Geall Location: Slindon, Sussex Name: Slindon Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20072 First Input Date: 10th September 1985 Last Input Date: 20th October 1986 Specified Waste: Deposited Waste included Inert and Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 3800/8036 BGS Ref: Not Supplied Other Ref: 7-058, WD27/191, WD13/34	A15SW (N)	803	2	497361 107146
162	Historical Landfill Sites Licence Holder: Not Supplied Location: Slindon, Sussex Name: Woodlands Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20071 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Deposited Waste included Inert Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: WD27/192	A14NW (NW)	879	2	496839 107227
163	Historical Landfill Sites Licence Holder: Not Supplied Location: Mill Road, Slindon, Sussex Name: Mill Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20070 First Input Date: 31st December 1985 Last Input Date: 31st December 1985 Specified Waste: Deposited Waste included Inert Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 3800/8095 BGS Ref: Not Supplied Other Ref: WD27/190	A14NE (N)	918	2	497316 107293



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Arun District Council - Has no landfill data to supply		0	5	497334 106213
	Local Authority Landfill Coverage Name: West Sussex County Council - Has supplied landfill data		0	6	497334 106213
164	Local Authority Recorded Landfill Sites Location: Hooe Farm, Tye Lane, Walburton Reference: WA/10/87 Authority: West Sussex County Council, Environment & Development Last Reported Unknown Status: Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	A10NW (NW)	487	6	496800 106800
165	Local Authority Recorded Landfill Sites Location: Wardfield, Mill Road, Slindon Reference: SL/8/85 Authority: West Sussex County Council, Environment & Development Last Reported Unknown Status: Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	A14SE (N)	844	6	497200 107200
166	Local Authority Recorded Landfill Sites Location: Mill Farm, Mill Road, Slindon Reference: Not Supplied Authority: West Sussex County Council, Environment & Development Last Reported Unknown Status: Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	A14NE (N)	957	6	497300 107300
167	Local Authority Recorded Landfill Sites Location: Woodlands Farm, Mill Road, Slindon Common Reference: Not Supplied Authority: West Sussex County Council, Environment & Development Last Reported Unknown Status: Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	A14NW (NW)	959	6	496800 107300
168	Potentially Infilled Land (Non-Water) Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14SE (N)	811	-	497155 107171
169	Potentially Infilled Land (Non-Water) Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NW (NW)	879	-	496842 107228
170	Potentially Infilled Land (Non-Water) Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NE (N)	912	-	497125 107274
171	Potentially Infilled Land (Non-Water) Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SE (NW)	988	-	496486 107197
172	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A12SW (E)	421	-	498094 106375



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
173	Registered Landfill Sites Licence Holder: J I Geall Licence Reference: 5/BK/85 Site Location: Pit To North Of Wardfield, Mill Road, Slindon, Arundel, West Sussex Licence Easting: 497180 Licence Northing: 107170 Operator Location: 5 Aigburt Avenue, Rose Green, Bognor Regis, West Sussex Authority: Environment Agency - Southern Region, Sussex Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 19th September 1985 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Brick Rubble,Broken Concrete Stone,Chalk,Subsoil Totally Inert Solid Waste Prohibited Waste: Any Waste Not Totally Inert Asbestos Grass Cuttings Paper Vegetable Matter Waste Ex Sites Cont.Hazardous Material Waste Ex Sites Cont.Polluting Mater'L Wood	A14SE (N)	812	2	497180 107170



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A10SE (W)	0	1	497334 106213
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A10SE (W)	0	1	497334 106213
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (NE)	187	1	497797 106457
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9SW (W)	884	1	496134 106379
174	BGS Recorded Mineral Sites Site Name: Potwell Copse Gravel Pit Location: , Arundel, West Sussex Source: British Geological Survey, National Geoscience Information Service Reference: 157616 Type: Opencast Status: Ceased Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Palaeocene Geology: Lambeth Group Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A9NW (NW)	816	1	496324 106788
175	BGS Recorded Mineral Sites Site Name: Slindon Common Brick Field Location: , Slindon, Arundel, West Sussex Source: British Geological Survey, National Geoscience Information Service Reference: 157578 Type: Opencast Status: Ceased Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Palaeocene Geology: Lambeth Group Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A14NW (NW)	911	1	496816 107255
176	BGS Recorded Mineral Sites Site Name: Slindon Common Location: , Slindon, Arundel, West Sussex Source: British Geological Survey, National Geoscience Information Service Reference: 18266 Type: Opencast Status: Ceased Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Quaternary Geology: Head (Head Gravel) Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A15NE (N)	992	1	497750 107270



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Natural Cavities Easting: 498300 Northing: 107000 Distance: 949 Quadrant Reference: A16 Quadrant Reference: SW Bearing Ref: NE Cavity Type: Sinkhole x 1, Solution Pipe x 1 Solid Geology Detail: Chalk Group, Lambeth Group Superficial Geology No Details Detail:	A16SW (NE)	949	7	498300 107000
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	159	1	497375 106529
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (N)	0	1	497336 106308
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (NE)	184	1	497797 106457
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11SE (NE)	184	1	497797 106457
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	137	1	497790 106378
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (N)	0	1	497336 106308
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	135	1	497790 106378
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SE (NE)	184	1	497797 106457
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	231	1	497894 106374
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (N)	0	1	497336 106308



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (N)	5	1	497366 106353
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (E)	97	1	497781 106281
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11SW (NE)	175	1	497649 106475
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A10SW (NW)	176	1	496925 106513
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	1	497334 106213
	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	A10SE (W)	0	1	497334 106213



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
177	Contemporary Trade Directory Entries Name: Cathedral Fire Ltd Location: Apple Acre, Avisford Park Road, Walberton, Arundel, West Sussex, BN18 0AP Classification: Abattoirs Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SE)	19	-	497536 106017
178	Contemporary Trade Directory Entries Name: Christine Llewellyn Location: Rosslyn Cottage, The Street, Walberton, Arundel, West Sussex, BN18 0PH Classification: Furniture - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	75	-	497164 106059
178	Contemporary Trade Directory Entries Name: Art On Tiles Location: Hollytree Cottage, The Street, Walberton, Arundel, West Sussex, BN18 0PH Classification: Tile Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	81	-	497181 106056
179	Contemporary Trade Directory Entries Name: Swanbourne Auto Works Location: The Street, Walberton, Arundel, West Sussex, BN18 0PG Classification: Mot Testing Centres Status: Active Positional Accuracy: Manually positioned to the address or location	A6NE (SW)	100	-	497057 106055
179	Contemporary Trade Directory Entries Name: Turnpike Motors Location: The Street, Walberton, Arundel, West Sussex, BN18 0PG Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	102	-	497051 106053
180	Contemporary Trade Directory Entries Name: Universal Race Technology Ltd Location: William Booker Yard, The Street, Walberton, Arundel, BN18 0PF Classification: Car Component Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	120	-	497098 106027
180	Contemporary Trade Directory Entries Name: Bevis Digitech Ltd Location: William Booker Yard, The Street, Walberton, Arundel, BN18 0PF Classification: Machinery - Industrial & Commercial Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	120	-	497098 106027
180	Contemporary Trade Directory Entries Name: Stephen Butler Blinds Location: William Booker Yard, The Street, Walberton, ARUNDEL, West Sussex, BN18 0PF Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Automatically positioned to the address	A6NE (SW)	140	-	497086 106009
181	Contemporary Trade Directory Entries Name: Poppies Location: Avisford Park House, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Automatically positioned to the address	A10NE (NW)	174	-	497066 106538
182	Contemporary Trade Directory Entries Name: K L Motors Location: Unit 12, Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A10SW (NW)	280	-	496782 106510
182	Contemporary Trade Directory Entries Name: Rhino Walling Location: Unit 9/10, Hooe Farm, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Fencing Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A10SW (NW)	295	-	496770 106518



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
182	Contemporary Trade Directory Entries Name: Arun Electrical Ltd Location: Unit 5, Hooe Farm, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Electrical Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A10SW (NW)	304	-	496756 106512
182	Contemporary Trade Directory Entries Name: Tompkins Joinery Location: Unit 2, Hooe Farm, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Joinery Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A10SW (NW)	322	-	496733 106507
183	Contemporary Trade Directory Entries Name: Arun Electrical Ltd Location: Unit 15, Hooe Farm, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Electrical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A10NW (NW)	325	-	496753 106547
183	Contemporary Trade Directory Entries Name: County Stone Ltd Location: Unit 7, Hooe Farm, Tye Lane, Walberton, Arundel, West Sussex, BN18 0LU Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Automatically positioned to the address	A10NW (NW)	338	-	496730 106536
183	Contemporary Trade Directory Entries Name: County Stone Ltd Location: Unit 4-7, Hooe Farm, Tye La, Walberton, Arundel, West Sussex, BN18 0LU Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A10NW (NW)	338	-	496730 106536
183	Contemporary Trade Directory Entries Name: A B Repairs Location: Unit 8, Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A10NW (NW)	346	-	496736 106560
183	Contemporary Trade Directory Entries Name: Keith Herbert Commercials Location: Unit 6, Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Classification: Commercial Vehicle Bodybuilders & Repairers Status: Active Positional Accuracy: Automatically positioned to the address	A10NW (NW)	356	-	496728 106567
184	Contemporary Trade Directory Entries Name: Dm Chainsaws Ltd Location: Walberton Place Farm, Yapton Lane, Walberton, Arundel, West Sussex, BN18 0AS Classification: Lawnmowers & Garden Machinery - Sales & Service Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SW (SE)	358	-	497599 106679
185	Contemporary Trade Directory Entries Name: Base 2 Studio Location: Binsted, Arundel, West Sussex, BN18 0LP Classification: Digital Printing Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A12SW (E)	368	-	498028 106409
186	Contemporary Trade Directory Entries Name: Nicholas Harper Location: Friars Oak Cottage, Walberton Green, Walberton, Arundel, West Sussex, BN18 0AT Classification: Laundry Equipment Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A5NE (W)	396	-	496641 106007
187	Contemporary Trade Directory Entries Name: Parsec Electronics Location: The Barn, Arundel Road, Walberton, Arundel, West Sussex, BN18 0QP Classification: Automation Systems & Equipment Status: Inactive Positional Accuracy: Manually positioned to the address or location	A10NE (NW)	404	-	497102 106766



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
188	Contemporary Trade Directory Entries Name: Woodcraft Furniture Frames Location: Unit 16, Hooe Farm, Tye Lane, Walberton, ARUNDEL, West Sussex, BN18 0LU Classification: Seating Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A10NW (NW)	415	-	496796 106715
189	Contemporary Trade Directory Entries Name: Arundel Car Sales Location: Eastergate La, Walberton, Arundel, West Sussex, BN18 0BA Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A5NE (W)	527	-	496482 106108
190	Contemporary Trade Directory Entries Name: Somerford & Hudson Location: Walberton Farm, Yapton Lane, Walberton, Arundel, West Sussex, BN18 0AS Classification: Cabinet Makers Status: Active Positional Accuracy: Automatically positioned to the address	A3NE (SE)	672	-	497936 105480
191	Contemporary Trade Directory Entries Name: I Q C International Ltd Location: Stoneybridge Farm, Shellbridge Road, Slindon Common, Arundel, West Sussex, BN18 0LT Classification: Electronic Component Manufacturers & Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A15SW (N)	703	-	497353 107024
191	Contemporary Trade Directory Entries Name: A D F Milking Ltd Location: 1 Camelia Court, Shellbridge Road, Slindon Common, Arundel, BN18 0LT Classification: Horticultural Equipment Manufacturers & Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A15SW (N)	728	-	497347 107052
192	Contemporary Trade Directory Entries Name: Deborah Services Location: Yapton Lane, Walberton, Arundel, West Sussex, BN18 0AS Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A3NW (S)	787	-	497493 105222
193	Contemporary Trade Directory Entries Name: Chartwell Wooden Windows Ltd Location: Yapton Lane, Walberton, Arundel, BN18 0AS Classification: Window Frame Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A3NW (S)	809	-	497596 105211
194	Contemporary Trade Directory Entries Name: Fibreglass Services Location: Yapton Lane, Walberton, Arundel, BN18 0AS Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A3NE (S)	815	-	497684 105226
194	Contemporary Trade Directory Entries Name: Fibreglass Services Location: Yapton Lane, Walberton, Arundel, West Sussex, BN18 0AS Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A3NE (S)	825	-	497709 105223
194	Contemporary Trade Directory Entries Name: Red Diamond Ltd Location: Yapton La, Walberton, Arundel, West Sussex, BN18 0AS Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A3NE (S)	836	-	497738 105222
194	Contemporary Trade Directory Entries Name: County Supplies Location: Yapton La, Walberton, Arundel, West Sussex, BN18 0AS Classification: Builders' Merchants Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A3NE (S)	836	-	497738 105222



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
195	Contemporary Trade Directory Entries Name: Fordingbridge Plc Location: Arundel Road, Fontwell, ARUNDEL, West Sussex, BN18 0SD Classification: Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (NW)	893	-	496257 106825
196	Contemporary Trade Directory Entries Name: T J R Cabinet Makers Location: Eastergate La, Walberton, Arundel, West Sussex, BN18 0BA Classification: Cabinet Makers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A5NW (W)	927	-	496079 106148
197	Contemporary Trade Directory Entries Name: Ian Anderson Location: Yapton La, Walberton, Arundel, West Sussex, BN18 0AS Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A3SE (S)	959	-	497740 105093
198	Fuel Station Entries Name: Turnpike Motors Location: The Street, Walberton, ARUNDEL, West Sussex, BN18 0PG Brand: Obsolete Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Automatically positioned to the address	A6NE (SW)	102	-	497050 106053
199	Points of Interest - Commercial Services Name: Swanbourne Auto Works Location: The Street, Walberton, Arundel, BN18 0PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6NE (SW)	100	8	497057 106055
199	Points of Interest - Commercial Services Name: Turnpike Motors Location: The Street, Walberton, Arundel, BN18 0PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6NE (SW)	102	8	497051 106053
200	Points of Interest - Commercial Services Name: K L Motors Location: Unit 12 Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10SW (NW)	281	8	496782 106510
200	Points of Interest - Commercial Services Name: K L Motors Location: Unit 12 Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10SW (NW)	281	8	496781 106510
200	Points of Interest - Commercial Services Name: A B Repairs Location: Unit 8 Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10NW (NW)	346	8	496736 106560
200	Points of Interest - Commercial Services Name: A B Repairs Location: Unit 8 Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10NW (NW)	346	8	496736 106560
200	Points of Interest - Commercial Services Name: Keith Herbert Commercials Location: Unit 6 Hooe Farm, Tye Lane, Walberton, Arundel, BN18 0LU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10NW (NW)	356	8	496728 106566
201	Points of Interest - Commercial Services Name: Geoff Burse Trailers Ltd Location: Yapton Lane, Walberton, Arundel, BN18 0AS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A3NW (S)	796	8	497564 105219



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
202	Points of Interest - Commercial Services Name: Fibreglass Services Location: Yapton Lane, Walberton, Arundel, BN18 0AS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A3NE (S)	815	8	497683 105226
203	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	A6NE (W)	0	8	497120 106149
203	Points of Interest - Manufacturing and Production Name: Works Location: BN18 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A6NE (W)	0	8	497121 106150
204	Points of Interest - Manufacturing and Production Name: W Forse Location: Barn Ends, Dairy Lane, Walberton, Arundel, BN18 0PT Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A6NW (W)	106	8	496908 106118
205	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	A6NE (SW)	154	8	497115 105987
205	Points of Interest - Manufacturing and Production Name: Works Location: BN18 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A6NE (SW)	160	8	497112 105982
206	Points of Interest - Manufacturing and Production Name: Hooe Farm Industrial Estate Location: BN18 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A10NW (NW)	313	8	496776 106559
207	Points of Interest - Manufacturing and Production Name: M J Langmead Location: Hooe Farm House, Tye Lane, Walberton, Arundel, BN18 0LU Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A10NE (NW)	377	8	497015 106745
207	Points of Interest - Manufacturing and Production Name: M J Langmead Location: Hooe Farm House, Tye Lane, Walberton, Arundel, BN18 0LU Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A10NE (NW)	378	8	497016 106746
208	Points of Interest - Manufacturing and Production Name: L B Wishart Location: Church Farmhouse, Binsted, Arundel, BN18 0LN Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A12SW (E)	465	8	498131 106406
208	Points of Interest - Manufacturing and Production Name: Binsted Farms Ltd Location: Church Farm, Binsted Lane, Binsted, Arundel, BN18 0LN Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A12SW (E)	501	8	498173 106387
208	Points of Interest - Manufacturing and Production Name: L B Wishart Location: Church Farm, Binsted, Arundel, West Sussex, BN18 0LP Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A12SW (E)	509	8	498182 106384



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
209	Points of Interest - Manufacturing and Production Name: Tanks Location: BN18 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A3NW (S)	834	8	497605 105188
210	Points of Interest - Manufacturing and Production Name: Tank Location: BN18 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NE (E)	845	8	498466 105922
210	Points of Interest - Manufacturing and Production Name: Tank Location: BN18 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NE (E)	849	8	498468 105915
210	Points of Interest - Manufacturing and Production Name: Tanks Location: BN18 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NE (E)	854	8	498478 105927
211	Points of Interest - Manufacturing and Production Name: Walburton Nursery Location: Yapton Lane, Walburton, Arundel, BN18 0AS Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A3SE (S)	882	8	497721 105168
212	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	A9NW (NW)	889	8	496257 106818
212	Points of Interest - Manufacturing and Production Name: Works Location: BN18 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (NW)	891	8	496256 106820
213	Points of Interest - Public Infrastructure Name: Sluice Location: BN18 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A1NE (SW)	829	8	496563 105459
214	Points of Interest - Recreational and Environmental Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A6NE (S)	137	8	497317 105972
214	Points of Interest - Recreational and Environmental Name: Play Area Location: The Street, BN18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A6NE (S)	137	8	497315 105972



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
215	Ancient Woodland Name: Not Supplied Reference: 1475964 Area(m²): 11414.9 Type: Ancient and Semi-Natural Woodland	A10NE (N)	231	9	497233 106563
216	Ancient Woodland Name: Not Supplied Reference: 1475920 Area(m²): 33033.75 Type: Ancient and Semi-Natural Woodland	A11NE (NE)	277	9	497684 106614
217	Ancient Woodland Name: Hundredhouse Copse Reference: 1475943 Area(m²): 73003.64 Type: Ancient and Semi-Natural Woodland	A11NE (NE)	287	9	497792 106545
218	Ancient Woodland Name: Potwell Copse Reference: 1475919 Area(m²): 27426.38 Type: Ancient and Semi-Natural Woodland	A9NE (NW)	469	9	496605 106580
219	Ancient Woodland Name: Potwell Copse Reference: 1475953 Area(m²): 8141.6 Type: Ancient and Semi-Natural Woodland	A9NE (NW)	534	9	496613 106709
220	Ancient Woodland Name: Danes Wood. Great Deans. West Stubbs Copse Reference: 1475968 Area(m²): 6187.9 Type: Ancient and Semi-Natural Woodland	A11NW (N)	537	9	497499 106818
221	Ancient Woodland Name: High Wood Reference: 1475921 Area(m²): 50220.72 Type: Ancient and Semi-Natural Woodland	A11NE (NE)	589	9	497941 106808
222	Ancient Woodland Name: Great Deans Reference: 1475945 Area(m²): 224758.41 Type: Ancient and Semi-Natural Woodland	A15SW (N)	606	9	497475 106883
223	Ancient Woodland Name: Not Supplied Reference: 1475950 Area(m²): 15403.76 Type: Ancient and Semi-Natural Woodland	A1NE (SW)	749	9	496643 105505
224	Ancient Woodland Name: Not Supplied Reference: 1475949 Area(m²): 566.21 Type: Ancient and Semi-Natural Woodland	A1NE (SW)	786	9	496589 105493
225	Ancient Woodland Name: Goblestubbs Copse Reference: 1475954 Area(m²): 93544.9 Type: Plantation on Ancient Woodland	A15SE (NE)	786	9	497716 107066
226	Ancient Woodland Name: Pedlers Croft Reference: 1475972 Area(m²): 25687.31 Type: Ancient and Semi-Natural Woodland	A12NE (E)	800	9	498394 106646
227	Ancient Woodland Name: Not Supplied Reference: 1475973 Area(m²): 11501.12 Type: Ancient and Semi-Natural Woodland	A12NE (E)	817	9	498454 106551
228	Ancient Woodland Name: Not Supplied Reference: 1475915 Area(m²): 21004.52 Type: Ancient and Semi-Natural Woodland	A13SE (NW)	892	9	496577 107140



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
229	Ancient Woodland Name: West Stubbs Copse Reference: 1475966 Area(m²): 32760.3 Type: Plantation on Ancient Woodland	A15NE (N)	933	9	497703 107215
230	Ancient Woodland Name: Threecorner Copse Reference: 1475916 Area(m²): 8627.7 Type: Ancient and Semi-Natural Woodland	A16SW (NE)	978	9	498278 107054
231	Environmentally Sensitive Areas Name: South Downs Multiple Areas: N Total Area (m2): 690432994.81 Source: Natural England	A15SW (N)	605	9	497443 106884
232	National Parks Name: South Downs Multiple Area: N Area (m2): 1652679314.3 Source: Natural England Status: Fully Designated - designated as a National Park Designation Date: 2nd November 2009	A11SE (NE)	139	9	497705 106421
233	Nitrate Vulnerable Zones Name: Aldingbourne Rife Nvz Description: Surface Water Source: Environment Agency, Head Office	A10SE (W)	0	10	497334 106213
234	Nitrate Vulnerable Zones Name: Sussex Chalk Description: Groundwater Source: Environment Agency, Head Office	A11NW (N)	82	10	497375 106529



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Arun District Council - Environmental Health Department Chichester District Council - Environmental Health Department	July 2013 July 2013	Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Southern Region	July 2017	Quarterly
Enforcement and Prohibition Notices Environment Agency - Southern Region	March 2013	As notified
Integrated Pollution Controls Environment Agency - Southern Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control Environment Agency - South East Region - Solent & South Downs Area Environment Agency - Southern Region	July 2017 July 2017	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Arun District Council - Environmental Health Department Chichester District Council - Environmental Health Department	December 2014 October 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Controls Arun District Council - Environmental Health Department Chichester District Council - Environmental Health Department	December 2014 October 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Arun District Council - Environmental Health Department Chichester District Council - Environmental Health Department	December 2014 October 2014	Annual Rolling Update Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	May 2017	
Pollution Incidents to Controlled Waters Environment Agency - Southern Region	December 1999	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Southern Region	March 2013	As notified
Prosecutions Relating to Controlled Waters Environment Agency - Southern Region	March 2013	As notified
Registered Radioactive Substances Environment Agency - Southern Region	January 2015	
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register Environment Agency - South East Region - Solent & South Downs Area Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	July 2017 July 2017 July 2017	Quarterly Quarterly Quarterly
Water Abstractions Environment Agency - Southern Region	July 2017	Quarterly
Water Industry Act Referrals Environment Agency - Southern Region	July 2017	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	August 2015	As notified



Agency & Hydrological	Version	Update Cycle
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	August 2015	As notified
Source Protection Zones Environment Agency - Head Office	July 2017	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2017	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2017	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	August 2017	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2017	Quarterly
Flood Defences Environment Agency - Head Office	August 2017	Quarterly
OS Water Network Lines Ordnance Survey	July 2017	6 Weekly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water Suitability Environment Agency - Head Office	October 2013	As notified
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually



Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - Head Office	July 2017	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Southern Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - South East Region - Solent & South Downs Area Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	July 2017 July 2017 July 2017	Quarterly Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - South East Region - Solent & South Downs Area Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	July 2017 July 2017 July 2017	Quarterly Quarterly Quarterly
Local Authority Landfill Coverage Arun District Council - Technical Support Unit Chichester District Council - Environmental Health Department West Sussex County Council - Environment & Development	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Arun District Council - Technical Support Unit Chichester District Council - Environmental Health Department West Sussex County Council - Environment & Development	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Transfer Sites Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Southern Region - Solent and South Downs Environment Agency - Southern Region - Sussex Area	March 2003 March 2003	Not Applicable Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	September 2017	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Arun District Council - Technical Support Unit Chichester District Council - Planning Department West Sussex County Council - Environment & Development	February 2016 February 2016 October 2006	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Planning Hazardous Substance Consents Arun District Council - Technical Support Unit Chichester District Council - Planning Department West Sussex County Council - Environment & Development	February 2016 February 2016 October 2006	Annual Rolling Update Annual Rolling Update Annual Rolling Update

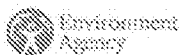
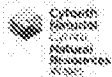


Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2017	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	September 2017	Quarterly
Fuel Station Entries Catalist Ltd - Experian	August 2017	Quarterly
Gas Pipelines National Grid	July 2014	Quarterly
Points of Interest - Commercial Services PointX	September 2017	Quarterly
Points of Interest - Education and Health PointX	September 2017	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2017	Quarterly
Points of Interest - Public Infrastructure PointX	September 2017	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2017	Quarterly
Underground Electrical Cables National Grid	December 2015	Bi-Annually



Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	May 2017	Bi-Annually
Areas of Outstanding Natural Beauty Natural England	August 2017	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	August 2017	Bi-Annually
Marine Nature Reserves Natural England	August 2017	Bi-Annually
National Nature Reserves Natural England	August 2017	Bi-Annually
National Parks Natural England	August 2017	Bi-Annually
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	June 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	August 2017	Bi-Annually
Sites of Special Scientific Interest Natural England	August 2017	Bi-Annually
Special Areas of Conservation Natural England	August 2017	Bi-Annually
Special Protection Areas Natural England	August 2017	Bi-Annually

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	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	



Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	
3	Arun District Council - Environmental Health Department Civic Centre, Maltravers Road, Littlehampton, Sussex, BN17 5LF	
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	
5	Arun District Council - Technical Support Unit Civic Centre, Maltravers Road, Littlehampton, Sussex, BN17 5LF	
6	West Sussex County Council - Environment & Development County Hall, Tower hall, Chichester, West Sussex, PO19 1RH	
7	Peter Brett Associates Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	
8	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	
9	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	
10	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	

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

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Holocene - Holocene
	SLIP	Landslide Deposit	Sandstone and Mudstone	Quaternary - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	RBD1	Raised Beach Deposits, 1	Sand and Gravel	Quaternary - Quaternary
	RTDU	River Terrace Deposits (Undifferentiated)	Sand, Silt and Clay	Quaternary - Quaternary
	HEAD	Head	Gravel, Sand, Silt and Clay	Quaternary - Quaternary
	HEAD	Head	Clay, Silt, Sand and Gravel	Quaternary - Quaternary
	RSB2	Raised Storm Beach Deposits, 2	Gravel	Quaternary - Quaternary
	RBD2	Raised Beach Deposits, 2	Sand and Gravel	Quaternary - Quaternary
	RMD	Raised Marine Deposits	Clay, Silt, Sand and Gravel	Quaternary - Quaternary
	RSB1	Raised Storm Beach Deposits, 1	Sand and Gravel	Quaternary - Quaternary
	CWF	Clay-with-flints Formation	Clay, Silt, Sand and Gravel	Quaternary - Pliocene

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Eocene - Eocene
	LMBE	Lambeth Group	Clay, Silt and Sand	Paleocene - Paleocene
	SPCH	Spetsbury Chalk Member	Chalk	Campanian - Campanian
	TACH	Tarrant Chalk Member	Chalk	Campanian - Campanian
	NCK	Newhaven Chalk Formation	Chalk	Campanian - Santonian
	LPCK	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven	Chalk	Campanian - Turonian

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
		Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (Undifferentiated)		
		Faults		



Geo-Environmental

Geology 1:50,000 Maps

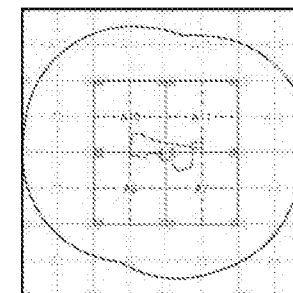
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published 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: 317
 Map Name: Chichester and I
 Map Date: 1996
 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:

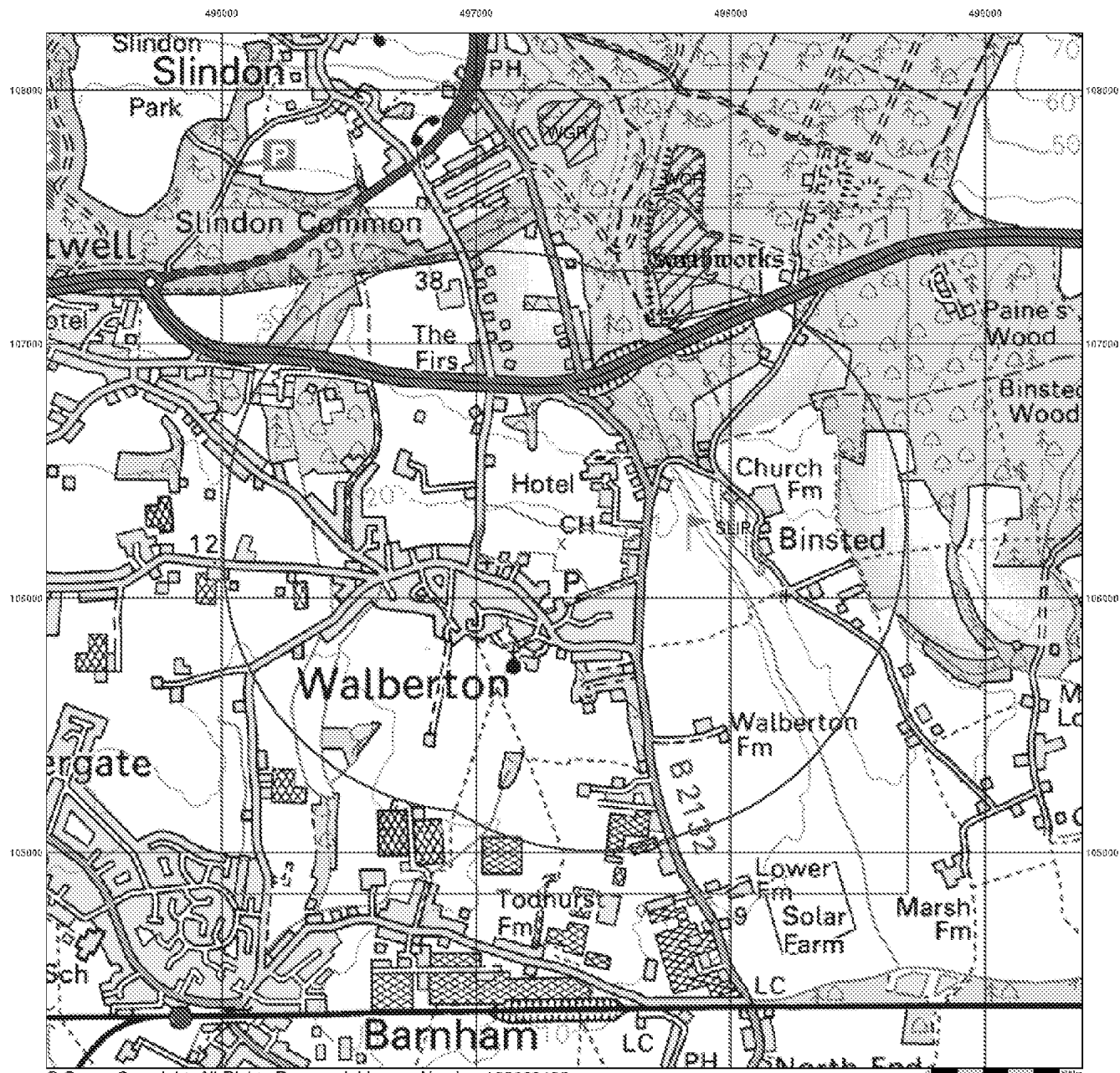
Order Number: 143822756_1_1
 Customer Reference: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details:

Wessex House, Tye Lane, Walberton, ARUNDEL, BN18 0PS

Landmark
 INFORMATION GROUP

Tel: 0844 544 0050
 Fax: 0844 544 5551
 Web: www.environmental.co.uk



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Geo-Environmental

Artificial Ground and Landslip

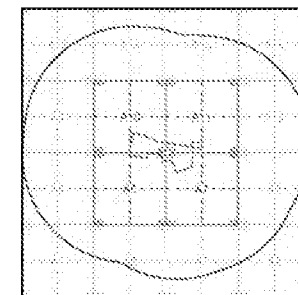
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions 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: 143822756_1_1
 Customer Reference: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details:

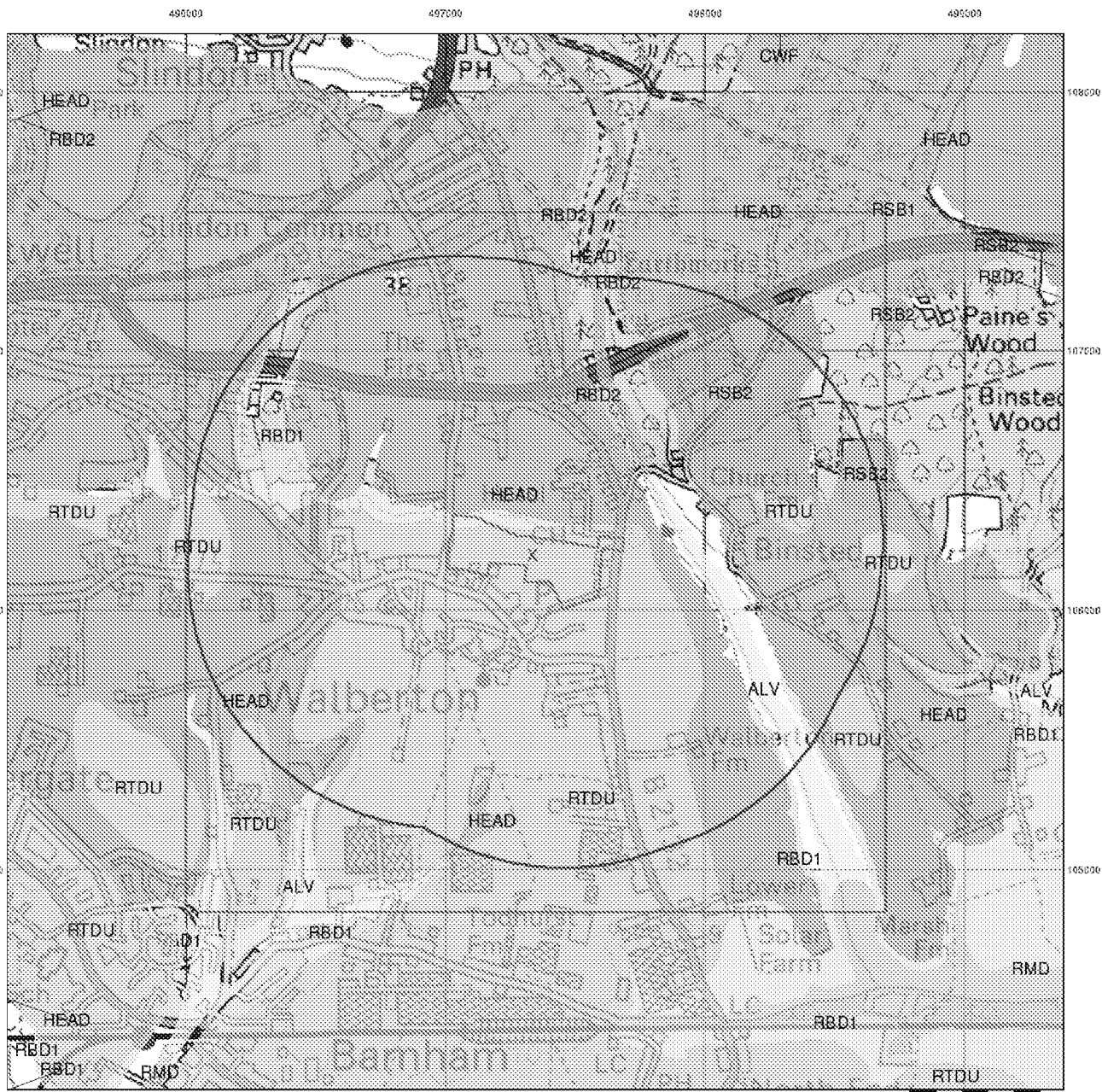
Wessex House, Tye Lane, Walberton, ARUNDEL, BN18 0PS

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 INFORMATION GROUP

Tel: 01444 544 0050
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Page 2 of 5



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Geo-Environmental

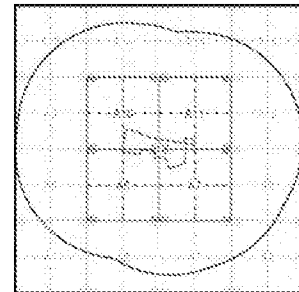
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



Order Details:

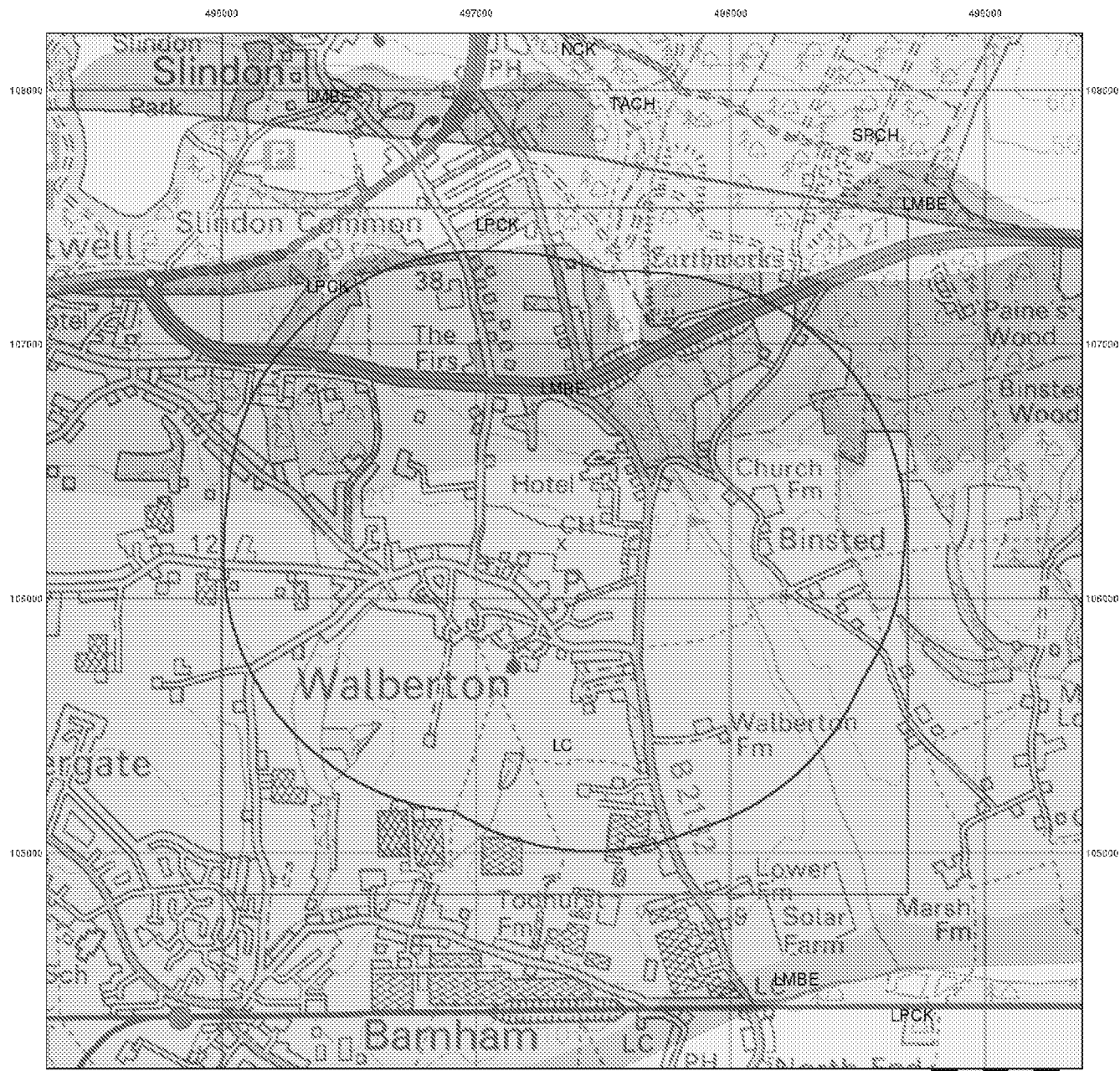
Order Number: 143822756_1_1
 Customer Reference: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details:

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 Fax: 01444 544 5551
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Geo-Environmental

Bedrock and Faults

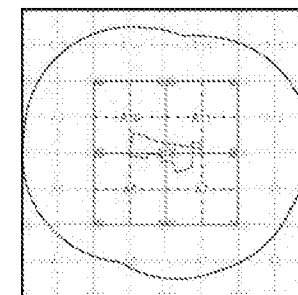
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 143822756_1_1
 Customer Reference: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details:

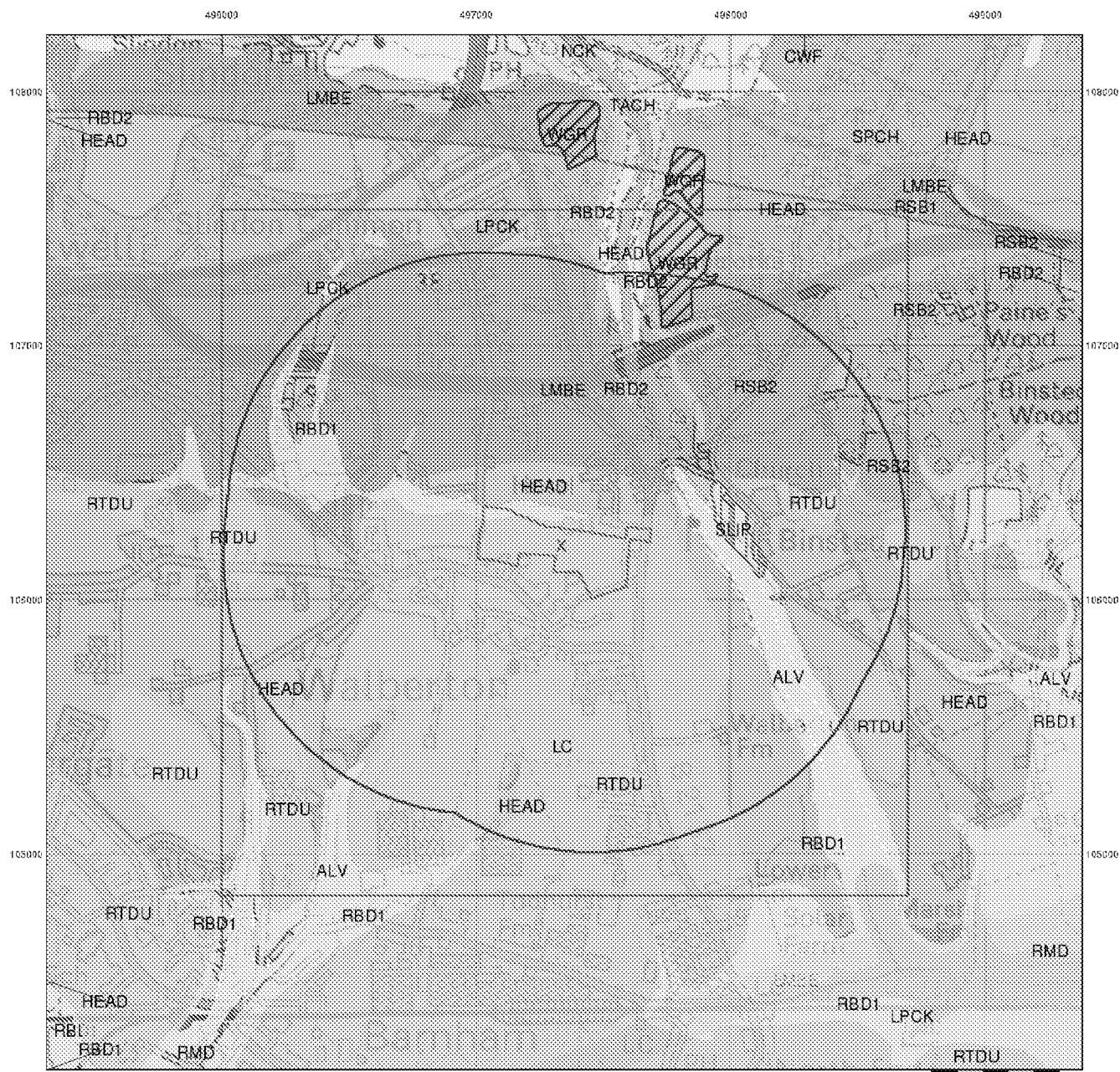
Wessex House, Tye Lane, Walberton, ARUNDEL, BN18 0PS

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Page 4 of 5



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Geo-Environmental

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.

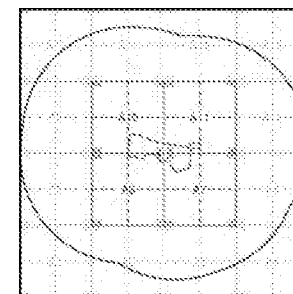
Additional Information

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: 143822756_1_1
Customer Reference: GE16861
National Grid Reference: 497330, 106210
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Site Area (Ha): 11.27
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Site Details:

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Landmark
INFORMATION GROUP

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Fax: 01444 544 5551
Web: www.environmental.co.uk

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Page 5 of 5

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

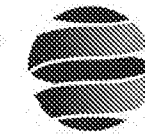
	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

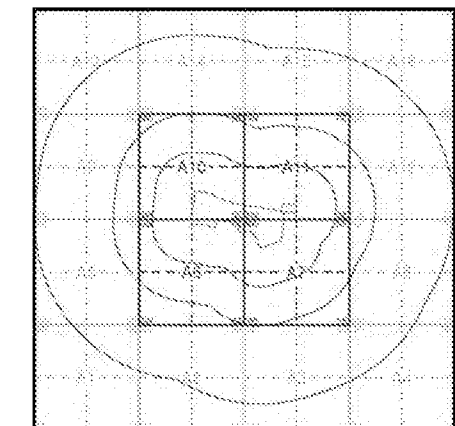
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



Geo-Environmental Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:10,560	1880	2
Sussex	1:10,560	1899	3
Sussex	1:10,560	1914	4
Sussex	1:10,560	1914	5
Sussex	1:10,560	1914	6
Sussex	1:10,560	1914	7
Historical Aerial Photography	1:10,560	1947	8
Sussex	1:10,560	1951	9
Ordnance Survey Plan	1:10,000	1961 - 1962	10
Ordnance Survey Plan	1:10,000	1967	11
Ordnance Survey Plan	1:10,000	1979	12
Ordnance Survey Plan	1:10,000	1980	13
Ordnance Survey Plan	1:10,000	1992	14
10K Raster Mapping	1:10,000	2000	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2017	17

Historical Map - Slice A



Order Details

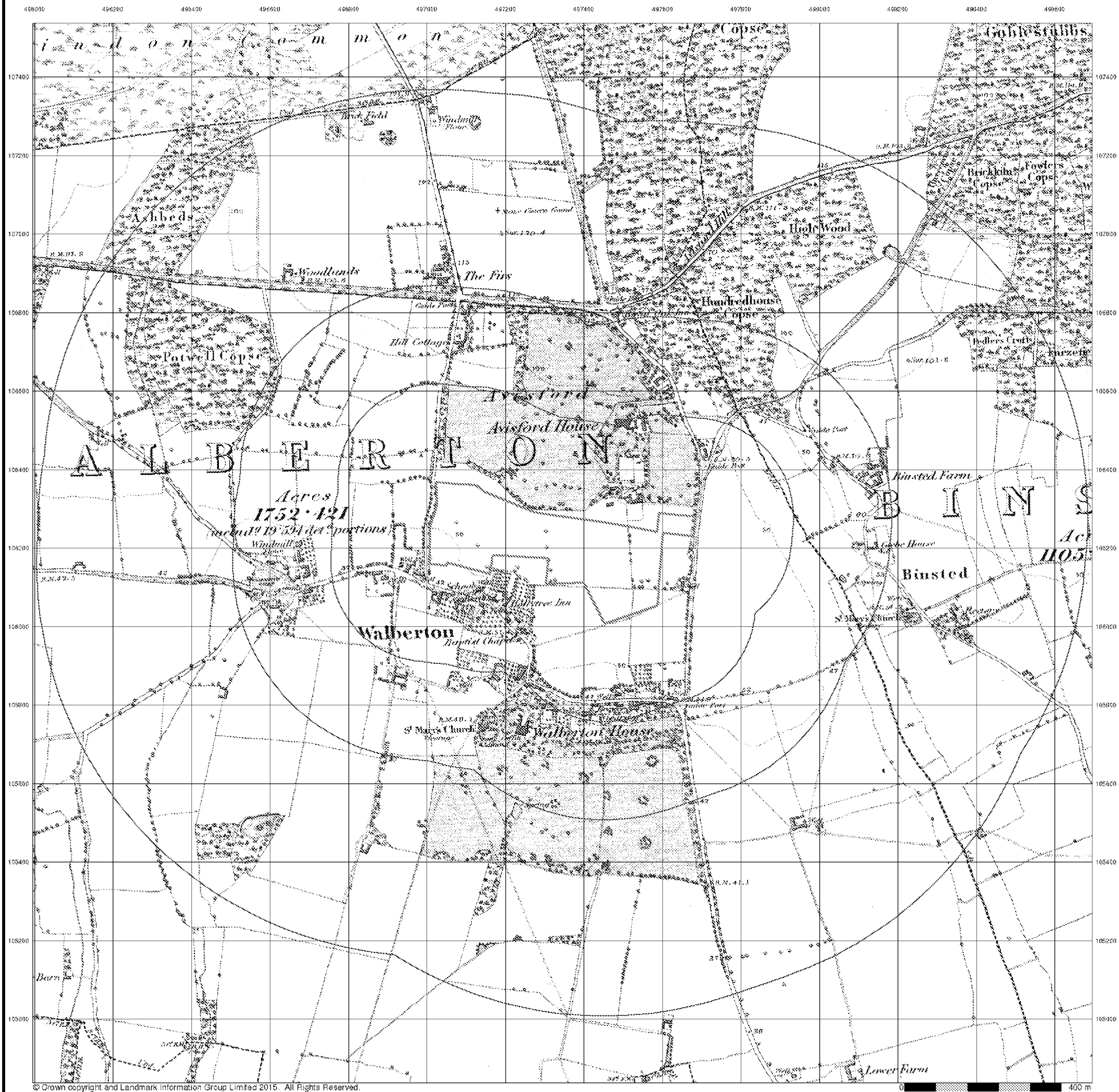
Order Number: 143822756_1_1
 Customer Ref: GE16861
 National Grid Reference: 497330, 106210
 Slice: A
 Site Area (Ha): 11.27
 Search Buffer (m): 1000

Site Details

Wessex House, Tye Lane, Walberton, ARUNDEL, BN18 0PS

Landmark
 INFORMATION GROUP

Tel: 0844 844 9852
 Fax: 0844 844 9951
 Web: www.envisirocheck.co.uk



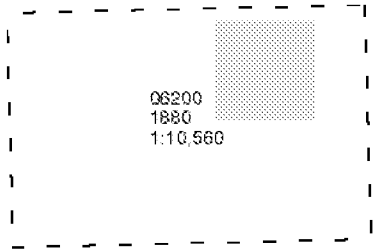
Geo-Environmental Sussex

Published 1880

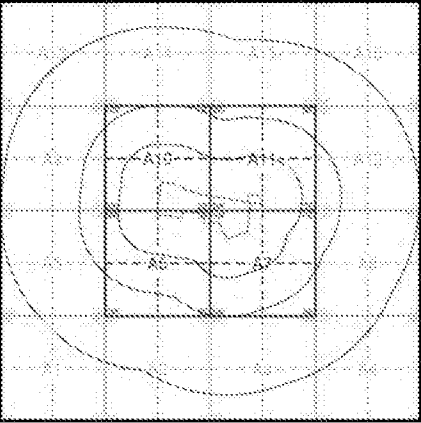
Source map scale - 1:10,560

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

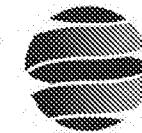
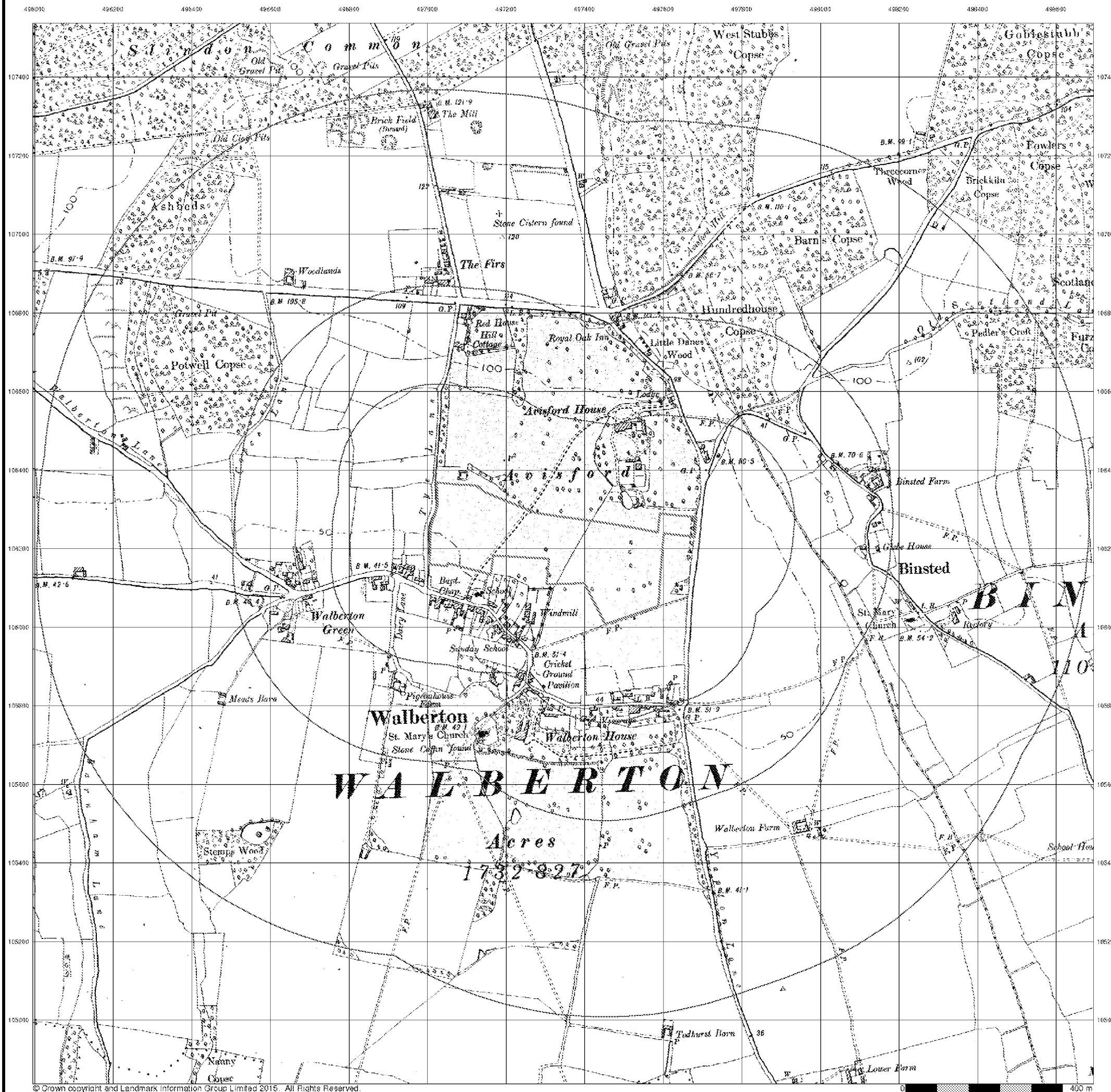
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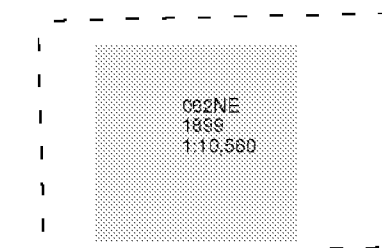
Geo-Environmental Sussex

Published 1899

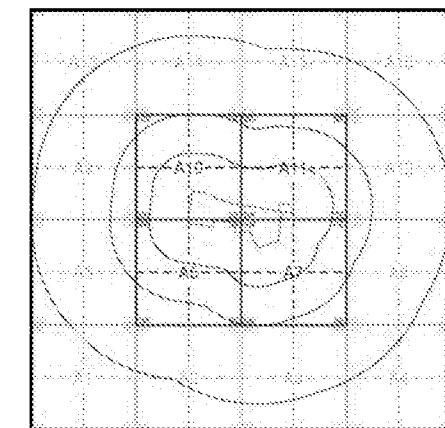
Source map scale - 1:10,560

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092NE
1914
1:10.560

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Customer Ref: GE16861
National Grid Reference: 497330, 106210
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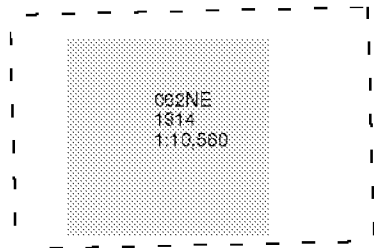
**Geo-Environmental
Sussex**

Published 1914

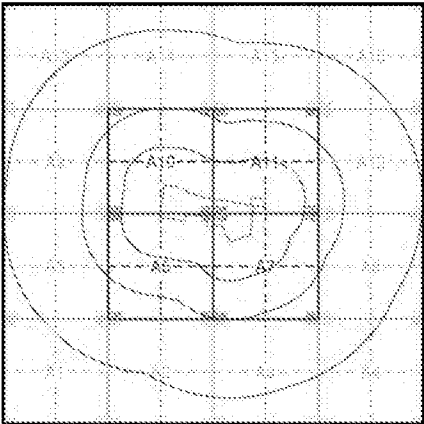
Source map scale - 1:10,560

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.

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