

## **MR AND MRS BROOM**

MAWLES FARM POUND LANE OX15 5RW

**PRELIMINARY INVESTIGATION REPORT** 

Contract: 22145

Date: September 2019

Ian Farmer Associates (1998) Limited 1 Fairfield Court, Seven Stars Industrial Estate, Wheler Road, Coventry, CV3 4LJ Telephone: 024 7630 3422 Email: coventry@ianfarmer.co.uk



# PRELIMINARY INVESTIGATION REPORT

carried out at

## MAWLES FARM

#### POUND LANE OX15 5RW

Prepared for

MR AND MRS BROOM Foxbury Upton Banbury OX15 6HT

Contract: 22145

Date: September 2019

Issue	Date	<b>Description / Revision Details</b>	Prepared	Approved	Distribution
01	27/09/19	First Issue	JW	HP	PDF to I O'B

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## **EXECUTIVE SUMMARY**

On the instructions of Ian O'Brien Studio, architects to Mr and Mrs Broom, a Preliminary Investigation in the form of a desk study and site reconnaissance has been carried out in order to assess the potential hazards on and adjacent to the site and prepare a risk assessment for further consideration. It is understood that the proposed development comprises the conversion of the existing barns into two, two-storey residential properties with associated hard standing car parking with access routes, and soft landscaping areas as shown on drawings PA-0002 rev00 and PA-0003 rev01; Lower Ground Floor Plan Proposed and Upper Ground Floor Plan Proposed.

A review of the geological maps has identified the site is not underlain by superficial deposits; the bedrock is indicated to be the Northampton Sand Formation. Although Made Ground is not indicated, it may exist given the site is already developed.

The research has identified a small number of possible geotechnical hazards associated with the possible Made Ground that may be present. The research has however identified a number of potential contamination risks associated with the previous site use and possible Made Ground.

It is recommended that some further work be carried out, particularly to confirm the presence, nature or extent of any contamination that may be present.



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## **1.0 INTRODUCTION**

#### 1.1 General

- 1.1.1 On the instructions of Ian O'Brien Studio, architects to Mr and Mrs Broom, a Preliminary Investigation in the form of a desk study and site reconnaissance has been carried out in order to assess the potential hazards on and adjacent to the site and prepare a risk assessment for further consideration.
- 1.1.2 It is understood that the proposed development comprises the conversion of the existing barns into two, two-storey residential properties with associated hard standing car parking with access routes, and soft landscaping areas as shown on drawings PA-0002 rev00 and PA-0003 rev01; Lower Ground Floor Plan Proposed and Upper Ground Floor Plan Proposed.
- 1.1.3 This report has been prepared for the sole use of the Client for the purpose described and no extended duty of care to any third party is implied or offered. Third parties using any information contained within this report do so at their own risk.
- 1.1.4 It is recommended that a copy of this report be submitted to the relevant authorities to enable them to carry out their own site assessment and provide any comments.
- 1.1.5 The comments given in this report and the opinions expressed herein are based on the information obtained from the desk study and site reconnaissance. No intrusive investigation has been carried out to confirm the actual ground or environmental conditions.
- 1.1.6 Any risks identified in this report are perceived risks based on information reviewed. Actual risks can only be assessed following a physical investigation of the site.
- 1.1.7 This report has been based, in part, on information supplied by others. The report has been prepared on the basis of that information being accurate.
- 1.1.8 The conclusions presented in this report are based on the guidance available at the time of preparation of the report. No liability can be accepted for the retrospective effects of any changes or amendments to legislation or guidance.
- 1.1.9 This Preliminary Investigation has been conducted in general accordance with CLR 3, ref. 8.1, CLR 11, ref 8.2, BS 10175, ref 8.3, and GPLC 1, ref 8.4.



#### 2.0 SITE

#### 2.1 Site Location

- 2.1.1 The site is situated to the northeast of the cross-roads of Main Street and Pound Lane, Sibford Gower, approximately 11 km to the west of the town centre of Banbury and may be located by Grid Reference SP352378.
- 2.1.2 A site location plan and aerial photograph are included in Appendix 1, Figures A1.1 and A1.2.

#### 2.2 Site Walkover and Description

- 2.2.1 A walkover survey of the site was conducted on 3 September 2019. The walkover was carried out in general accordance with CLR 2, ref. 8.5.
- 2.2.2 The site is irregular in shape and approximately 0.2 hectares in size.
- 2.2.3 At the time of the walkover survey, the site was no longer in use and comprised a yard surrounded by former agricultural buildings.
- 2.2.4 An L-shaped, single-storey, stone agricultural building was located along the southern boundary of the site and was previously used as a dairy with stalls and a grain store with grain silo present. There was also, on the corner of Main Street and Pound Lane, a street level access pit which is approximately 3 m lower than the ground floor of the remainder of the building. The northern section of this building was open. The south eastern section of the L-shaped building was formed of a single-storey brick building with a possible asbestos roof.
- 2.2.5 A piggery, which was a small, single-storey, brick building was present within the centre of the site with a more modern storage barn located behind. The modern storage barn was an open steel-frame construction with metal sheet roof. The northern and eastern sides of this barn were formed of concrete walls with higher level ground behind.
- 2.2.6 The northern area of the site comprised a disused swimming pool which was full of water during the time of the walkover, with a shed to house the associated machinery. Within the area of the swimming pool there was a known badger sett.
- 2.2.7 The ground surface of the site varied and comprised concrete hardstanding, with rough ground/hardstanding forming the main yard area. The northern area of the site was surfaced with rough vegetation with paving around the swimming pool.
- 2.2.8 The site lay on three different ground levels. The highest area where the swimming pool was located was in the north and north-east at an approximate elevation of 195 mAOD.
- 2.2.9 The main yard and buildings covering the majority of the site lay at approximately 192 mAOD; in addition was the street-level access pit.



- 2.2.10 The general elevation of the site is approximately 192 mAOD.
- 2.2.11 Two tanks were noted during the site walkover; one was located in the south eastern corner of the site and was used for holding kerosene. A second smaller tank was located within the small building attached to the L-shaped building which was believed to store water.
- 2.2.12 The buildings present on site generally appeared to be sound with no obvious signs of significant deterioration or structural problems. One exception was the open end of the L-shaped agricultural building, which showed a number of large cracks within the stone-work and had some vegetation growing out of the wall along Pound Lane. The roof of the small brick building attached to the dairy end of the L shaped building was sagging and the wooden lintel above the window was broken. The piggery roof also showed signs of sagging in the middle and the brick addition to the building showed some bulging to the brickwork.
- 2.2.13 Photographs from the walkover survey are included within Appendix 2, Figures A2.1 to A2.5. A site plan is included in Appendix 1, Figure A1.1.



## 2.3 Historical Maps

2.3.1 A review of the history of the site has been conducted based on readily available historical maps. Details of the findings are provided in the table below. All maps are provided in Appendix 4.

Map, Date and Scale	Site Description	Regional Setting
Oxfordshire 1882-1887 1:2,500 1884-1887 1:10,560	The site is shown to contain an L-shaped structure along the southern and western boundary which occupies the same footprint as a present- day barn. The building identified as the piggery during the walkover is present in the centre of the site. Two structures are also present near to the entrance of the site. The remainder of the site to the northeast appears to be fields.	The immediate surrounding area is formed of agricultural fields to the north, residential properties and agricultural fields to the east, Main Street to the south with residential and commercial properties beyond, and Pound Lane to the west with residential properties beyond. A smithy is noted approximately 50 m to the south of the site. A small stream located 400 m south of the site runs towards the southwest and has a small tributary which is located 130 m to the southeast. The surrounding area beyond Sibford Gower is formed of agricultural fields with Burdrop 500 m to the east and Sibford Ferris 600 m to the southeast. A number of springs are labelled beyond 250 m of the site.
Oxfordshire 1990 1:10,560 1905 1:2,500	No significant change noted.	The Smithy is no longer labelled. A quarry is labelled approximately 550 m to the northeast of the site.
Oxfordshire 1922 1:2,500 Oxfordshire and Gloucestershire 1923 1:10,560	No significant change noted.	No significant change noted.
Historical Aerial Photography 1948 1:10,560	The aerial photo concurs with the historic maps.	The aerial photo concurs with the historic maps.
Ordnance Survey Plan 1955 1:10,000	No significant change noted.	There is a small number of residential properties present 100 m to the north of the site.
Ordnance Survey Plan 1974 1:2,500	No significant change noted.	A sewage works is present 500 m to the south of the site.



Map, Date and Scale	Site Description	Regional Setting	
1977			
1:10,000			
Large-Scale National Grid Data 1993			
1:2,500	No significant change noted.	No significant change noted.	
10k Raster Mapping 1999			
1:10,000			
Historical Aerial Photography 1999	The aerial photo shows that there is a swimming pool present in the north eastern area of the site.	The aerial photo concurs with the historic maps.	
10k Raster Mapping 2006 1:10,000	No significant change noted.	No significant change noted.	
VectorMap Local 2019 1:10,000	No significant change noted.	No significant change noted.	
	No observable change from 2019.	The historical map appears to be substantially accurate in comparison to the current setting.	

#### 2.4 Anecdotal Evidence

2.4.1 During the site walkover, it was noted that the storage barn located in the centre of the site is a newer addition to the site, where the original barn was demolished and replaced with a new storage barn.

#### 2.5 Summary

2.5.1 There has been little change seen on the site from the start of its mapped history with the exception of the swimming pool noted on the 1999 historical aerial photograph and the replacement of the original central barn with the newer barn. The surrounding area since the beginning of its mapped history has also had minimal change with some residential development noted to the north of the site; the remainder remained largely unchanged.

#### 3.0 SITE SETTING

#### **3.1** Geological Setting

- 3.1.1 Details of the geology underlying the site have been obtained from the relevant geological map of the area, ref. 8.6.
- 3.1.2 The geological map does not indicate the site to be underlain by superficial deposits; however, Head Deposits are noted within 1000 m of the site of clay, described as 'silt, sand and gravel'.
- 3.1.3 The bedrock underlying the site is indicated to be the Northampton Sand Formation, described as 'ooidal and sideritic ironstone and limonitic sandstone with lenses of mudstone and limestone'.
- 3.1.4 Although not indicated as present on the site from the geological maps, there is the possibility that Made Ground may exist on the site given that the site is developed and has been used as a working farm.

#### **3.2 Hydrogeological Setting**

- 3.2.1 The hydrogeological records, provided by the Environment Agency, indicate that the site is situated on a Secondary Aquifer, relating to the variably permeable sandstone and ironstone.
- 3.2.2 The Environment Agency defines Secondary A aquifers as 'permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers'.
- 3.2.3 The site is classified as being within an urban setting as designated by the Environment Agency, which therefore means that the soils are classified as having a high leaching potential.
- 3.2.4 Soils of high leaching potential are soils that readily transmit liquid discharges because they are either shallow or susceptible to rapid by-pass flow directly to rock, gravel or groundwater.
- 3.2.5 The site is not located within a groundwater source protection zone.
- 3.2.6 There are no groundwater abstraction wells within 1000 m of the site.

#### 3.3 Hydrological Setting

- 3.3.1 The nearest surface watercourse is a spring feeding an inland river, located approximately 141 m to the south east of the site at its closest point.
- 3.3.2 There are no ponds or lakes located within 500 m of the site.
- 3.3.3 The surface spring appears to lie approximately 10 m below the level of the site.



- 3.3.4 The site is not situated within an area defined by the Environment Agency as being at risk of flooding from rivers or the sea at the extent of extreme flood. The risk to the site is considered by the Environment Agency to be low. The site is not shown to be situated within an area which benefits from flood defences.
- 3.3.5 There is no available river quality classification data for the nearest watercourse.
- 3.3.6 There is one surface water abstraction within 1000 m of the site, located 909 m west of the site. The water is abstracted from a tributary of the River Stour.

#### 3.4 Radon

- 3.4.1 The British Geological Survey, in conjunction with the Radiation Protection Division of the Health Protection Agency, ref. 8.9, indicates the site to lie within an area where there is a probability of 3% to 10% of present or future homes being above the action level of 200Bq/m<sup>3</sup>. As such, the site is classified as a Radon Affected Area.
- 3.4.2 Therefore, the guidance recommends that basic radon protective measures should be installed in the proposed development in line with the Building Research Establishment, Report BR211, ref 8.10.

#### 3.5 Soil Geochemistry

3.5.1 The British Geological Survey data indicates the following concentrations of naturally occurring metals to be representative of background levels in natural soil underlying the site. The levels are based on those present in rural soils and are not necessarily representative of levels within Made Ground which may be encountered on site:

Element	Concentration (mg/kg)
Arsenic	35-45
Cadmium	<1.8
Chromium	60-90
Lead	<100
Nickel	15-30





## 4.0 ASSESSMENT OF GEOTECHNICAL RISK

## 4.1 Geological Constraints

4.1.1 The following are brief findings relating to factors identified during the research from the Envirocheck data that may have a potential impact upon the engineering of the proposed development.

Potential Hazard	Assessed Risk	Comment
BGS Recorded Mineral Sites	Low	Closest recorded at 527 m northeast of the site was an opencast limestone mine which has now ceased.
Coal Mining / Mining Instability	None	Area not known for coal beds.
Other shallow mine workings	No hazard	No other economic minerals are known to have been worked locally.
Quarrying	Very low	Nearest quarry noted on the historic maps was 550 m to the northeast of the site.
Collapsible Ground	Very low	No known superficial deposits on the site.
Compressible Ground	Very low	No known superficial deposits on the site.
Ground Dissolution	Very low to none	Ironstone and sandstone not considered to be susceptible to dissolution.
Landslide	Low to moderate	The site has varying levels with a step up from the main area of the site to the northern area of the site.
Running Sand	Low to moderate	Possible risk if the bedrock sandstone has been weathered to a significant thickness of sand and if there is a high water table.
Shrinking or Swelling Clay	Very low	High plasticity clay not anticipated to underlay the site.
Unconsolidated Made Ground	Low to moderate	There is no evidence for any extensive upfilling; however, there has been development present on the site for a significant period of time.
Bearing Pressure	Low	High strength bedrock anticipated at shallow depths.
Aggressive conditions for construction materials	Low	If significant thickness of Made Ground then there may be aggressive conditions for construction materials.
Shallow or high groundwater table	Low	Site is not expected to have a significantly shallow groundwater table given there is a service pit located within one of the barns which is not flooded.
Buried obstructions	Low to moderate	Buried foundations may be present from historic structures.



#### 4.2 Geotechnical Risk Assessment

- 4.2.1 An assessment of the main hazards associated with the site is detailed below. Unless stated otherwise, the presence of such hazards are based on information from the research or reconnaissance and have not been confirmed by an intrusive investigation.
  - Soil Conditions

The presence of a significant thickness of granular Made Ground, particularly if they are water bearing, may cause instability in excavations for foundations or services trenches.

• Topography

The change in level from the north / north-east of the site to the rest of the site is considered to represent a low to moderate risk to the proposed development.

• Previous Use

Historical mapping indicates previous development on the site including structural and infrastructure changes. Therefore, the presence of buried structures such as services, basements and old foundations is a potential risk.

#### 4.3 Conclusions of Geotechnical Risk Assessment

4.3.1 The research has identified evidence of limited potential hazards associated with underlying ground conditions, either natural or man-made, and therefore it is recommended that further work be carried out to confirm the presence, nature or extent of those hazards anticipated to impact on the site.



#### 5.0 ENVIRONMENTAL SEARCHES

# 5.1 **Potential Sources of Contamination**

5.1.1 A search was made of records held by the various regulatory authorities and other statutory bodies to determine the presence or otherwise of past and current activities on or within 500m of the site which have the potential to give rise to the presence on site of contaminants. The findings are given in the table below:

Activity	On Site	Off Site (distance / direction)	Detail
Contaminated Land Register Entries	None	None within 500m	
Discharge Consents	None	None within 500m	
Integrated and Local Authority Pollution Prevention and Controls	None	None within 500m	
Pollution Incidents to Controlled Waters	None	None within 500m	
Prosecutions Relating to Authorised Processes or Controlled Waters	None	None within 500m	
Registered Radioactive Substances	None	None within 500m	
Substantiated Pollution Incident Register	None	None within 500m	
Water Abstractions	None	None within 500m	
BGS Recorded Landfill Sites	None	None within 500m	
Historical Landfill Sites	None	None within 500m	
Licenced Waste Management Facilities	None	None within 500m	
Local Authority Recorded Landfill Sites	None	None within 500m	
Registered Landfill Sites	None	None within 500m	
Registered Waste Transfer Sites	None	None within 500m	
Registered Waste Treatment or Disposal Sites	None	None within 500m	
Hazardous Substances	None	None within 500m	
Explosive Sites	None	None within 500m	
Contemporary Trade Entries	None	One within 250m	Closest at 52 m southeast of the site is an inactive antiques repairing and restoring business.



Activity On Site		Off Site (distance / direction)	Detail
<b>Fuel Station Entries</b>	None	None within 500m	

1 = Notification of Installations Handling Hazardous Substances

2 = Control of Major Accident Hazards

#### 5.2 Green Belt Areas

- 5.2.1 There are no designated areas or as yet un-adopted areas of Green Belt land within 1 km of the site.
- 5.2.2 Green Belt Areas are generally areas that are designated as being under special consideration for development. Local Authorities may restrict the type of development, place particular planning constraints on proposed developments, or potentially restrict any development within a designated Green Belt area.

#### 5.3 Designated Sites

- 5.3.1 A review of the Natural England website, was undertaken to assess whether there were any Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) or Local Nature Reserves (LNR) which may be impacted by the development.
- 5.3.2 The enquiries indicated there are no SSSIs, NNRs or LNRs within 1 km of the site.

#### 5.4 Nitrate Vulnerable Zone

- 5.4.1 The site is not located within an area designated as a nitrate vulnerable zone.
- 5.4.2 The Nitrates Directive defines a nitrate vulnerable zone as:
  - a) Surface freshwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l.
  - b) Groundwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l.
  - c) Natural freshwater lakes or other freshwater bodies, estuaries, coastal waters and marine waters, which are eutrophic or may become so in the near future if protective action is not taken.

#### 5.5 **Contemporary Trade Entries**

- 5.5.1 There is one contemporary trade entry located within 500 m of the site.
- 5.5.2 The closest trade is an inactive antiques restoration and repair business located 52 m southeast of the site which is not anticipated to pose a significant risk. The nearest active trade is a horse box and transporting business located 750 m to the south east.



#### 6.0 ASSESSMENT OF GEOENVIRONMENTAL RISK

#### 6.1 General

- 6.1.1 The definition of 'contaminated land', along with the relevant details on legislation and guidance is set out in Appendix 3.
- 6.1.2 The assessment of potential risk has been based on the guidelines given in CIRIA report C552, ref 8.11. These guidelines are summarised in Appendix 3.
- 6.1.3 The assessment of environmental risk is aimed at identifying the possible risk, if any, arising from substances used or deposited on the site, or from any other sources of land contamination, based on the principles of the pollutant linkage.
- 6.1.4 The assessment is based on the proposed development end use, taking account of present and previous use. It is based only on a review of historical maps, desk based data and site reconnaissance; therefore it contains some elements of conjecture based on professional judgement. A comprehensive risk assessment can only be made following an intrusive investigation and testing regime.
- 6.1.5 The proposed development comprises the conversion of the existing barns into two, two-storey residential properties with associated hard standing car parking and access routes and soft landscaping areas.

#### 6.2 **Potential Sources of Contamination Identified**

- 6.2.1 The research has identified the following potential sources of contamination which may form part of a pollutant linkage:
  - Contamination associated with former agricultural use
  - Contamination associated with vehicular storage within the central modern barn and the maintenance/lower road access pit in the dairy barn
  - Contamination associated with Made Ground due to previous development on-site
  - Contamination associated with disused, full swimming pool
  - Radon

#### 6.3 **Potential Pathways Identified**

- 6.3.1 The research has identified a number of potential pathways which are relevant to the potential sources of contamination identified above and may form part of a pollutant linkage.
- 6.3.2 Those identified are detailed within the Conceptual Site Model, along with the receptors relevant to the development on a site specific basis.





#### 6.4 Hazard Identification

6.4.1 The research has identified a number of potential sources and pathways which are considered 'likely' to be present which, taking into account the potential receptors identified, form potential pollutant linkages and have been used in the formulation of the Conceptual Site Model.

#### 6.5 Hazard Assessment

- 6.5.1 An assessment of the main sources of contamination and the potential for unacceptable risk to receptors is detailed below. Unless stated otherwise, it is considered 'likely' that a potential source is present at this stage, in order to provide a preliminary estimation of the risk and therefore determine the need for further work.
  - Human Health

There is evidence for the potential for radon to be present at levels for which basic protection measures have been recommended. The risk to end-users is considered to be moderate.

There is the potential for contamination to be present associated with the former use as a farm and vehicle storage area within the newer barn area. There is considered to be a valid pathway and as such, the risk is considered to be low to moderate.

• Construction Material

There is considered to be a moderate to low risk due to chemical attack on construction materials emplaced within the Made Ground.

If any contamination is present associated with the storage of vehicles on the site, then there is considered to be a moderate risk to water supply pipes.

• Controlled Waters

The site is located on a secondary aquifer and as such, any consequence of contamination to the water environment is considered to be moderate, and therefore a low to moderate risk level has been assigned.

The site contains a swimming pool identified during the walkover. If properly sealed which, given the water level, it is assumed to be then the risk to groundwater is considered low.

#### 6.6 Conceptual Site Model

6.6.1 The research has therefore identified the following pollutant linkages that require further consideration and have been used to formulate the Conceptual Site Model.



Potential Contamination Sources	Potential Contaminants of Concern	Potential Pathways	Receptor Group
	Inorganic Compounds Metals Cyanide Sulphates Organic Compounds TPH PAH Others Asbestos pH E.Coli	<ul> <li>Soil ingestion</li> <li>Vegetable uptake</li> <li>Dermal contact</li> <li>Inhalation of contaminated dust</li> <li>Vapour inhalation</li> </ul>	<ul><li>Human Health</li><li>Site occupants</li><li>Site users</li><li>Construction workers</li></ul>
Possible contamination associated with		Plant uptake and accumulation of contaminants	Ecology • Landscaped areas
former agricultural use / vehicle storage		<ul><li>Lateral migration</li><li>Surface run-off</li><li>Infiltration</li></ul>	Controlled Waters <ul> <li>Groundwater</li> </ul>
		• Direct contact of contaminants with building materials	<ul> <li>Building Materials or Services</li> <li>Concrete</li> <li>Plastic pipes and services</li> <li>Structural iron &amp; steel work</li> </ul>
Natural Geology	• Radon	• Inhalation	• Human Health

#### 6.7 Conclusions of Geoenvironmental Risk Assessment

- 6.7.1 The research has identified evidence of potential sources of contamination on or which may impact on the site, with plausible pathways to the likely receptors, and therefore potential pollutant linkages have been suggested.
- 6.7.2 It is recommended that further work be carried out to confirm the presence, nature or extent of any contamination which is anticipated to impact on the site.

#### 6.8 Consultation

- 6.8.1 During development, consultation may be required for a number of reasons with a number of regulatory Authorities. The following provides an indication as to the most likely Authorities with which consultation may be required:
  - Local Authority. There may be a planning condition regarding contamination and consultation will be required with a designated Contaminated Land Officer within the Environmental Health Department. The Local Authority is generally concerned with human health risks.
  - **Environment Agency.** Where a site is within a groundwater protection zone or has been designated as a special site, the Environment Agency is likely to be involved to ensure that controlled waters are protected.



- National House Building Council, NHBC. Section 4.1 of the NHBC Standards, ref 8.12, requires land management to be addressed. For a new housing development to be approved by the NHBC, any contamination will require remediation accompanied by a validation report.
- 6.8.2 Based on the results of any consultation, there may be specific investigation and/or remediation requirements imposed by one or more of the Authorities.



#### 7.0 RECOMMENDATIONS

#### 7.1 Further Work

- 7.1.1 An intrusive investigation should be undertaken to address the issues raised in Chapter 4.0 and Chapter 6.0.
- 7.1.2 The following scope of works is suggested in order to collect the required data:
  - The sinking of boreholes for the recovery of samples for geotechnical and chemical contamination analysis.
  - Remediation of the site to provide basic gas measures to address the risk of radon.
- 7.1.3 Any proposed residential development will require the installation of basic radon protective measures.

#### 7.2 Other Considerations

- 7.2.1 There are several other areas of research which are beyond the scope of this report. All or none of the following may be applicable to the site, either on the outcome of consultation with a regulatory body or as a result of the research for this Preliminary Investigation. They include:
  - Archaeology. Should the site be situated on or within an area of archaeological sensitivity, the advisor to the relevant local authority should be consulted. The requirement for an archaeological report may be identified within a planning condition, if appropriate, for the site.
  - **Ecology.** There may be a requirement for a detailed ecological report, dependant on the type or size of the development, or due to evidence identified during the site reconnaissance or desk study. This requirement may be identified within a planning condition, or recommended within Section 7.0.
  - Unexploded Ordnance (UXO). There may be a requirement for a UXO report, dependant on the site location, historical use and surrounding site history, as well as the type or size of the development. Areas of low potential for UXO may include rural greenfield sites, well away from any military installations; however this does not mean there is no risk in such areas. The risk increases within urban areas, particularly those with wartime installations and infrastructure (e.g. power stations, industrial centres). Clearly wartime military establishments and their close surroundings have to be classed as high risk. This requirement may be identified within a planning condition.



#### 8.0 **REFERENCES**

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- 8.7 HPA-RPD-033, 'Indicative Atlas of Radon in England and Wales', Health Protection Agency, 2007
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- 8.11 The Environmental Protection Act, Part IIA, Section 78, 1990
- 8.12 Environment Act 1995, Section 57, DoE, 1995
- 8.13 Water Environment and Water Services (Scotland) Act, 2003
- 8.14 Planning Policy Statement 23: Planning and Pollution Control, ODPM, 2004
- 8.15 Science Report SC050021/SR2, 'Human health toxicological assessment of contaminants in soil'. Environment Agency, 2009
- 8.16 Science Report SC050021/SR3, 'Updated technical background to the CLEA model'. Environment Agency, 2009

#### For and on behalf of Ian Farmer Associates (1998) Limited

J Walker Westgate Senior Environmental Geologist BSc(Hons.) FGS Han Pan Senior Engineering Geologist BSc MSc FGS

DRAWINGS

SITE WALKOVER PHOTOGRAPHS

# ENVIRONMENTAL RISK

#### ENVIRONMENTAL RISK ASSESSMENT

#### A3.1 STATUTORY FRAMEWORK AND DEFINITIONS

A3.1.1 The statutory definition of 'contaminated land' is defined in Part IIA of the Environmental Protection Act 1990, ref 8.13, which was inserted by Section 57 of the Environment Act 1995, ref 8.14, and came into force in England in 2000, as;

'any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) pollution of controlled waters is being, or is likely to be, caused'.
- A3.1.2 In Scotland, this has been amended by the Water Environment and Water Services (Scotland) Act 2003, ref 8.15, to 'significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused'.
- A3.1.3 The purpose of Part IIA was to help address the problems caused by historical contamination, with the voluntary remediation of such land encouraged without the use of the Act. The planning regime assists in this, with Planning Policy Statement 23: Planning and Pollution Control (PPS23), ref 8.16, published in 2004, setting out the minimum requirements for the remediation of land affected by contamination as '*after carrying out the development and commencement of its use, the land should not be capable of being determined as contaminated land under Part IIA of the EPA 1990*'.
- A3.1.4 The UK guidance on the assessment of contaminated has developed as a direct result of the introduction of these two Acts. The technical guidance supporting the legislation was originally summarised in a number of key documents collectively known as the Contaminated Land Reports (CLRs), a proposed series of twelve documents. Seven were originally published in March 1994, four more were published in April 2002, while the final guidance document, CLR 11 was published in 2004. CLR7 to 10 were withdrawn in 2008, with CLR 9 and 10 effectively replaced by the Environment Agency in the form of Science Reports SR2, ref 8.17 and SR3, ref 8.18.
- A3.1.5 CLR11 remains valid and sets out the framework of the investigation process, with the overall approach one of risk management, with risk given the definition of 'a combination of the probability or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'. In establishing whether a site fulfils the statutory definition of 'contaminated land' it is necessary to identify whether the three essential elements of risk exist. These are defined as:
  - A contaminant a substance which is in, on or under the land and has the potential to cause harm or to cause pollution of controlled waters;
  - A receptor something which could be adversely affected by a contaminant, such as people, an ecological system, property or a water body; and
  - A pathway a route or means by which a receptor can be exposed to, or affected by, a contaminant.
- A3.1.6 A '*pollutant linkage*' may be defined as the link between a contaminant '*source*' and a '*receptor*' by means of a '*pathway*'. There may be none, one or many pollutant linkages

existing on a site, which may utilise the same or different sources, pathways and receptors, which may change over the passage of time.

- A3.1.7 Each pollutant linkage that exists in respect of the land in question must fulfil one or more of the following criteria:
  - significant harm is being caused to the receptor in the pollutant linkage,
  - there is a significant possibility of significant harm being caused to that receptor,
  - there is (significant) pollution of controlled waters (the water environment) which constitute the receptor, or
  - pollution of controlled waters is likely to be caused
  - (there is a significant possibility of such pollution being caused).
- A3.1.8 A pollutant linkage indicates that all three elements have been identified. The site can only be defined as 'Contaminated Land' under Part IIA if a pollutant linkage exists and the criteria above are met.
- A3.1.9 The main potential receptors include:
  - 1) Humans current site occupants, construction workers, future site users and neighbouring site users.
  - 2) Controlled Waters surface water and groundwater resources
  - 3) Property including buildings, crops, livestock and pets
  - 4) Ecological systems including current/future site and neighbouring vegetation
- A3.1.10 The main potential pathways to be considered include:
  - a) Ingestion and/or inhalation.
  - b) Uptake of contaminants via cultivated vegetables.
  - c) Dermal contact
  - d) Migration through permeable strata
  - e) Drains or services
  - f) Direct contact with building materials and services
  - g) Fire and explosion

#### A3.2 ASSESSMENT METHODOLOGY

A3.2.1 The guidance proposes a four-stage assessment process for identifying potential pollutant linkages on a site. These stages are set out in the table below:

No.	Process	Description
1	Hazard Identification	Establishing contaminant sources, pathways and receptors (the conceptual model).
2	Hazard Assessment	Analysing the potential for unacceptable risks (what linkages may be present and what could be the effects?).
3	Risk Estimation	Trying to establish the magnitude and probability of the possible consequences (what degree of harm might result and to what receptors, and how likely is it).
4	Risk Evaluation	Deciding whether the risk is unacceptable.

- A3.2.2 Stages 1 and 2 develop a 'conceptual model' based upon information collated from desk based studies, and reconnaissance of the site (a walkover survey). The walkover survey should be conducted in general accordance with CLR 2. The formation of a conceptual model is an iterative process and as such, it should be updated and refined throughout each stage of the project to reflect any additional information obtained.
- A3.2.3 The extent of the desk based research and enquiries to be conducted should be in general accordance with CLR 3. The information from these enquiries is presented in a preliminary investigation report with recommendations, if necessary, for further work based upon the conceptual model. In the absence of specific information on contamination anticipated to be encountered, specific DoE 'Industry Profiles' provide guidance on the nature of contaminants relating to a variety of industrial processes and should be used as the basis for determining which contaminants are more likely to be present on a site.
- A3.2.4 If potential pollutant linkages are identified within the conceptual model, an intrusive ground investigation and report will be recommended. The investigation should be planned in general accordance with CLR 4, and BS10175. The number of exploratory holes and samples collected for analysis should be consistent with the size of the site and the level of risk envisaged. This will enable a generic quantitative risk assessment (GQRA) to be conducted, at which point the conceptual model can be updated and relevant pollutant linkages can be identified.
- A3.2.5 A two-stage investigation may be more appropriate where time constraints are less of an issue. The first stage investigation may be conducted as an initial assessment for the presence of potential sources, with the second being more refined in order to delineate or further characterise any contamination or the physical properties of the site.

#### A3.3 RISK EVALUATION

- A3.3.1 The risk evaluation is a qualitative method for interpreting the data from the hazard estimation stage. It involves the classification of the:
  - magnitude of the potential 'consequence' (severity) of the risk occurring and:
  - magnitude of the 'probability' (likelihood) of the risk occurring.
- A3.3.2 These are defined in the following sections:

#### A3.4 CLASSIFICATION OF CONSEQUENCE

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

A3.4.1 In theory, both severe and medium classification can result in death. The differential is that severe relates to short term risk while medium relates to long-term risk. Therefore, the classification of severe requires urgent action while medium may require urgent action but usually long term action would be sufficient.

#### A3.5 CLASSIFICATION OF PROBABILITY

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

A3.5.1 For the purposes of this preliminary investigation, any source of contamination that has been identified by professional judgement as potentially impacting on the site has been classified as being 'likely' to be present, unless proven otherwise by intrusive investigation.

#### A3.6 COMPARISON OF CONSEQUENCE AGAINST PROBABILITY

A3.6.1 These classifications are compared to indicate the risk presented by each pollutant linkage. Once the consequence and probability have been classified they can be used to produce a risk category as below:

		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	

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

A3.6.2 The action required for the classified risks are as follows:

ENVIROCHECK REPORT

DRAWINGS



# 22145: Mawles Farm





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Mawles Farm Sibford Gower OX15 5RW

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**APPENDIX 2** 

SITE WALKOVER PHOTOGRAPHS



Photograph A: Looking south at the yard with the L-shaped building beyond



Photograph B: Looking west at the open end of the L shaped building

# **Site Photographs**

Figure A2.1





Photograph C: Looking south at the refuelling area, including fuel tank



Photograph D: Looking south at brick building attached to the L-shaped building

# **Site Photographs**

Figure A2.2





Photograph E: Internal view of the brick building including a suspected water tank



Photograph F: Looking west from the southwest corner of the site within the lower ground loading bay

# Site Photographs

Figure A2.3





Photograph G: Looking northeast at the piggery and bulging brick wall with modern storage barn beyond



Photograph H: Looking northeast at the modern storage barn

# Site Photographs

Scale: NTS

Figure A2.4





Photograph I: Looking south at the swimming pool



Photograph J: Looking south at the crack present within the open end of the L shaped building

# Site Photographs





# **APPENDIX 3**

# ENVIRONMENTAL RISK

## **APPENDIX 3**

## ENVIRONMENTAL RISK ASSESSMENT

### A3.1 STATUTORY FRAMEWORK AND DEFINITIONS

A3.1.1 The statutory definition of 'contaminated land' is defined in Part IIA of the Environmental Protection Act 1990, ref 8.13, which was inserted by Section 57 of the Environment Act 1995, ref 8.14, and came into force in England in 2000, as;

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- A3.1.5 CLR11 remains valid and sets out the framework of the investigation process, with the overall approach one of risk management, with risk given the definition of 'a combination of the probability or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'. In establishing whether a site fulfils the statutory definition of 'contaminated land' it is necessary to identify whether the three essential elements of risk exist. These are defined as:
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  - A receptor something which could be adversely affected by a contaminant, such as people, an ecological system, property or a water body; and
  - A pathway a route or means by which a receptor can be exposed to, or affected by, a contaminant.
- A3.1.6 A '*pollutant linkage*' may be defined as the link between a contaminant '*source*' and a '*receptor*' by means of a '*pathway*'. There may be none, one or many pollutant linkages

existing on a site, which may utilise the same or different sources, pathways and receptors, which may change over the passage of time.

- A3.1.7 Each pollutant linkage that exists in respect of the land in question must fulfil one or more of the following criteria:
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  - there is a significant possibility of significant harm being caused to that receptor,
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  - pollution of controlled waters is likely to be caused
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  - d) Migration through permeable strata
  - e) Drains or services
  - f) Direct contact with building materials and services
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## A3.2 ASSESSMENT METHODOLOGY

A3.2.1 The guidance proposes a four-stage assessment process for identifying potential pollutant linkages on a site. These stages are set out in the table below:

No.	Process	Description		
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- A3.2.2 Stages 1 and 2 develop a 'conceptual model' based upon information collated from desk based studies, and reconnaissance of the site (a walkover survey). The walkover survey should be conducted in general accordance with CLR 2. The formation of a conceptual model is an iterative process and as such, it should be updated and refined throughout each stage of the project to reflect any additional information obtained.
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- A3.2.4 If potential pollutant linkages are identified within the conceptual model, an intrusive ground investigation and report will be recommended. The investigation should be planned in general accordance with CLR 4, and BS10175. The number of exploratory holes and samples collected for analysis should be consistent with the size of the site and the level of risk envisaged. This will enable a generic quantitative risk assessment (GQRA) to be conducted, at which point the conceptual model can be updated and relevant pollutant linkages can be identified.
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## A3.3 RISK EVALUATION

- A3.3.1 The risk evaluation is a qualitative method for interpreting the data from the hazard estimation stage. It involves the classification of the:
  - magnitude of the potential 'consequence' (severity) of the risk occurring and:
  - magnitude of the 'probability' (likelihood) of the risk occurring.
- A3.3.2 These are defined in the following sections:

## A3.4 CLASSIFICATION OF CONSEQUENCE

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

A3.4.1 In theory, both severe and medium classification can result in death. The differential is that severe relates to short term risk while medium relates to long-term risk. Therefore, the classification of severe requires urgent action while medium may require urgent action but usually long term action would be sufficient.

## A3.5 CLASSIFICATION OF PROBABILITY

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

A3.5.1 For the purposes of this preliminary investigation, any source of contamination that has been identified by professional judgement as potentially impacting on the site has been classified as being 'likely' to be present, unless proven otherwise by intrusive investigation.

## A3.6 COMPARISON OF CONSEQUENCE AGAINST PROBABILITY

A3.6.1 These classifications are compared to indicate the risk presented by each pollutant linkage. Once the consequence and probability have been classified they can be used to produce a risk category as below:

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

A3.6.2	The action required for the classified risks are as follows:
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Very high risk	<ul><li>There is a high probability that severe harm could a risk to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening.</li><li>This risk, if realised, is likely to result in a substantial liability.</li><li>Urgent investigation (if not undertaken already) and remediation are likely to be required</li></ul>
High risk	Harm is likely to arise to a designated receptor from an identified hazard.
	Realisation of the risk is likely to present a substantial liability.
	Urgent investigation (if not undertaken already) is required and remedial works
	may be necessary in the short term and are likely over the longer term
Moderate risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is 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
	Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term
Low risk	It is possible that harm could arise to a designated receptor from an identified
	hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very low risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

**APPENDIX 4** 

ENVIROCHECK REPORT

# Geology 1:50,000 Maps Legends

### Superficial Geology

Map Colour	Lex Code Rock Name		Rock Type	Min and Max Age	
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene	
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary	

### Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	CNL	Chipping Norton Limestone Formation	Limestone, Ooidal	Not Supplied - Bathonian
	SHHB	Sharp's Hill Formation	Argillaceous Rocks with Subordinate Sandstone and Limestone	Not Supplied - Bathonian
	WHL	White Limestone Formation	Limestone	Not Supplied - Bathonian
	FMB	Forest Marble Formation	Limestone and Mudstone, Interbedded	Not Supplied - Bathonian
	СВ	Combrash Formation	Limestone	Not Supplied - Bathonian
	CNRL	Chipping Norton Limestone Formation and Rutland Formation (Undifferentiated)	Limestone and [Subequal/Subordi nate] Argillaceous Rocks, Interbedded	Not Supplied - Bathonian
	HYSA	Horsehay Sand Formation	Sandstone	Not Supplied - Bajocian
	NS Northampton Sand Formation		Sandstone, Limestone and Ironstone	Not Supplied - Aalenian
	WHM Whitby Mudstone Formation		Mudstone	Not Supplied - Toarcian
	MRB Marlstone Rock Formation		Ferruginous Limestone and Ironstone	Not Supplied - Pliensbachian
	DYS Dyrham Formation		Siltstone and Mudstone, Interbedded	Not Supplied - Pliensbachian
	MRB	Marlstone Rock Formation	Limestone, Ferruginous	Not Supplied - Pliensbachian
	CHAM Charmouth Mudstone Formation		Mudstone	Not Supplied - Sinemurian
		Faults		



### 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

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 Sheet No: Map Name: Map Date: Bedrock Geology: Superficial Geology: Artificial Geology: Faults: Landslip: Rock Segments:	218 Chipping Norton 1968 Available Available Not Supplied Available Not Supplied
Geology 1:50,	000 Maps - Slice A
A21 A22	A23 A24 A25
- A16 A17	
-A11A12	
- · A6 A7	km − − − − − − A3 − − − − A10-
A1 A2	A3 A4 A5
Order Details: Order Number: Customer Reference: National Grid Referen Slice: Site Area (Ha): Search Buffer (m):	215951425_1_1 22145 nce: 435290, 237900 A 0.21 1000
Site Details: Mawles Farm, Sibford	d Gower, Banbury, OX15 5RW
	Tel:     0844 844 9952       Fax:     0844 844 9951       Web:     www.envirocheck.co.uk

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### Artificial Ground and Landslip

Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often 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: 215951425 1 1 Customer Reference: 22145 National Grid Reference: 435290, 237900 Slice: A 0.21 Site Area (Ha): Search Buffer (m): 1000 Site Details: Mawles Farm, Sibford Gower, Banbury, OX15 5RW Tel: Fax: 0844 844 9952 Landmark 0844 844 9951

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### **Superficial Geology**

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

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

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

Superficial Geology Map - Slice A



Order Details: Order Number: Customer Reference: National Grid Reference: Slice: Site Area (Ha); Search Buffer (m):	2159514 22145 435290, 2 A 0.21 1000	25_1_1 237900		
Site Details: Mawles Farm, Sibford Gowe	ər, Banbury	, OX15 5	RW	
	8	Tel: Fax: Web:	0844 844 9952 0844 844 9951 www.envirocheck.co.uk	
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### **Bedrock and Faults**

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

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

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

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





Order Details: Order Number: Customer Reference: National Grid Reference: Slice: Site Area (Ha); Search Buffer (m):	21595142 22145 435290, 2 A 0.21 1000	25_1_1 237900	
Site Details: Mawles Farm, Sibford Gowe	er, Banbury,	OX15 5	SRW
	8	Tel: Fax: Web:	0844 844 9952 0844 844 9951 www.envirocheck.co.uk
v15.0 27-Aug-2019			Page 4 of 5





### **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

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### **Combined Geology Map - Slice A**



Order Details. Order Number: Customer Reference: National Grid Reference: Slice: Site Area (Ha): Search Buffer (m):	215951425_1_ 22145 435290, 23790 A 0.21 1000	_1 )0	
Site Details: Mawles Farm, Sibford Gow	er, Banbury, OX1	5 5RW	
Landmark	* Tel: Fax	0844 844 9952 0844 844 9951	

Web:

www.envirocheck.co.uk





















# IAN FARMER ASSOCIATES

### General



# Site Sensitivity Map - Segment A13



## **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Plot Buffer (m):	100

## **Site Details**

Mawles Farm, Sibford Gower, Banbury, OX15 5RW



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# IAN FARMER ASSOCIATES

## General



## Site Sensitivity Map - Slice A



## **Order Details**

Order Number:
Customer Ref:
National Grid Reference
Slice:
Site Area (Ha):
Search Buffer (m):

215951425\_1\_1 22145 : 435290, 237900 А 0.21 1000

## Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW



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215951425_1_
22145
435290, 23790
A
0.21
1000





High - 30 Year Return



Order Details:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Search Buffer (m):	1000












### Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

### Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

### Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

### Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:





British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL





Envirocheck reports are compiled from 136 different sources of data.

### **Client Details**

MR P Bailey, Ian Farmer Associates, 1 Fairfield Court, Seven Stars Industrial Estate, Wheler Road, Coventry, CV3 4LJ

### **Order Details**

 Order Number:
 215951425\_1\_1

 Customer Ref:
 22145

 National Grid Reference:
 435290, 237900

 Site Area (Ha):
 0.21

 Search Buffer (m):
 1000

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW

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## **Historical Mapping Legends**

Ordnance	Survey County Series 1:10,560	Ordnance Survey Plan 1:10,000	1:10,000 Raster Mapping
Grav Pit	vel Sand Other Pit Pits	Chalk Pit, Clay Pit	Gravel Pit Refuse tip or slag heat
پېنې پېنې پېښ پېښ پېښ پېښ	rs	Refuse or Lake, Loch	ື້ໍ້ໍ້ຈັກ Boulders ໂດຍ Autor (southered) ອີ່ເຊັ່ງ Boulders ເscattered)
د د		Dunes	Shingle Mud Mud
Mixed Woo	d Deciduous Brushwood	ネネ Coniferous ふみの Non-Coniferous 木 木 Trees のの Trees	Sand Sand Sand Pit
		ሩን ሩን Orchard በስ_ Scrub \ነነ <sub>በ</sub> Coppice	Slopes     Top of cliff     Undergroun
Fir	Furze Rough Pasture	יזר זו Bracken איזענעע Heath איז אין א Rough יד	General detail     detail     detail     Narrow gau     railway
Ar flc	row denotes Trigonometrical w of water Station	<u>→⊥</u> Marsh 、、、Y///, Reeds <u>→</u> - <u>-</u> s Saltings	County boundary
++ Si Pt Si	te of Antiquities	Building Building Glasshouse	(England only) boundary District, Unitary, Metropolitan, Constituend London Borough boundary boundary
Sketched Contour	Instrumental Contour	Pylon ————————————————————————————————————	Area of wooded vegetation ∧ Non-coniferous ∧ Coniferous
Main Roads	Fenced Minor Roads	Cutting Embankment Standard Gauge	<ul> <li>Coniferous</li> <li>Coniferous</li> <li>Crees (scattered)</li> <li>Coniferous</li> <li>Coniferou</li></ul>
	Sunken Road Raised Road	Road <sup>™</sup> <sup>™</sup> Road Level Foot Single Track Under Over Crossing Bridge	ې پې د د د د د د د د د د د د د د د د د د
	Road over Railway over Railway River	Siding, Tramway or Mineral Line -+ -+ -+ -+ +-+ + Narrow Gauge	متله Rough متلاه المعلم الم متله Grassland من المعلم الم
Constant Constant	Railway over Road Level Crossing	— — Geographical County	مور میں
	River or Canal Stream	Administrative County, County Borougn     or County of City     Municipal Borough, Urban or Rural District,     Burgh or District Council	Water feature Flow arrows
	Stream County Boundary (Geographical)	Borough, Burgh or County Constituency Shown only when not coincident with other boundaries	MHW(s)     Mean ngh water (springs)     Mean of water (springs)       Telephone line     Electricity
<u></u>	County & Civil Parish Boundary	BP, BS Boundary Post or Stone Pol Sta Police Station	(where shown) (with poles) Bench mark (where shown) (with poles)
Co. Boro. Bdy.	County Borough Boundary (England)	Ch Church PO Post Office CH Club House PC Public Convenience F E Sta Fire Engine Station PH Public House FB Foot Bridge SB Signal Box	Point feature Pylon, flare
Co. Burgh Bdy	County Burgh Boundary (Scotland) Rural District Boundary	Fn Fountain Spr Spring GP Guide Post TCB Telephone Call Box MP Mile Post TCP Telephone Call Post	• Site of (antiquity) Glasshouse
·····	Civil Parish Boundary	MS Mile Stone W Well	General Building Important Building

### ping

Refuse tip or slag heap

Underground detail Narrow gauge railway Single track railway Civil, parish or community boundary Constituency boundary

Non-coniferous

Marsh, Salt Marsh or Reeds

Flow arrows

(with poles) Triangulation

Glasshouse

water (springs)

transmission line

Pylon, flare stack or lighting tower

## IAN FARMER ASSOCIATES

### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Oxfordshire	1:10,560	1884 - 1887	2
Warwickshire	1:10,560	1885 - 1886	3
Oxfordshire	1:10,560	1900	4
Oxfordshire	1:10,560	1905 - 1906	5
Oxfordshire	1:10,560	1923	6
Gloucestershire	1:10,560	1923	7
Historical Aerial Photography	1:10,560	1948	8
Oxfordshire	1:10,560	1951	9
Ordnance Survey Plan	1:10,000	1955	10
Ordnance Survey Plan	1:10,000	1977	11
10K Raster Mapping	1:10,000	1999	12
10K Raster Mapping	1:10,000	2006	13
VectorMap Local	1:10,000	2019	14

### Historical Map - Slice A



### **Order Details**

Order Number: 215951425\_1\_1 Customer Ref: 22145 National Grid Reference: 435290, 237900 Slice: А Site Area (Ha): 0.21 Search Buffer (m): 1000

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW



Tel: Fax: Web:













### Gloucestershire

Published 1923

### 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 until recently, with new editions appearing every 10 years or so for urban areas.





### Historical Map - Slice A



### **Order Details**

215951425_1_1
435290, 237900
A
0.21
1000

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW







### Historical Aerial Photography Published 1948 Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was rechecked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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### Map Name(s) and Date(s)











Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	1000



Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
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Site Area (Ha):	0.21
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Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Search Buffer (m):	1000



### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Oxfordshire	1:2,500	1882 - 1887	2
Warwickshire	1:2,500	1886 - 1887	3
Oxfordshire	1:2,500	1905	4
Oxfordshire	1:2,500	1922	5
Ordnance Survey Plan	1:2,500	1974	6
Additional SIMs	1:2,500	1987	7
Additional SIMs	1:2,500	1991	8
Large-Scale National Grid Data	1:2,500	1993	9
Historical Aerial Photography	1:2,500	1999	10

### Historical Map - Segment A13



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Search Buffer (m):	100

### **Site Details**

Mawles Farm, Sibford Gower, Banbury, OX15 5RW



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ww.envirocheck.co.uk

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Fax: Web



### Oxfordshire

### Published 1882 - 1887

### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### **Historical Map - Segment A13**



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100

### Site Details

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### Warwickshire

### Published 1886 - 1887

### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### **Historical Map - Segment A13**



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
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### Site Details

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Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100



### Oxfordshire

### Published 1922

### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### **Historical Map - Segment A13**



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Search Buffer (m):	100

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW







Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100



### Additional SIMs

### Published 1987

### Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW







### Additional SIMs

### Published 1991

### Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### **Order Details**

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100

### Site Details

Mawles Farm, Sibford Gower, Banbury, OX15 5RW







—			—	—	_
L	SP3438	1	SP3	538	Т
Ι	1993 1:2,500	Т	1993 1:2,5	3 500	I
L		1			Т
—			—	-	—
-	 SP3437		– SP3	537	-
   	 SP3437 1993 1:2,500	   	SP3 1993 1:2,5	537 300	- 1 1

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	A
Site Area (Ha):	0.21
Search Buffer (m):	100



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-A16	-A17		-A18		-A19-	A20-	
SE SW NE NW		SE SW NE NW		SE SW NE NW		SESW NENW	N A
-A11	-A12		(A\$3)		-A14-	A15-	
SE SW NE NW		SE SW NEINW		SE SW NEINW		SE SW NE NW	V
- · A6	- · A7		- · A8 - ·		- · Å9 - ·	A10-	
SE SW NE NW	Å2	SE SW NE NW	A3	SE SW NE NW	A4	NENW A5	

Order Number:	215951425_1_1
Customer Ref:	22145
National Grid Reference:	435290, 237900
Slice:	Α
Site Area (Ha):	0.21
Search Buffer (m):	100

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## **Envirocheck® Report:**

### **Datasheet**

### **Order Details:**

Order Number: 215951425\_1\_1

## Customer Reference: 22145

National Grid Reference: 435290, 237900

Slice:

A

Site Area (Ha): 0.21

Search Buffer (m): 1000

### Site Details:

Mawles Farm, Sibford Gower Banbury OX15 5RW

### **Client Details:**

MR P Bailey Ian Farmer Associates 1 Fairfield Court Seven Stars Industrial Estate Wheler Road Coventry CV3 4LJ





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Waste	12
Hazardous Substances	-
Geological	13
Industrial Land Use	18
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### Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

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

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Report Version v53.0

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Potential for Landslide Ground Stability Hazards	pg 17	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 17		Yes	n/a	n/a
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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
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### Agency & Hydrological

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater F	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13SW (N)	0	1	435291 237900
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A13SW (W)	263	1	435000 237900
	BGS Groundwater F	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	349	1	435000 237650
	BGS Groundwater F	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A8NE (S)	423	1	435300 237450
	BGS Groundwater F	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A14NW (E)	449	1	435750 238050
	BGS Groundwater F	looding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A8NW (S)	475	1	435250 237400
	BGS Groundwater F	Flooding Susceptibility		100		10 10 50
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	(SW)	499	1	434850 237600
	Discharge Consents	S	A ON 114/	500		405040
1	Operator: Property Type:	WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)	A8NVV (S)	530	2	435210 237350
	Location:	Sibford Ferris Stw, Sibford Ferris, Sibford Ferris, Oxfordshire	(-)			
	Authority: Catchment Area:	Environment Agency, Midlands Region Stour Catchment (Warwickshire)				
	Reference:	S/14/20062/R				
	Permit Version:	1 21at October 1080				
	Issued Date:	31st October 1989				
	Revocation Date:	24th October 2002				
	Discharge Type: Discharge	Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River				
	Receiving Water: Status:	Trib Of River Stour Modified (Water Resources Act 1991, Schedule 10 as amended by				
	Positional Accuracy:	Located by supplier to within 100m				
	Discharge Concent					
1	Discharge Consents	S Sovern Trent Water Limited		522	2	425100
1	Property Type:	WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)	(S)	533	2	237350
	Location:	Sibford Ferris Stw, Sibford Gower, Oxfordshire, Oxfordshire	(-)			
	Authority: Catchment Area:	Environment Agency, Midlands Region Stour Catchment (Warwickshire)				
	Reference:	S/14/26023/R				
	Permit Version:	4 24at March 2010				
	Issued Date:	31st March 2010				
	Revocation Date:	Not Supplied				
	Discharge Type: Discharge	Sewage Uischarges - Final/ I reated Effluent - Water Company Freshwater Stream/River				
	Environment:					
	Receiving Water:	Trib River Stour				
	Status.	amended by Environment Act 1995)				
	Positional Accuracy:	Located by supplier to within 10m				
	Discharge Consents	5				
1	Operator:	Severn Trent Water Limited	A8NW	533	2	435190
	Property Type:	WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)	(S)			237350
	Authority:	Environment Agency, Midlands Region				
	Catchment Area:	Stour Catchment (Warwickshire)				
	Permit Version:	3/14/20023/R				
	Effective Date:	1st January 2010				
	Issued Date:	24th September 2009 20th March 2010				
	Discharge Type:	Sewage Discharges - Final/Treated Effluent - Water Company				
	Discharge	Freshwater Stream/River				
	Environment: Receiving Water:	Trib River Stour				
	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				



### Agency & Hydrological

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Discharge Consents Operator: Property Type:	S Severn Trent Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)	A8NW	533	2	435190
	Location: Authority: Catchment Area: Reference: Permit Version:	Sibford Ferris Stw, Sibford Gower, Oxfordshire, Oxfordshire Environment Agency, Midlands Region Stour Catchment (Warwickshire) S/14/26023/R	(3)			237330
	Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge	25th October 2002 25th October 2002 3rd April 2006 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River				
	Environment: Receiving Water: Status: Positional Accuracy:	Trib River Stour Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m				
	Discharge Consents					
1	Operator: Property Type: Location: Authority: Catchment Area: Reference:	Severn Trent Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Sibford Ferris Stw, Sibford Gower, Oxfordshire, Oxfordshire Environment Agency, Midlands Region Stour Catchment (Warwickshire) S/14/26023/R	A8NW (S)	533	2	435190 237350
	Permit Version: Effective Date: Issued Date: Revocation Date:	2 4th April 2006 25th October 2002 31st December 2009				
	Discharge Discharge Environment: Receiving Water:	Freshwater Stream/River				
	Status: Positional Accuracy:	New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m				
	Discharge Consents	3				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version:	Mr David Smith DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) 5 The Colony Sibford Gower, Banbury, Oxfordshire, Oxfordshire, Ox15 5ry Environment Agency, Midlands Region Stour Catchment (Warwickshire) Npswqd000863	A7NE (SW)	679	2	434831 237356
	Effective Date: Issued Date: Revocation Date:	ard March 2008 3rd March 2008 Not Supplied Courses – Final/Tracted Effluent - Not Water Company				
	Discharge Environment: Receiving Water:	Land/Soakaway Groundwaters Via Soakaway				
	Status: Positional Accuracy:	New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m				
	Nearest Surface Wa	ter Feature				
			A13SE (SE)	141	-	435400 237776
2	Pollution Incidents to Controlled Waters		AOSE	071	2	426000
3	Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water:	SIBFORD FERRIS Environment Agency, Thames Region Oils - Unknown Confirmed As A Pollution Incident 2nd March 1992 W1920097 Not Given	(SE)	971	2	436000 237200
	Cause of Incident: Incident Severity: Positional Accuracy:	Not Given Category 3 - Minor Incident Located by supplier to within 100m				


Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End:	William J Wealsby 18/54/14/01411 Not Supplied Tributary Of River Stour, Ryehill Farm, SIBFORD GOWER Environment Agency, Midlands Region Impounding Not Supplied Surface 0 0 Stour Catchment (Warwickshire) Not Supplied Not Supplied Not Supplied	A12SW (W)	909	2	434400 237595
	Permit Start Date: Permit End Date: Positional Accuracy:	Not Supplied Not Supplied Located by supplier to within 100m				
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr K F Bishop 18/54/14/0113 100 Land At Sibford Ferris - Well Environment Agency, Midlands Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Land At Sibford Ferris 01 April 31 March 16th February 1967 Not Supplied Located by supplier to within 100m	A10SW (SE)	1285	2	436400 237200
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit Start Date: Permit End Date: Positional Accuracy:	Mr J C L Taylor 28/39/14/0290 100 Tynehill Farm, Sibford Ferris, Oxon Environment Agency, Thames Region General Farming And Domestic Water may be abstracted from a single point Groundwater 9 2527 Additional Purpose(s) - Private Water Supply (745). Inferior Oolite 01 January 31 December 29th July 1980 Not Supplied Located by supplier to within 100m	A15NE (E)	1407	2	436700 238200
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	Mr J C L Taylor 28/39/14/0290 100 Tynehill Farm, Sibford Ferris, Oxon Environment Agency, Thames Region Household Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Tynehill Farm, Sibford Ferris, Oxon 01 January 31 December 29th July 1980 Not Supplied Located by supplier to within 10m	A15NE (E)	1407	2	436700 238200



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Permit Start Date: Permit End Date: Positional Accuracy:	Frederick Arnold Lamb 18/54/14/01261 Not Supplied Grounds Farm, Mill Stream, SIBFORD FERRIS Environment Agency, Midlands Region Impounding Not Supplied Surface 0 0 5tour Catchment (Warwickshire) Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 100m	(S)	1689	2	435100 236195
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Litany Holdings Ltd 28/39/14/0083 101 Grange Farm, Swalcliffe (Catchpit) Environment Agency, Thames Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied O1 January 31 December 21st May 2001 Not Supplied Located by supplier to within 10m	(E)	1824	2	437100 237500
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Litany Holdings Ltd 28/39/14/0083 101 Grange Farm, Swalcliffe (Catchpit) Environment Agency, Thames Region Private Water Supply: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Of January 31 December 21st May 2001 Not Supplied Located by supplier to within 10m	(E)	1824	2	437100 237500
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	Litany Holdings Ltd 28/39/14/0083 100 Grange Farm, Swalcliffe (Catchpit - A) Environment Agency, Thames Region General Farming And Domestic Water may be abstracted from a single point Groundwater 22 7137 Additional Purpose(s) - Private Water Supply (681). Inferior Oolite 01 January 31 December 24th October 1996 Not Supplied Located by supplier to within 100m	(E)	1824	2	437100 237500



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location:	Litany Holdings Ltd 28/39/14/0083 100 Grange Farm, Swalcliffe (Catchpit - A)	(E)	1824	2	437100 237500
	Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3):	Environment Agency, Thames Region Private Water Supply: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied				
	Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date:	Not Supplied Grange Farm, Swalcliffe 01 January 31 December 24th October 1996				
	Permit End Date: Positional Accuracy:	Not Supplied Located by supplier to within 10m				
	Water Abstractions					
	Operator: Licence Number: Permit Version:	Mr R M Spitzley 18/54/14/0189 100	(W)	1969	2	433340 238300
	Location: Authority: Abstraction: Abstraction Type:	Coombe Stade Farm - Borenole Environment Agency, Midlands Region General Farming And Domestic Water may be abstracted from a single point				
	Source: Daily Rate (m3): Yearly Rate (m3):	Roundwater Not Supplied Not Supplied				
	Details: Authorised Start: Authorised End: Permit Start Date:	Land At Coombe Slade Farm 01 April 31 March 21st March 1003				
	Permit End Date: Positional Accuracy:	Not Supplied Located by supplier to within 100m				
	Water Abstractions					
	Operator: Licence Number:	Mr R M Spitzley 18/54/14/0189	(W)	1969	2	433340 238300
	Location: Authority: Abstraction:	Coombe Slade Farm - Borehole Environment Agency, Midlands Region Private Water Undertaking: General Use (Medium Loss)				
	Abstraction Type: Source: Daily Rate (m3):	Water may be abstracted from a single point Groundwater Not Supplied				
	Yearly Rate (m3): Details: Authorised Start: Authorised End:	Not Supplied Land At Coombe Slade Farm 01 April 31 March				
	Permit Start Date: Permit End Date: Positional Accuracy:	Alst March 1993 Not Supplied Located by supplier to within 10m				
	Groundwater Vulne	rability Map				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	A13SW (N)	0	3	435291 237900
	Vulnerability: Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, No Superficial Aquifer Intermediate				
	Bedrock Flow: Dilution: Baseflow Index:	Well Connected Fractures <300 mm/year >70%				
	Patchiness: Superficial	<90%				
	Thickness: Superficial Recharge:	No Data				
	Groundwater Vulne	rability - Soluble Rock Risk				
	Classification:	Significant Risk - Problems Unlikely	A13SW (N)	0	3	435291 237900
	Bedrock Aquifer De Aquifer Designation:	signations Secondary Aquifer - A	A13SW (N)	0	3	435291 237900
	Superficial Aquifer I No Data Available	Designations				
	Extreme Flooding fr	rom Rivers or Sea without Defences				



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
5	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       322.2         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A13SE (SE)	141	4	435400 237776
6	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       431.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A13SW (W)	286	4	434990 237794
7	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 93.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14SW (SE)	385	4	435639 237680
8	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 464.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A8NE (S)	429	4	435410 237459
9	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 324.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A8NE (S)	429	4	435414 237460
10	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14SW (SE)	461	4	435672 237597
11	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 64.0 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14NW (E)	517	4	435834 237989
12	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 134.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14NW (E)	546	4	435869 237925



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       13.3         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NW (E)	547	4	435870 237926
14	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 157.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A12NE (NW)	585	4	434755 238191
15	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       13.7         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7NE (SW)	598	4	434857 237440
16	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       233.6         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7NE (SW)	608	4	434844 237439
17	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       63.6         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18SW (NW)	614	4	435043 238494
18	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       368.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A8NW (SW)	654	4	435013 237275
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 140.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A8NW (SW)	654	4	435013 237275
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 88.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14NE (E)	669	4	435992 237909
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 76.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14SE (E)	703	4	435982 237664



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	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:       Severn         Primacy:       1	A17SE (NW)	703	4	434708 238338
23	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       140.1         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18NW (N)	712	4	435191 238637
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 177.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14SE (E)	723	4	436039 237804
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 272.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14SE (E)	727	4	436025 237721
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 597.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A17SE (NW)	728	4	434622 238245
27	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       13.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A17SE (NW)	737	4	434631 238283
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14NE (E)	740	4	436063 237940
29	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       56.4         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A17SE (NW)	741	4	434639 238303
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A17SE (NW)	741	4	434635 238296



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       173.0         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A17SE (NW)	745	4	434665 238350
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 247.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A17SE (NW)	789	4	434803 238554
33	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       678.2         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A17SE (NW)	797	4	434729 238501
34	OS Water Network Lines         Watercourse Form:       Lake         Watercourse Length:       6.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NE (E)	811	4	436131 237984
35	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       29.0         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NE (E)	813	4	436132 237990
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 559.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A7NE (SW)	817	4	434653 237336
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A18NW (N)	823	4	435095 238731
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A17NE (NW)	826	4	434944 238682
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 128.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A18NW (N)	827	4	434971 238695



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	OS Water Network Lines Watercourse Form: Lake Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A14NE (E)	832	4	436149 238013
41	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 21.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A18NW (N)	832	4	435087 238739
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A17NE (NW)	833	4	434906 238671
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Severn Primacy: 1	A7NE (SW)	837	4	434659 237300
44	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       8.9         Watercourse Level:       Underground         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7NE (SW)	840	4	434664 237290
45	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       102.0         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7NE (SW)	842	4	434669 237282
46	OS Water Network Lines         Watercourse Form:       Lake         Watercourse Length:       12.1         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NE (E)	843	4	436160 238014
47	OS Water Network Lines         Watercourse Form:       Lake         Watercourse Length:       3.4         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NE (E)	843	4	436160 238014
48	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       165.5         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A14NE (E)	845	4	436161 238017



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       23.8         Watercourse Level:       Not Supplied         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A12SW (W)	850	4	434424 237747
50	OS Water Network Lines         Watercourse Form:       Lake         Watercourse Length:       89.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18NW (N)	851	4	435073 238755
51	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       8.4         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18NW (N)	914	4	435121 238830
52	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       231.2         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18NW (N)	914	4	435171 238838
53	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       41.7         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7SE (SW)	915	4	434671 237182
54	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       334.1         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A18NW (N)	922	4	435123 238838
55	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       139.9         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7SE (SW)	938	4	434632 237186
56	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       310.8         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Severn         Primacy:       1	A7SE (SW)	938	4	434632 237186
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 231.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Not Supplied Primacy: 1	A19SE (NE)	969	4	436034 238569



#### Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Lar	dfill Coverage				
	Name:	Cherwell District Council - Has supplied landfill data		0	5	435291 237900
	Local Authority Lar	dfill Coverage				
	Name:	Oxfordshire County Council - Has supplied landfill data		0	6	435291 237900
	Potentially Infilled L	and (Non-Water)				
58	Bearing Ref: Use: Date of Mapping:	NE Unknown Filled Ground (Pit, quarry etc) 1977	A14NW (NE)	565	-	435792 238227
	Potentially Infilled L	and (Non-Water)				
59	Bearing Ref: Use: Date of Mapping:	N Unknown Filled Ground (Pit, quarry etc) 1977	A18NE (N)	831	-	435382 238757



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid	d Geology				
	Description:	Inferior Oolite Group	A13SW (N)	0	1	435291 237900
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A13SW (N)	0	1	435291 237900
	Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 45 - 60 mg/kg <1.8 mg/kg 120 - 180 mg/kg <100 mg/kg 30 - 45 mg/kg	A13SE (SE)	155	1	435404 237761
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 25 - 35 mg/kg <1.8 mg/kg 60 - 90 mg/kg	A13NE (NE)	176	1	435378 238084
	Nickel Concentration:	<15 mg/kg				
	BGS Estimated Soil Source:	Chemistry British Geological Survey, National Geoscience Information Service	A13NE	234	1	435545
	Arsenic Concentration: Cadmium	<1.8 mg/kg	(=)			237903
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	<b>BGS Estimated Soil</b>	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 25 - 35 mg/kg	A13NE (NE)	336	1	435556 238152
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 ma/ka				
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
		Chamiatau				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium	British Geological Survey, National Geoscience Information Service Rural Soil 60 - 120 mg/kg <1.8 mg/kg >180mg/kg	A8NE (S)	423	1	435391 237460
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 60 - 80 mg/kg				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 45 - 60 mg/kg	A14NW (E)	468	1	435783 238000
	Cadmium	<1.8 mg/kg				
	Chromium	120 - 180 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 45 - 60 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A8NE (SE)	566	1	435558 237371
	Concentration: Cadmium	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A12NE (NW)	585	1	434768 238215
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	120 - 180 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 30 - 45 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A12NE (W)	630	1	434671 238107
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	90 - 120 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 45 - 60 mg/kg	A18SW (NW)	650	1	435000 238514
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	120 - 180 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 45 - 60 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A12NW (W)	657	1	434617 238000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	120 - 180 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 30 - 45 mg/kg				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	<b>Chemistry</b> British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A14SE (E)	677	1	436000 237900
	Cadmium Concentration: Chromium	<1.8 mg/kg 90 - 120 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<100 mg/kg 30 - 45 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A14NE (E)	683	1	436000 238000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	120 - 180 mg/kg <100 mg/kg				
	Nickel Concentration:	30 - 45 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A8SW (S)	684	1	435121 237210
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	90 - 120 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A7NE (SW)	781	1	434683 237356
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	120 - 180 mg/kg				
	Nickel Concentration:	45 - 60 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A9NE (SE)	855	1	436044 237441
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	90 - 120 mg/kg				
	Nickel Concentration:	30 - 45 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Rural Soil 35 - 45 mg/kg	A17SW (NW)	898	1	434491 238362
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	<100 mg/kg 15 - 30 mg/kg				



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry         Source:       British Geological Survey, National Geoscience Information Service         Soil Sample Type:       Rural Soil         Arsenic       35 - 45 mg/kg         Concentration:       <1.8 mg/kg	A12SW (W)	961	1	434324 237674
	Concentration: Chromium 60 - 90 mg/kg Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:				
	PCS Estimated Sail Chemistry				
	BGS Estimated Soil Chemistry         Source:       British Geological Survey, National Geoscience Information Service         Soil Sample Type:       Rural Soil         Arsenic       45 - 60 mg/kg         Concentration:       -         Cadmium       <1.8 mg/kg	A19NE (NE)	998	1	435977 238664
60	BGS Recorded Mineral Sites         Site Name:       Pound Lane         Location:       Sibford Gower, Banbury, Oxfordshire         Source:       British Geological Survey, National Geoscience Information Service         Reference:       39660         Type:       Opencast         Status:       Ceased         Operator:       Unknown Operator         Operator Location:       Not Supplied         Periodic Type:       Jurassic         Geology:       Great Oolite Group         Commodity:       Limestone         Positional Accuracy:       Located by supplier to within 10m	A18SE (NE)	527	1	435578 238375
61	BGS Recorded Mineral Sites         Site Name:       Handywater Farm         Location:       Sibford Gower, Banbury, Oxfordshire         Source:       British Geological Survey, National Geoscience Information Service         Reference:       56987         Type:       Opencast         Status:       Ceased         Operator:       Unknown Operator         Operator Location:       Not Supplied         Periodic Type:       Jurassic         Geology:       Northampton Sand Formation (Northampton Sand Ironstone)         Commodity:       Limestone         Positional Accuracy:       Located by supplier to within 10m	A18NE (N)	826	1	435382 238752
	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 Non Coal Mining Areas of Great Britain				
	No Hazard				
	Potential for Collapsible Ground Stability Hazards           Hazard Potential:         Very Low           Source:         British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Compressible Ground Stability Hazards           Hazard Potential:         No Hazard           Source:         British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Ground Dissolution Stability Hazards           Hazard Potential:         No Hazard           Source:         British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Ground Dissolution Stability Hazards           Hazard Potential:         Very Low           Source:         British Geological Survey, National Geoscience Information Service	A13NE (E)	234	1	435545 237985



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Lands	ide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Lands	ide Ground Stability Hazards				
	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	155	1	435404 237761
	Potential for Lands	ide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	231	1	435458 237706
	Potential for Runnin	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Shrink	ing or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SW (N)	0	1	435291 237900
	Potential for Shrink	ing or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	155	1	435404 237761
	Radon Potential - R	adon Affected Areas				
	Affected Area:	The property is in an Intermediate probability radon area (5 to 10% of homes	A13SW	0	1	435291
	Source:	British Geological Survey, National Geoscience Information Service	(IN)			237900
	Radon Potential - R	adon Protection Measures				
	Protection Measure:	Basic radon protective measures are necessary in the construction of new dwellings or extensions	A13SW (N)	0	1	435291 237900
	Source:	British Geological Survey, National Geoscience Information Service				



# **Industrial Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
62	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	The English Furniture Workshop Fairview, Sibford Gower, Banbury, Oxfordshire, OX15 5RW Antiques - Repairing & Restoring Inactive Automatically positioned to the address	A13SE (SE)	52	-	435362 237866
	Contemporary Trad	e Directory Entries				
63	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	King Horse Transport 13, Cotswold Close, Sibford Ferris, Banbury, OX15 5QP Horse Boxes & Transporting Active Automatically positioned to the address	A8SE (SE)	750	-	435628 237200
	Points of Interest - I	Manufacturing and Production				
64	Name: Location: Category: Class Code: Positional Accuracy:	Quarry (Disused) OX15 Extractive Industries Unspecified Quarries Or Mines Positioned to address or location	A18SE (NE)	525	7	435576 238374
	Points of Interest - I	Manufacturing and Production				
65	Name: Location: Category: Class Code: Positional Accuracy:	Tank OX15 Industrial Features Tanks (Generic) Positioned to an adjacent address or location	A9SW (SE)	977	7	435905 237109
	Points of Interest - I	Public Infrastructure				
66	Name: Location: Category: Class Code: Positional Accuracy:	Sewage Works OX15 Infrastructure and Facilities Waste Storage, Processing and Disposal Positioned to address or location	A8NW (S)	528	7	435181 237357



#### **Sensitive Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	Nitrate Vulnerable Z	Zones	A 12 S W	0	2	425201
07	Description: Source:	Surface Water Environment Agency, Head Office	(N)	0	3	237900
	Nitrate Vulnerable 2	Zones				
68	Name: Description: Source:	Cherwell (Ray To Thames) And Woodeaton Brook Nvz Surface Water Environment Agency, Head Office	A19NW (NE)	937	3	435868 238673
	Nitrate Vulnerable 2	Zones				
69	Name: Description: Source:	Balscote Groundwater Environment Agency, Head Office	A19NW (NE)	937	3	435868 238673



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Stratford-on-Avon District Council - Environmental Services Cherwell District Council - Environmental Health Department West Oxfordshire District Council - Environmental Health Department	April 2014 October 2014 October 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Midlands Region Environment Agency - Thames Region	July 2019 July 2019	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Midlands Region Environment Agency - Thames Region	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Integrated Pollution Controls Environment Agency - Midlands Region Environment Agency - Thames Region	October 2008 October 2008	Variable Variable
Integrated Pollution Prevention And Control Environment Agency - Midlands Region Environment Agency - South East Region - West Thames Area Environment Agency - Thames Region	July 2019 July 2019 July 2019	Quarterly Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Stratford-on-Avon District Council - Environmental Health Department West Oxfordshire District Council - Environmental Health Department Cherwell District Council - Environmental Health Department	August 2014 June 2014 October 2014	Variable Variable Variable
Local Authority Pollution Prevention and Controls Stratford-on-Avon District Council - Environmental Health Department West Oxfordshire District Council - Environmental Health Department Cherwell District Council - Environmental Health Department	August 2014 June 2014 October 2014	Annual Rolling Update Annual Rolling Update Not Applicable
Local Authority Pollution Prevention and Control Enforcements Stratford-on-Avon District Council - Environmental Health Department West Oxfordshire District Council - Environmental Health Department Cherwell District Council - Environmental Health Department	August 2014 June 2014 October 2014	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	January 2019	
Pollution Incidents to Controlled Waters Environment Agency - Midlands Region Environment Agency - Thames Region	December 1999 September 1999	Not Applicable Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Midlands Region Environment Agency - Thames Region	July 2015 March 2013	Annual Rolling Update Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - Midlands Region Environment Agency - Thames Region	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Registered Radioactive Substances Environment Agency - Midlands Region Environment Agency - Thames Region	June 2016 June 2016	
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



Agency & Hydrological	Version	Update Cycle
Substantiated Pollution Incident Register Environment Agency - Midlands Region - Central Area Environment Agency - Midlands Region - Lower Severn Area Environment Agency - South East Region - West Thames Area Environment Agency - Thames Region - West Area	July 2019 July 2019 July 2019 July 2019	Quarterly Quarterly Quarterly Quarterly
Water Abstractions Environment Agency - Midlands Region Environment Agency - Thames Region	July 2019 July 2019	Quarterly Quarterly
Water Industry Act Referrals Environment Agency - Midlands Region Environment Agency - Thames Region	October 2017 October 2017	Quarterly Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office Groundwater Vulnerability - Soluble Rock Risk	June 2018	Annually
Environment Agency - Head Office Bedrock Aquifer Designations	June 2018	Annually
Environment Agency - Head Office Superficial Aquifer Designations Environment Agency - Head Office	January 2018 January 2018	Annually Annually
Source Protection Zones Environment Agency - Head Office	July 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office Flooding from Rivers or Sea without Defences	August 2019	Quarterly
Environment Agency - Head Office  Areas Benefiting from Flood Defences  Environment Agency - Head Office	August 2019 August 2019	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2019	Quarterly
Flood Defences Environment Agency - Head Office OS Water Network Lines	August 2019	Quarterly
Ordnance Survey Surface Water 1 in 30 year Flood Extent	April 2019	Quarterly
Environment Agency - Head Office Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013 October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
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 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Midlands Region	October 2008	Not Applicable
Environment Agency - Thames Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - Midlands Region - Central Area	July 2018	Quarterly
Environment Agency - Midlands Region - Lower Severn Area	July 2018	Quarterly
Environment Agency - South East Region - West Thames Area	July 2018	Quarterly
Environment Agency - Thames Region - West Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - Midlands Region - Central Area	July 2019	Quarterly
Environment Agency - Midlands Region - Lower Severn Area	July 2019	Quarterly
Environment Agency - South East Region - West Thames Area	July 2019	Quarterly
Environment Agency - Thames Region - West Area	July 2019	Quarterly
Local Authority Landfill Coverage		
Cherwell District Council - Environmental Health Department	May 2000	Not Applicable
Oxfordshire County Council	May 2000	Not Applicable
Stratford-on-Avon District Council	May 2000	Not Applicable
Warwickshire County Council	May 2000	Not Applicable
West Oxfordshire District Council - Technical Services Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Cherwell District Council - Environmental Health Department	May 2000	Not Applicable
Oxfordshire County Council	May 2000	Not Applicable
Stratford-on-Avon District Council	May 2000	Not Applicable
Warwickshire County Council	May 2000	Not Applicable
West Oxfordshire District Council - Technical Services Department	May 2000	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 - Midlands Region - Central Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Severn Area	March 2003	Not Applicable
Environment Agency - Thames Region - West Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Midlands Region - Central Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Severn Area	March 2003	Not Applicable
Environment Agency - Thames Region - West Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - Midlands Region - Central Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Severn Area	March 2003	Not Applicable
Environment Agency - Thames Region - West Area	March 2003	Not Applicable



Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		-
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Cherwell District Council	February 2016	Variable
Oxfordshire County Council	February 2016	Variable
Stratford-on-Avon District Council	February 2016	Variable
West Oxfordshire District Council	February 2016	Variable
Warwickshire County Council	July 2007	Annual Rolling Update
Planning Hazardous Substance Consents		
Cherwell District Council	February 2016	Variable
Oxfordshire County Council	February 2016	Variable
Stratford-on-Avon District Council	February 2016	Variable
West Oxfordshire District Council	February 2016	Variable
Warwickshire County Council	July 2007	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	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
CRSCR Componential District		217.111.000.19
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Cool Mining Affected Areas	7/090012011	
Coal Mining Anected Areas	March 2014	Annual Rolling Lindate
Mining Instability	October 2000	Not Applicable
	October 2000	
Non Coal Mining Areas of Great Britain	May 0045	Not Applicable
British Geological Survey - National Geoscience Information Service	May 2015	
Potential for Collapsible Ground Stability Hazards		·
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards	,	,
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards	· · · · · · · · · · · · · · · · · · ·	
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Padan Patantial Radan Affastad Areas		, an ideally
Rauon Fotential - Rauon Allected Areas	July 2014	Annually
	July 2011	Annually
Radon Potential - Radon Protection Measures	luby 2014	Appually
Draish Scological Survey - National Geoscience Information Service	July ZUTT	Annuany



Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	July 2019	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	May 2019	Quarterly
Gas Pipelines		
National Grid	July 2014	
Points of Interest - Commercial Services		
PointX	July 2019	Quarterly
Points of Interest - Education and Health		
PointX	July 2019	Quarterly
Points of Interest - Manufacturing and Production		
PointX	July 2019	Quarterly
Points of Interest - Public Infrastructure		
PointX	July 2019	Quarterly
Points of Interest - Recreational and Environmental		
PointX	July 2019	Quarterly
Underground Electrical Cables		
National Grid	December 2015	



Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt Cherwell District Council Stratford-on-Avon District Council West Oxfordshire District Council	March 2019 March 2019 March 2019	As notified As notified As notified
Areas of Unadopted Green Belt Cherwell District Council Stratford-on-Avon District Council West Oxfordshire District Council	March 2019 March 2019 March 2019	As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	March 2019	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	July 2019	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	December 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest Natural England	March 2019	Bi-Annually
Special Areas of Conservation Natural England	June 2019	Bi-Annually
Special Protection Areas Natural England	April 2019	Bi-Annually



A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	Scottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE (관소)주
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett



#### **Useful Contacts**

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Cherwell District Council - Environmental Health Department Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA	Telephone: 01295 252535 extn 4511 Fax: 01295 270028 Website: www.cherwell-dc.gov.uk
6	Oxfordshire County Council County Hall, New Road, Oxford, Oxfordshire, OX1 1ND	Telephone: 01865 792422 Fax: 01865 810106 Email: environmental.services@oxfordshire.gov.uk Website: www.oxfordshire.gov.uk
7	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

- Geotechnical Investigation and Advice
- Environmental Investigation and Advice
- Structural and Condition Surveys
- Desk Studies
- Compliance Testing of Material
- Concrete Technology
- Asbestos Survey and Management
- Insitu Testing
- Archaeological Studies and Surveys



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