



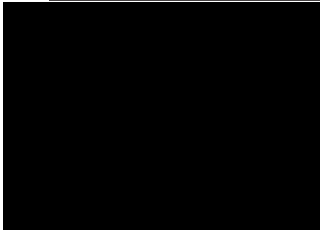
Phase I Geo-Environmental Report

Land at Hempsted Lane, Gloucester

Gladman Developments Ltd.

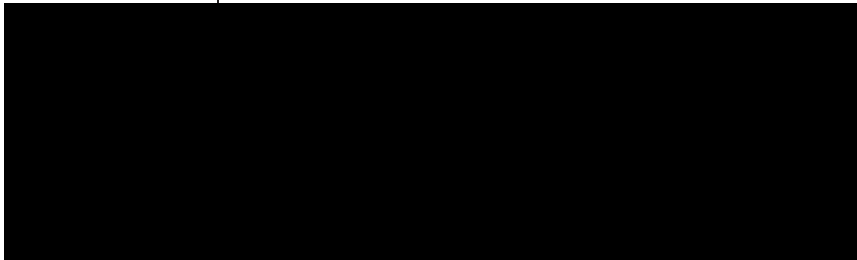
CRM.1132.021.HY.R.002.A

Contact Details:



Phase I Geo-Environmental Report for Land at Hempsted Lane, Gloucester

Project:	Land at Hempsted Lane, Gloucester
For:	Gladman Developments Ltd.
Ref:	CRM.1132.021.HY.R.002.A
Status:	Final
Date:	August 2019



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1.0 INTRODUCTION

1.1 Background

1.1.1 Enzygo Limited was commissioned by Gladman Developments Limited [the client] to prepare a Phase 1 Geo-environmental Report for a site, located off Hempsted Lane, Gloucester, GL2 5LG ('the Site').

1.2 Proposed Development

1.2.1 The proposed development is residential, with gardens, landscaping and associated infrastructure. At the time of writing a proposed development framework and/or layout had not been provided.

1.3 Objectives

1.3.1 The objectives of the study are to:

- Review historical plans, geology, hydrogeology and site sensitivity information to complete a Desk Study. A Geoenvironmental data report has been obtained, copy is included in Appendix 1;
- Assess the implications of any potential environmental risks, liabilities and development constraints associated with the Site in relation to the future use and in relation to off-site receptors;
- Conduct a comprehensive site walkover, to assess likely ground conditions;
- Provide a factual and interpretative report relating to the desk study; and
- Provide preliminary recommendations in relation to environmental risk, potential remedial options and to present an initial geotechnical assessment.

1.4 Risk Classification

1.4.1 The information was used to assess the likely risks to development from land quality issues. Definitions of the risk terms used are provided in Table 1.4.

1.4.2 Where adverse geotechnical risks are identified, these are discussed within the report.

Table 1.4 Risk Classification

Risk	Description
Dismissed	The risk has been dismissed.
Negligible	No contamination risk has been identified which is likely to affect development.
Low	No significant contaminated land risks have been encountered affecting development and a low risk that remediation will be required.
Low-Moderate	There are unlikely to be significant contaminated land issue associated with the site which will adversely affect its re-development. However, minor or localised contamination may be present requiring remediation. Remediation should be possible under a discovery strategy and with a call out service.
Moderate	Some potential contaminated land risks have been encountered or identified which may affect re- development. The risks identified are unlikely to affect the entire site or preclude development. Remediation is considered feasible as part of the development process and no further investigation is considered necessary.
Moderate-High	Some potentially significant contaminated land risks have been identified at the property that requires remediation. It is recommended that a separate remedial methodology is prepared supported by a site-specific risk assessment
High	Significant potential contaminated land risks have been identified and remediation is required supported by further intrusive ground investigation, risk assessment and remedial design.

2.0 SITE SETTING

Table 2.0 Site Description

Item	Description
Site Address	Land at Hempsted Lane, Gloucester, GL2 5LG.
National Grid Reference	381517mE 216540mN

2.1 Current Site Description

2.1.1 The following description has been compiled from an inspection of the Site, undertaken on the 19th July 2019. A Site Location Plan is included as Drawing CRM.1132.021.HY.D.001.A.

2.1.2 The Site currently comprises three agricultural fields separated by hedgerows (Figure 2.1.1). The Site is bounded by semi-mature vegetation.

2.1.3 Access is off Rea Lane to the west and Hempsted Lane to the north.

Figure 2.1.1 Site photographs (continues over page)





Top: View from southern boundary of western field, looking north. Centre: View from southern boundary of central field, looking north. Bottom: View from south-eastern corner of eastern field, looking north.

2.1.4 No tank storages have been identified on Site.

2.1.5 No overhead cables have been identified on Site.

2.1.6 An artificial basin is present in the southern area of the Site, which serves as an overflow from the Severn Trent Water surface water sewer network at the Site (Figure 2.1.2). The basin was dry and overgrown with vegetation at the time of visit. Manhole covers were also observed between the basin and watercourse during the Site walkover, which are likely to indicate a connection between the basin and watercourse. The manholes are likely associated with the

Severn Trent Water surface water sewer in the east of the Site directing flows south towards Black Ditch, which flows along the Site southern boundary.

Figure 2.1.2 Basin



2.1.7 At the time of writing no topographical survey was available for the Site. So, 2 metre DTM LIDAR data was used to indicate Site elevations and gradients. Figure 2.1.3 shows the Site topography with indicative slope direction. The Site falls south-west from 25 metres Above Ordnance Datum (m AOD) along the north-eastern boundary to 8m AOD in the southernmost corner. The fall of 17m over 380m gives a gradient of 1:22.

Figure 2.1.3 Topography of the Site Based on LiDAR



Contains OS data © Crown Copyright and Database right (2019)

2.2 Surrounding Area

2.2.1 Land uses surrounding the Site are summarised as follows:

Table 2.2 Land Use Surrounding the Area

Direction	Land Use
North- East	Hempsted Lane and residential dwellings of Gloucester.
South- East	The A430 followed by a vehicle repair shop beyond.
South- West	A watercourse and hedgerow with agricultural land beyond.
North- West	Rea Lane with agricultural land beyond.

3.0 SITE HISTORY

3.1 Historical Maps

3.1.1 A review of historical Ordnance Survey maps and information pertinent to the Site and within a 250m radius is summarised below:

Table 3.1 Historical Maps

Potentially Contaminative Historical Land Use		
Map Edition	Site	Surrounding Area (approximate distances)
1883	Agricultural fields 3 small buildings Small pond in the east	Gloucester and Berkeley Canal 125m east Gas works 400m south-east Reservoir 1m west Well 400m west River Severn 400m west Pond 300m north-west 4 ponds 250m north
1901	No significant change	Well 400m west no longer shown Well 500m north Reservoir 350m north
1924	No significant change	Reservoir 350m north no longer labelled Factory 100m east
1938	No significant change	Reservoir 1m west no longer shown
1954	No significant change	No significant change
1961	No significant change	No significant change
1971	No significant change	No significant change
1975	No significant change	Well 500m north no longer shown Factory 100m east moved locations south Significant urban expansion to north
1988	Loss of field boundaries	No significant change
1994	No significant change	No significant change
2002	No significant change	No significant change
2014	Pond to south	Gas works 400m south-east no longer shown Pond 300m north-west no longer shown

3.1.2 It is considered that there is no significant risk from potential off-site sources of contamination associated with the canal, gasworks, wells or ponds located close to the Site.

3.1.3 It is considered that there is no significant risk from ground gas ingress associated with potential made ground off-Site.

3.1.4 No other significant risks are identified from the available historic mapping.

4.0 ENVIRONMENTAL SETTING

4.1 Ground Conditions

4.1.1 The British Geological Survey (BGS) indicates that the Site is underlain by the following geological sequence:

Table 4.1 Geological Sequence

Geological Unit	Type	Descriptions	Aquifer Classification
Superficial	Kidderminster Station Member	Sand and gravel	Secondary (A) Aquifer (Permeable)
	Tidal Flat Deposits	Clay, silt and sand	Secondary (Undifferentiated)
Bedrock	Blue Lias Formation and Charmouth Mudstone Formation	Mudstone	Secondary (Undifferentiated)

4.1.2 No faults are recorded with 250m of the Site.

4.1.3 There are no records of landslips within 250m of the Site.

4.1.4 There is one exploratory hole record within 250m of the Site, located 14m south-east. The borehole has restricted access.

4.2 Groundwater

4.2.1 The permeability of the bedrock geology is recorded as low, reflecting the clayey nature of the mudstone. The permeability of the superficial deposits is likely to be variable based on the mixed strata.

4.2.2 The Site is not located within Source Protection Zone (SPZ).

4.2.3 There are no current groundwater and surface water abstraction licenses within 250m of the Site.

4.3 Coal Mining

4.3.1 The Site is not within a Coal Authority Reporting Area and there are no coal mining areas within 250m.

4.4 Non-Coal Mining and Cavities

4.4.1 There are no records of non-coal mining within 250m of the Site.

4.4.2 There are no non-coal mining and natural cavities identified within 250m of the Site.

4.5 Ground Workings

4.5.1 There are no active current ground workings within 250m of the Site.

4.5.2 No new risks are identified from the register of ground workings.

4.6 Hydrology

4.6.1 In addition to the basin in the south extent, dry at the time of visit there is a land drain along the south-western Site boundary and 14 drains within 250m of the Site.

4.6.2 An outline drainage strategy is to be undertaken by Enzygo, reported under separate cover (CRM.1132.021.HY.R.001).

4.7 Radon Risk Potential

4.7.1 The Groundsure Geo Insight report indicates that the Site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level. No radon protective measures are considered necessary by the British Geological Survey.

4.8 Natural Hazards Finding

4.8.1 BGS information presented within the Groundsure report identified the following ground conditions:

Table 4.8 Natural Hazards

Hazard	Risk Designation (Groundsure)
Collapsible Ground	Very Low
Compressible Ground	Moderate
Ground Dissolution	Negligible
Landslide	Very Low
Running Sand	Moderate
Swelling / Shrinking Clay	Low

4.8.2 No significant risks are identified.

4.9 Sensitive Land Uses

4.9.1 No Environmentally Sensitive Areas have been identified within 250m of the Site.

4.10 Unexploded Ordnance (UXO)

4.10.1 The UXO Risk Map (Appendix 2) indicates that the Site is within a low risk area.

4.11 Environmental Sensitivity

4.11.1 The Site is currently considered to be of low environmental sensitivity due to the following:

- The underlying strata are designated as a Secondary Aquifer;
- it is not located within a groundwater SPZ; and
- There are no environmentally sensitive areas on or adjacent to the Site.

4.12 Industrial Land Uses

4.12.1 There are 15 current industrial land uses within 250m of the Site, the closest is 68m south-east; listed as vehicle repair, testing and servicing and is not considered to pose a risk to the Site.

4.12.2 There is a fuel station with 250m of the Site, located 236m south-east and not considered to pose a risk to the Site.

4.12.3 There are no records of National Grid High Voltage Underground Electricity Transmission Cables within 250m of the Site.

4.12.4 There are no records of National Grid high pressure gas transmission pipelines within 250m of the Site.

4.12.5 There is, however, a National Grid high pressure gas main pipeline shown to be located approximately 34m south west of the Site at its closest point (see Appendix 3).

4.12.6 No new risks are identified from the register of industrial land uses.

4.13 Regulatory Database

4.13.1 The following information has been obtained from the appended Enviro Insight report.

Table 4.12 Regulatory Database

Environmental Permits, Incidents and Registers	0-250m	250-500m	Details
Site determined as contaminated land	0	0	Not Applicable
Authorised industrial processes	0	0	Not Applicable
Registered radioactive substances	0	0	Not Applicable
Records of Part A (2) and Part B Activities	5	7	Only one current permit within 250m (234m east); for non-ferrous metal foundry processes.
Enforcements, prohibitions or prosecutions	0	0	Not Applicable
Pollution Incidents	9	6	Three located on Site in 2001. Minor impact on land and water.
List 1 Dangerous Substance Inventory Sites	0	1	Not active- the risk to the Site is dismissed
List 2 Dangerous Substance Inventory Sites	0	1	Active. Flows into Black Ditch. Authorised Iron, pH
Consents issued under the Planning (Hazardous Substances) Act 1990	0	2	One approved, but no enforcement- the risk to the Site is dismissed.
Control of Major Accident Hazard (COMAH)/ Notification of Installations Handling Hazardous Substances (NIHHS) sites	0	3	All historical sites.
Records of Licensed Discharge Consents	3	5	Only two current licenses, which are for sewerage.

4.13.2 No new risks are identified from the regulatory database, which have not been previously discussed in this report.

4.14 Landfill Sites and Waste Treatment Sites

4.14.1 One historic landfill is located 222m to the south-east, with no listed waste type. This not considered to pose a risk due to the distance from the Site.

4.14.2 No current landfills are identified within 250m of the Site.

4.14.3 Three records of active licensed waste sites of waste treatment, transfer or disposal within 250m of the Site have been identified. These sites are listed as scrap metal yards.

5.0 PRELIMINARY ASSESSMENT

5.1 Preliminary Conceptual Model

5.1.1 Based on the information obtained the following Preliminary Conceptual Model has been prepared:

Table 5.1 Preliminary Conceptual Model

Source	Location	Exposure Pathway	Potential Receptor	Probability of Exposure	Details
Human Health					
Asbestos, metals and hydrocarbons	Unforeseen Contamination	Ingestion dermal and inhalation	Construction Workers	Dismissed	Standard construction PPE will address risk under CDM 2015 Regulations
			Site users	Negligible	Discovery strategy
Asbestos, metals and hydrocarbons	On-site sources	Ingestion dermal and inhalation	Construction Workers	Negligible	No likely significant sources
			Site users		
Hydrocarbon and metals	Migration from off-site sources	Ingestion dermal and inhalation	Construction Workers	Negligible	No likely significant sources
			Site users		
Ground Gas	Made Ground/Potentially Infilled Ground	Asphyxiant, Toxic & Explosive	Construction Workers	Negligible	Historic landfill located 222m to the south-east of the Site.
			Site users		
Radon	Natural Soils	Inhalation	Construction Workers	Dismissed	No radon protective measures are considered necessary by the British Geological Survey; therefore, the risk is dismissed
			Site Users		
Groundwater					
Hydrocarbon and metals	Unforeseen Contamination	Vertical Migration	Groundwater	Dismissed	No likely significant sources
Surface Water					
Hydrocarbon and metals	Unforeseen Contamination	Horizontal Migration	River Network	Low	One watercourse along the south-western Site boundary.
Environmental Receptors					
Onsite contaminants		Ingestion dermal and inhalation	Ecology	Dismissed	No receptor
		Direct	Archaeology	Dismissed	No receptor
		Direct	Geology	Dismissed	No receptor
		Phytotoxic	Woodland	Dismissed	No receptor
		Phytotoxic	Crops	Dismissed	No receptor
		Ingestion dermal and inhalation	Livestock	Dismissed	No receptor
Building Services					
Onsite contaminants		Direct	Proposed Buildings	Dismissed	No sources identified
		Permeate into pipework	Water Pipes	Dismissed	No sources identified

6.0 DISCUSSION AND RECOMMENDATIONS

- 6.1.1** The Site is considered to present a negligible to low contamination risk.
- 6.1.2** It is considered that conventional foundations will be suitable for residential properties. Cohesive weathered strata are likely to be present, with foundations designed accordingly, following NHBC Guidance.
- 6.1.3** Based on the likely ground conditions soakaway drainage is not considered suitable due to low infiltration potential.
- 6.1.4** A Phase 2 ground investigation should be undertaken to provide information for proposed residential development. This may be undertaken post-planning, covered by a suitably worded condition.

CRM.1132.021.HY.D.001.A - Site Features Plan



NOTES

1. Do not scale from this drawing.
2. All dimensions are in meters.
3. This drawing is to be read in conjunction with all relevant documentation.
4. All surveyed information including levels and layout is provided by others.
5. All existing and proposed dimensions, levels and locations to be checked and verified by the main contractor on site prior to the commencement of the works and any anomalies reported to the engineer.

Key:

- Site Boundary
- ← Direction of Photograph
- Photograph Location
- Site Access
- = Overhead Powerlines

A	22/07/19	First Issue	HDR	BF	PH
REV:	DATE:	DETAIL:	DES:	CHK:	APP:



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT:
Gladman Developments Limited

PROJECT:
Hempstead Lane, Gloucester

DRAWING TITLE:
Site Features Plan

DRAWN: HDR	DESIGNED: HDR	CHECKED: BF	APPROVED: PH
---------------	------------------	----------------	-----------------

DATE:
22/07/2019

SCALE @ A3:
Not to scale

PROJECT NO.:
CRM.1132.021

DRAWING NO.:
001

DRAWING STATUS:
FOR INFORMATION

ISSUE:
A

Appendix 1 – Emapsite Dataset



emapsite

Report Reference: EMS-553373_744046

Building A2 Office 1052 Cody Technology Park,
Old Ively Road,
Farnborough, GU14 0LX

Your Reference: EMS_553373_744046

Report Date 2 Jul 2019

Report Delivery Method: Email - pdf

Geo Insight

Address: Hempsted Lane, Gloucester, Hempsted Lane, Gloucester, GL2 5JA,

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.
Groundsure Geo Insight

Geo Insight

Address: Hempsted Lane, Gloucester, Hempsted Lane, Gloucester, GL2 5JA,
Date: 2 Jul 2019
Reference: EMS-553373_744046
Client: emapsite

NW N NE

W E



SW S SE

Aerial Photograph Capture date: 14-May-2018
Grid Reference: 381514,216535
Site Size: 12.5218ha

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Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Geology 1:10,000 Scale

1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	No

Section 2: Geology 1:50,000 Scale

2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

No

Section 3: Radon

3. Radon

3.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

Section 4: Ground Workings

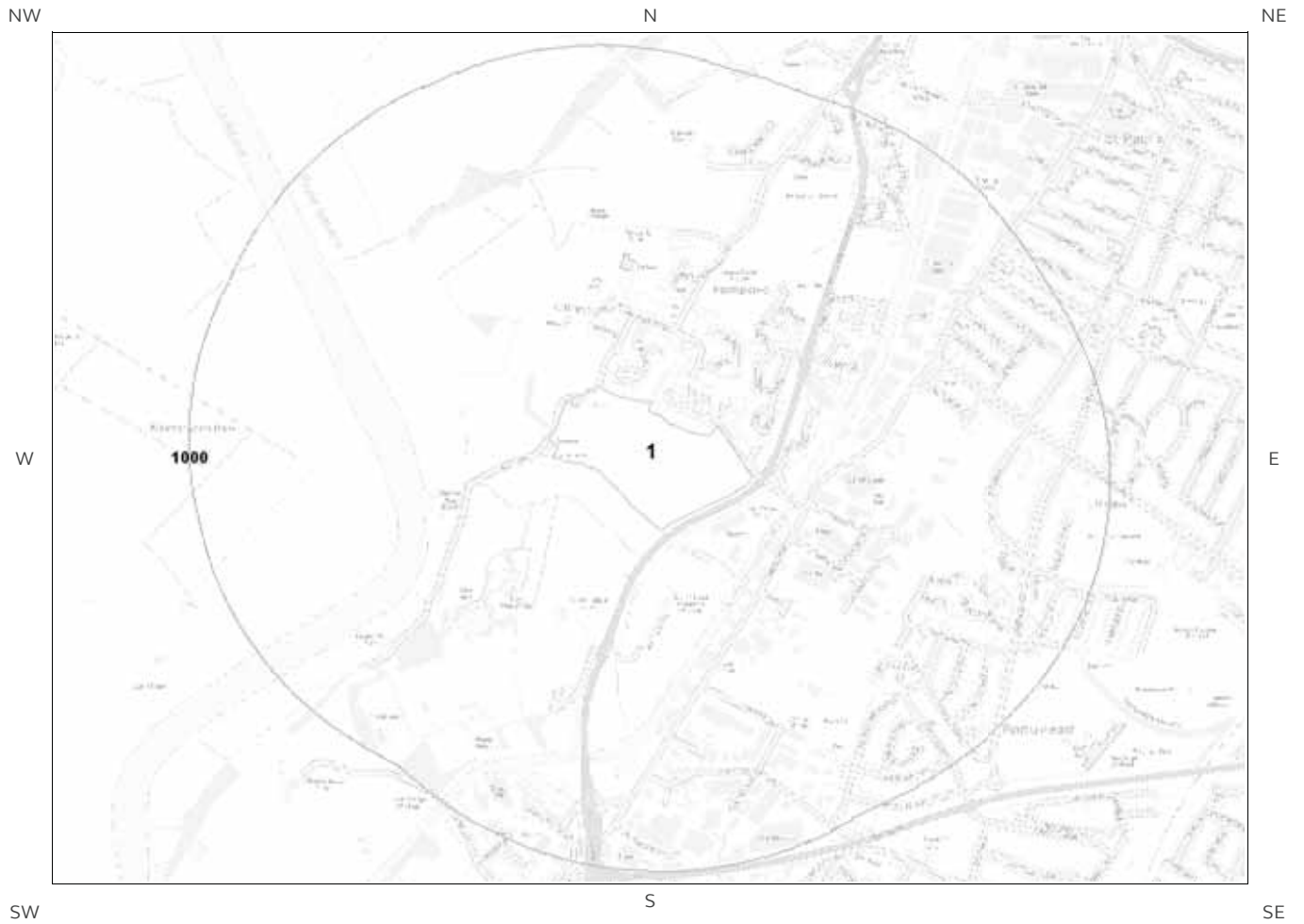
	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	4	19	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	0
4.3 Current Ground Workings	0	0	0	0	1

Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	0	0	0	0	0
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

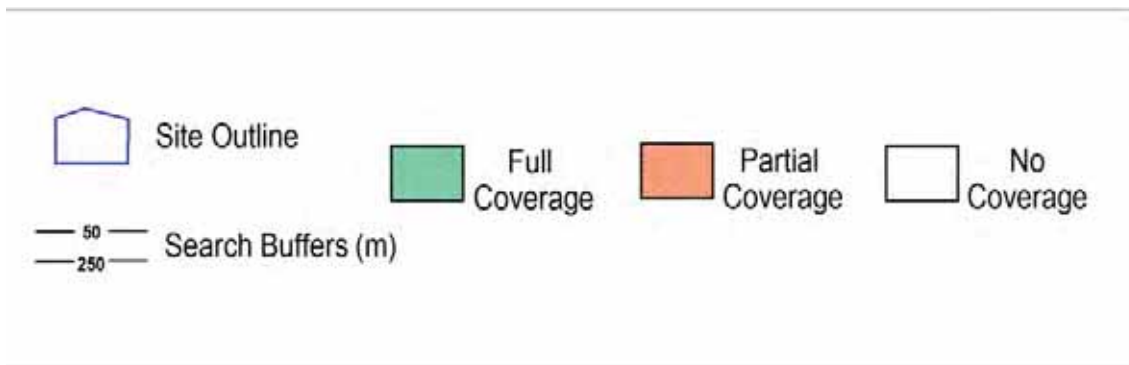
Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Cornwall and Devon Metalliferous Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Low				
6.2 Landslides	Very Low				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Moderate				
6.5 Collapsible Deposits	Very Low				
6.5 Running Sand	Moderate				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	0	1	0		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	9	0	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	0	0	12	Not Searched	
9.3 Historical Railways	0	0	0	Not Searched	
9.4 Active Railways	0	0	0	Not Searched	
9.5 Railway Projects	0	0	0	0	

1:10,000 Scale Availability



1_10,000 Availability Legend

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Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	No deposits are mapped	No coverage	No coverage	No coverage

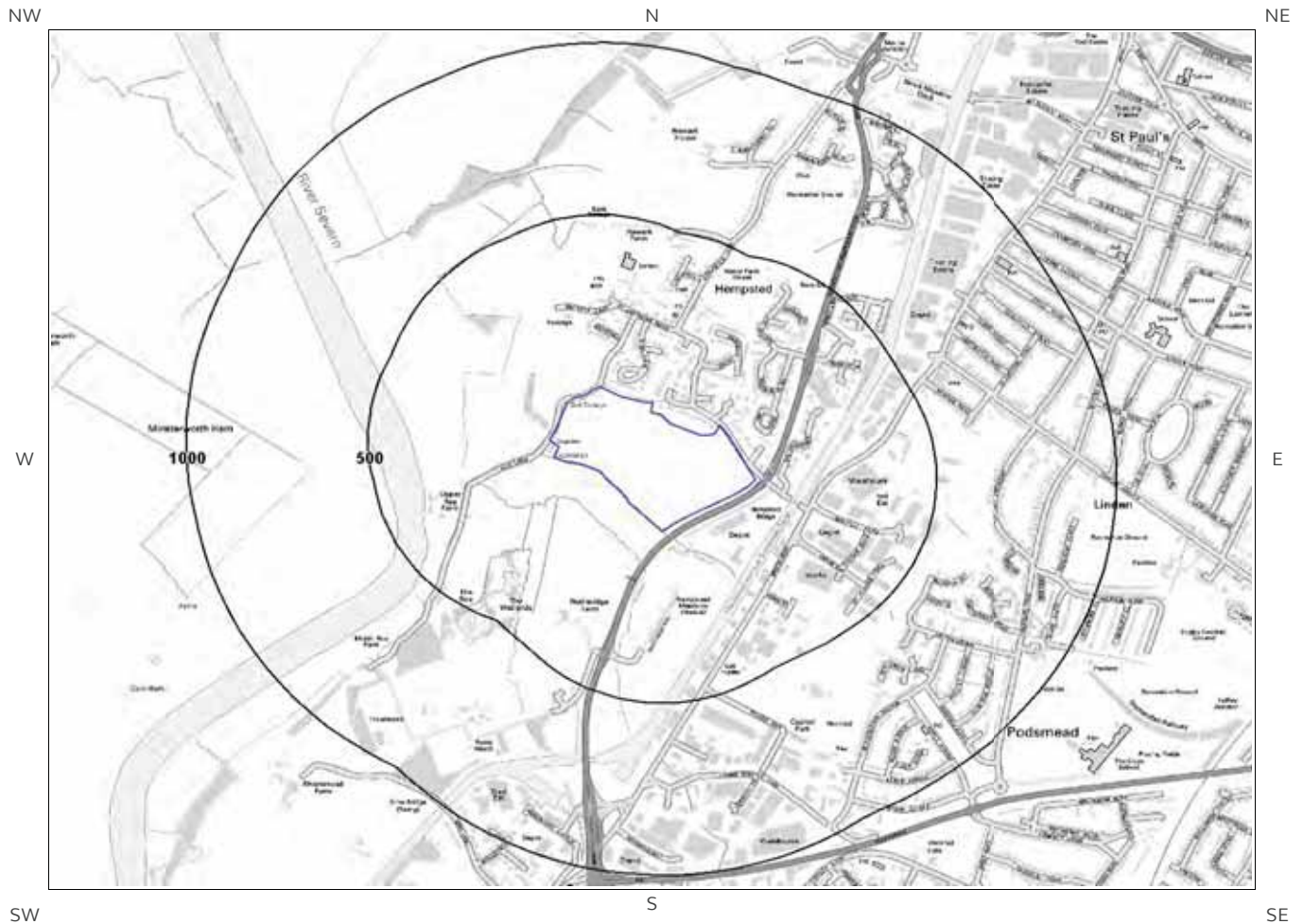
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Artificial Ground Legend

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1. Geology 1:10,000 scale

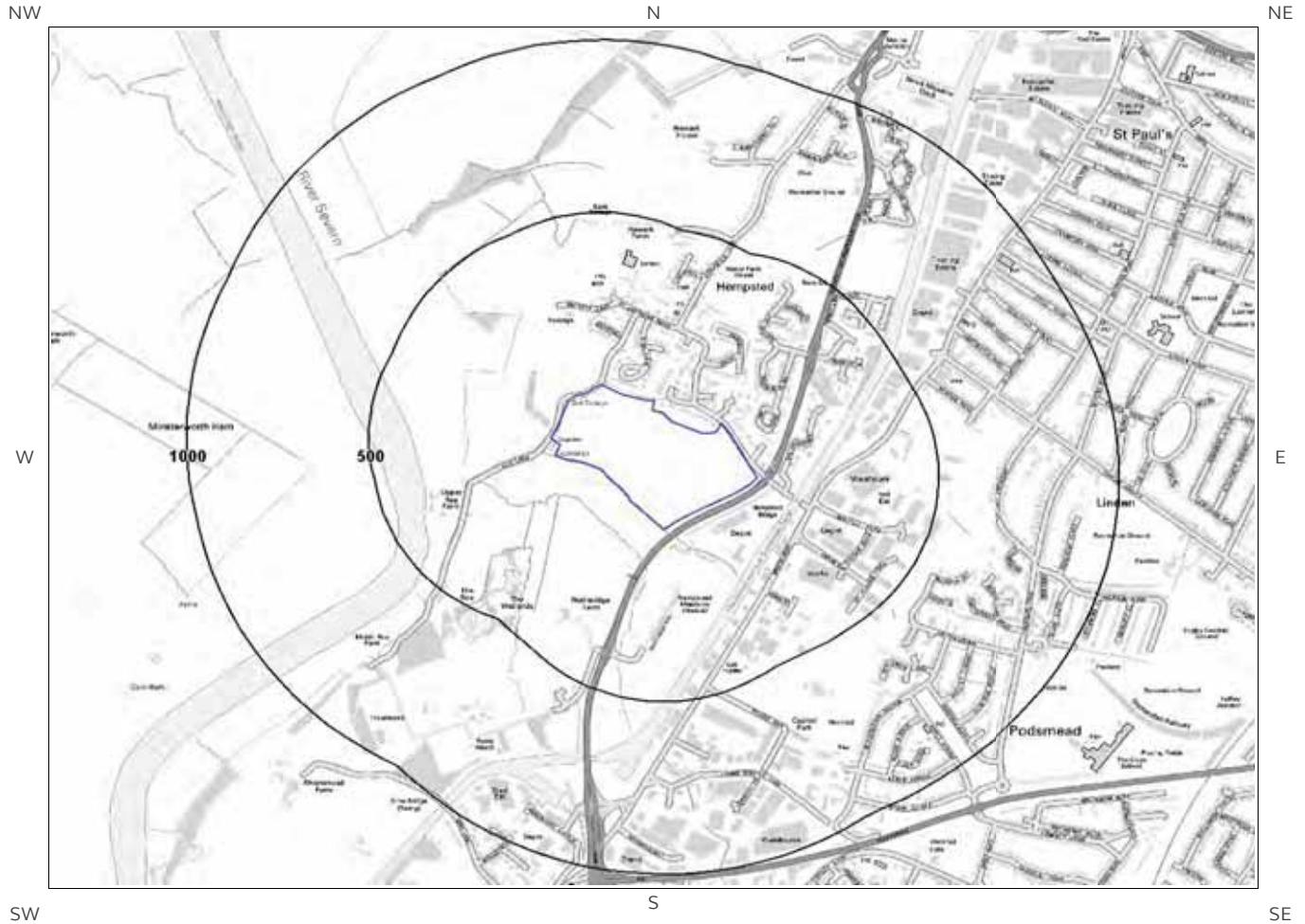
1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

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-  Site Outline
 -  500
 -  1000
- Search Buffers (m)

1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

1.2.2 Landslip

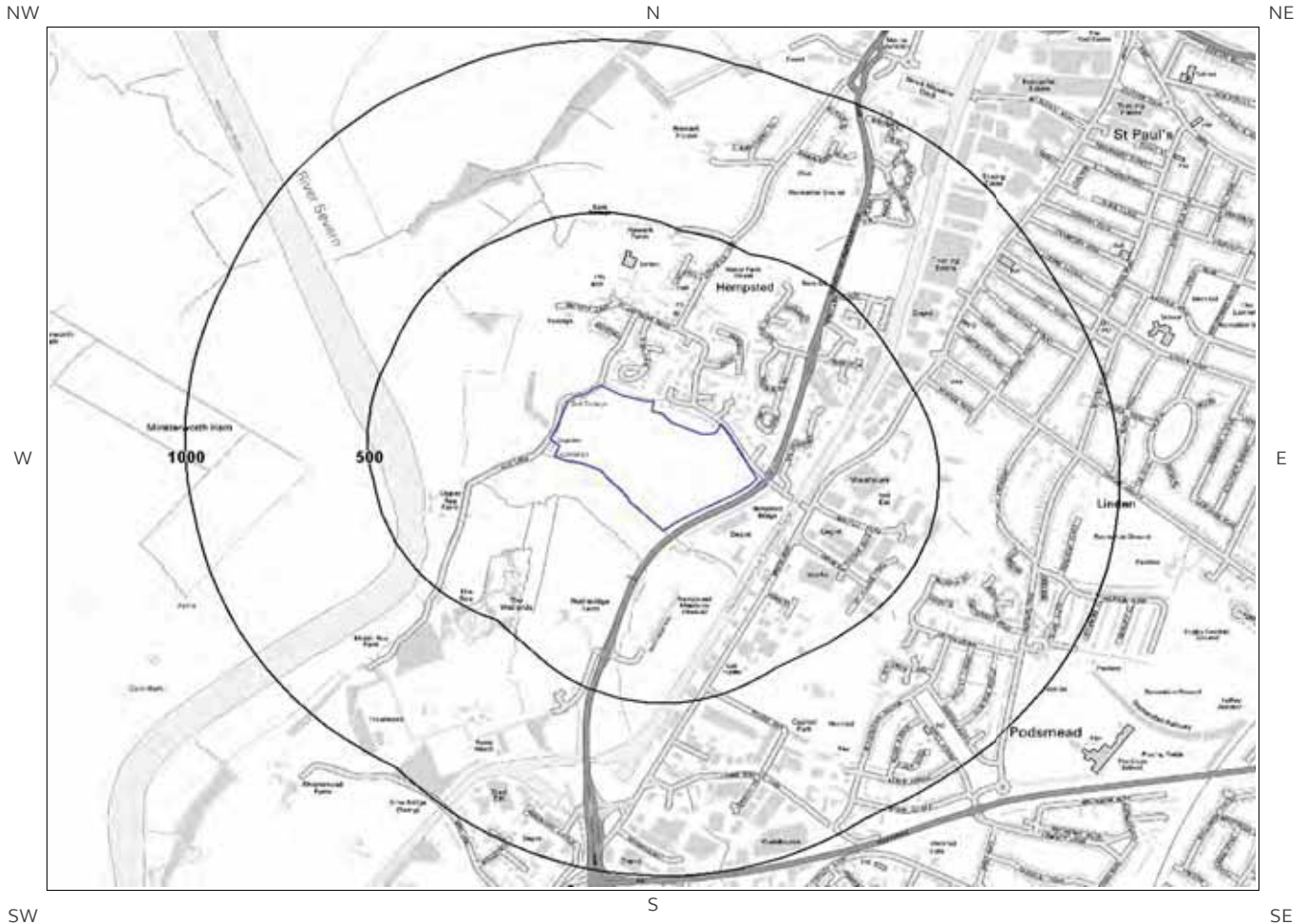
Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

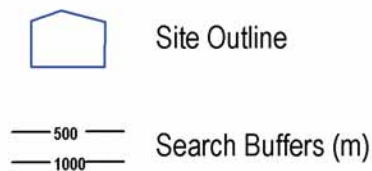
This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

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1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

Database searched and no data found at this scale.

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? No

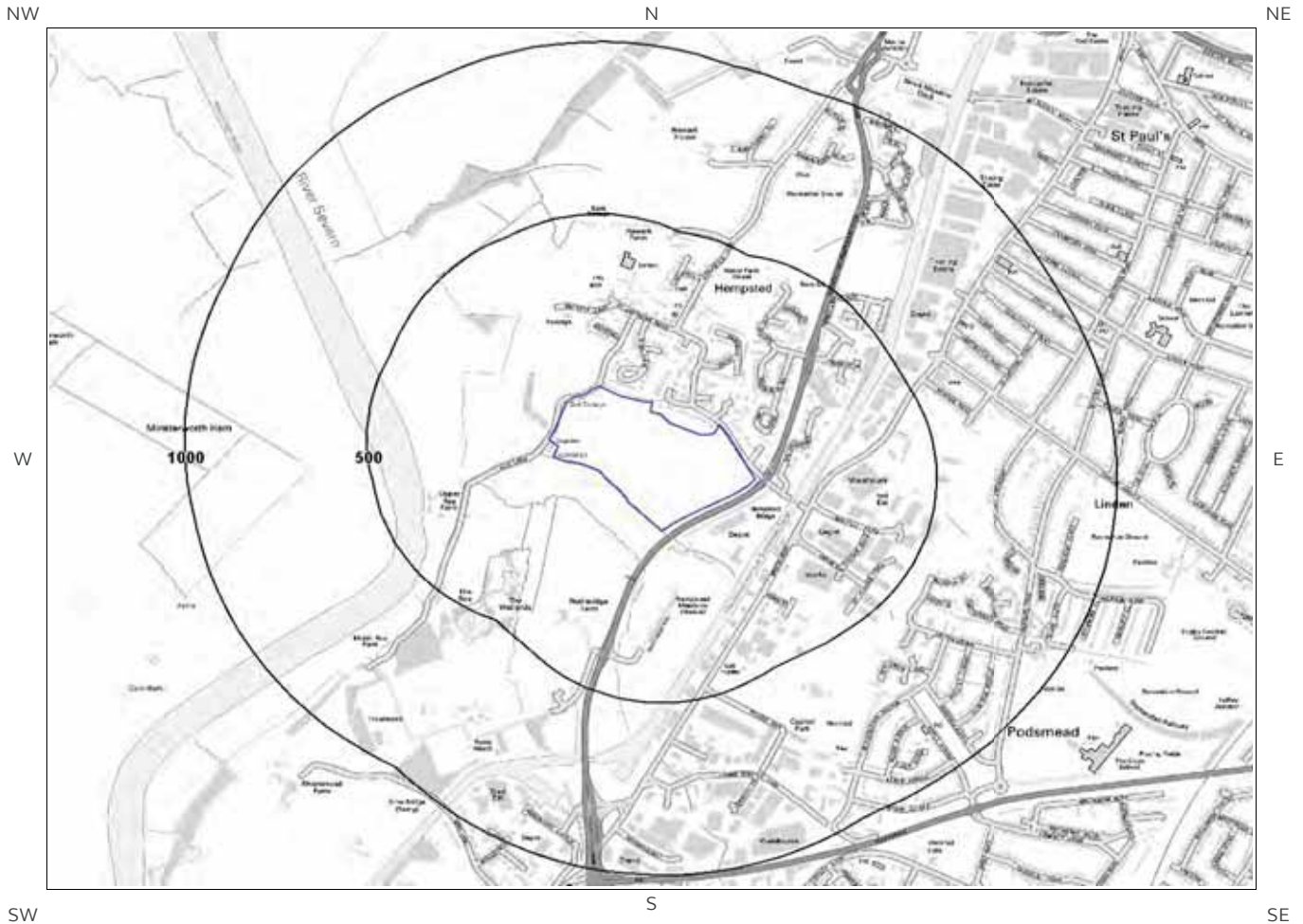
Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

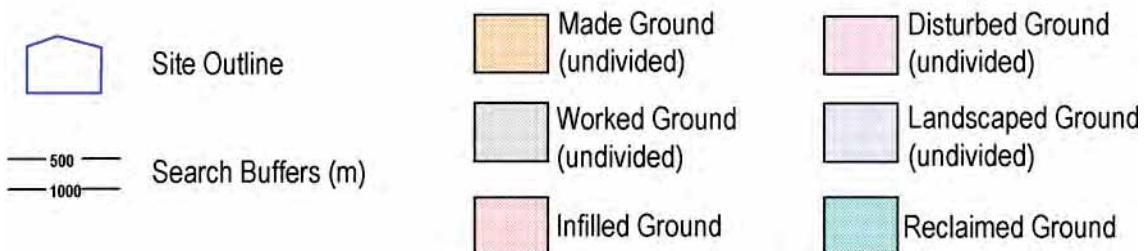
This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 234

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? No

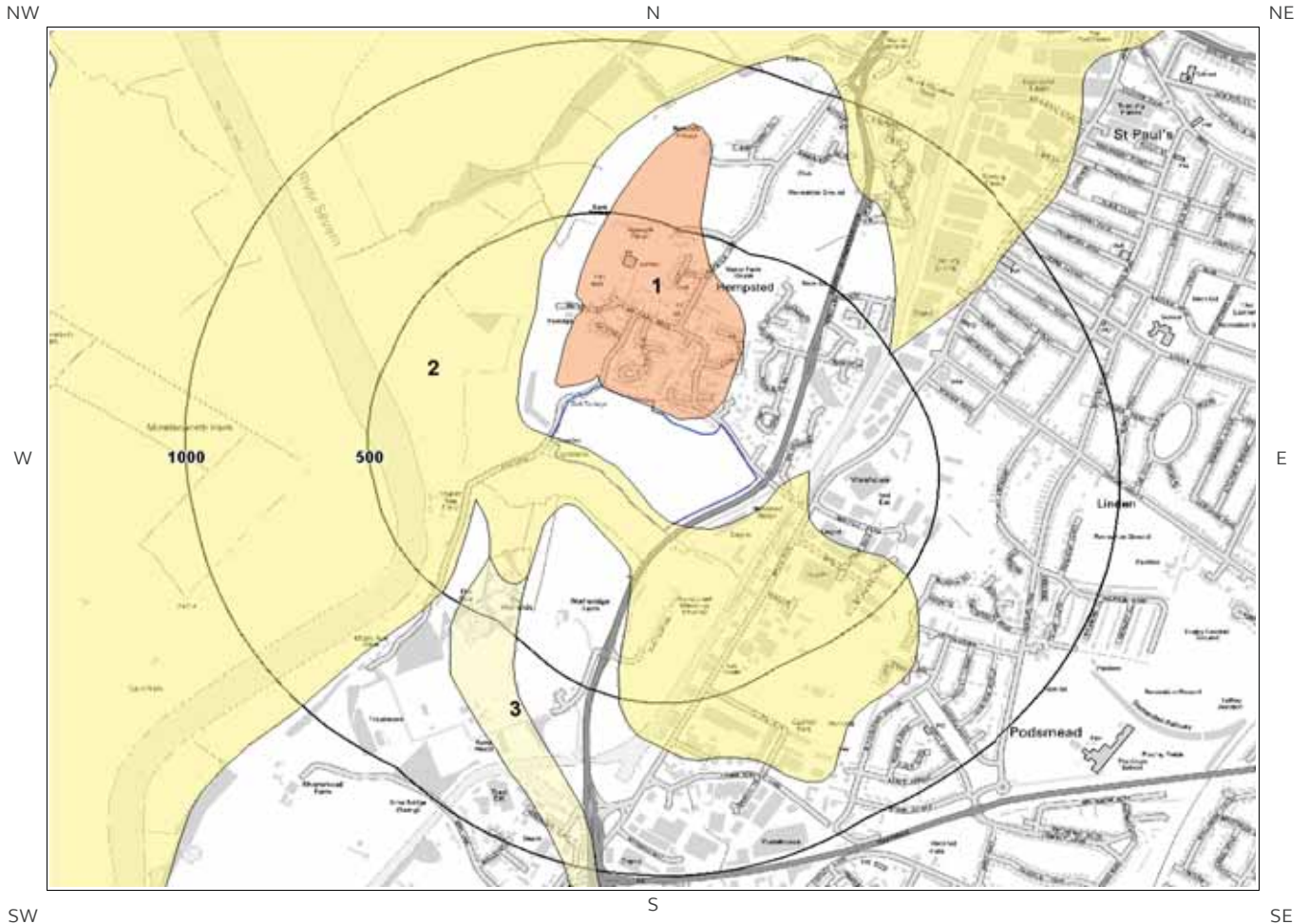
Database searched and no data found.

2.1.2 Permeability of Artificial Ground

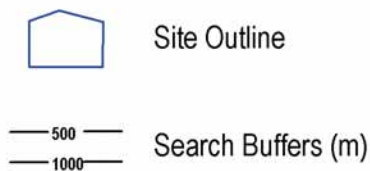
Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.

2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	KRT-XSV	KIDDERMINSTER STATION MEMBER	SAND AND GRAVEL
2	0.0	On Site	TFD-XCZS	TIDAL FLAT DEPOSITS	CLAY, SILT AND SAND
3	340.0	SW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	Very High	High
0.0	On Site	Intergranular	Moderate	Very Low

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

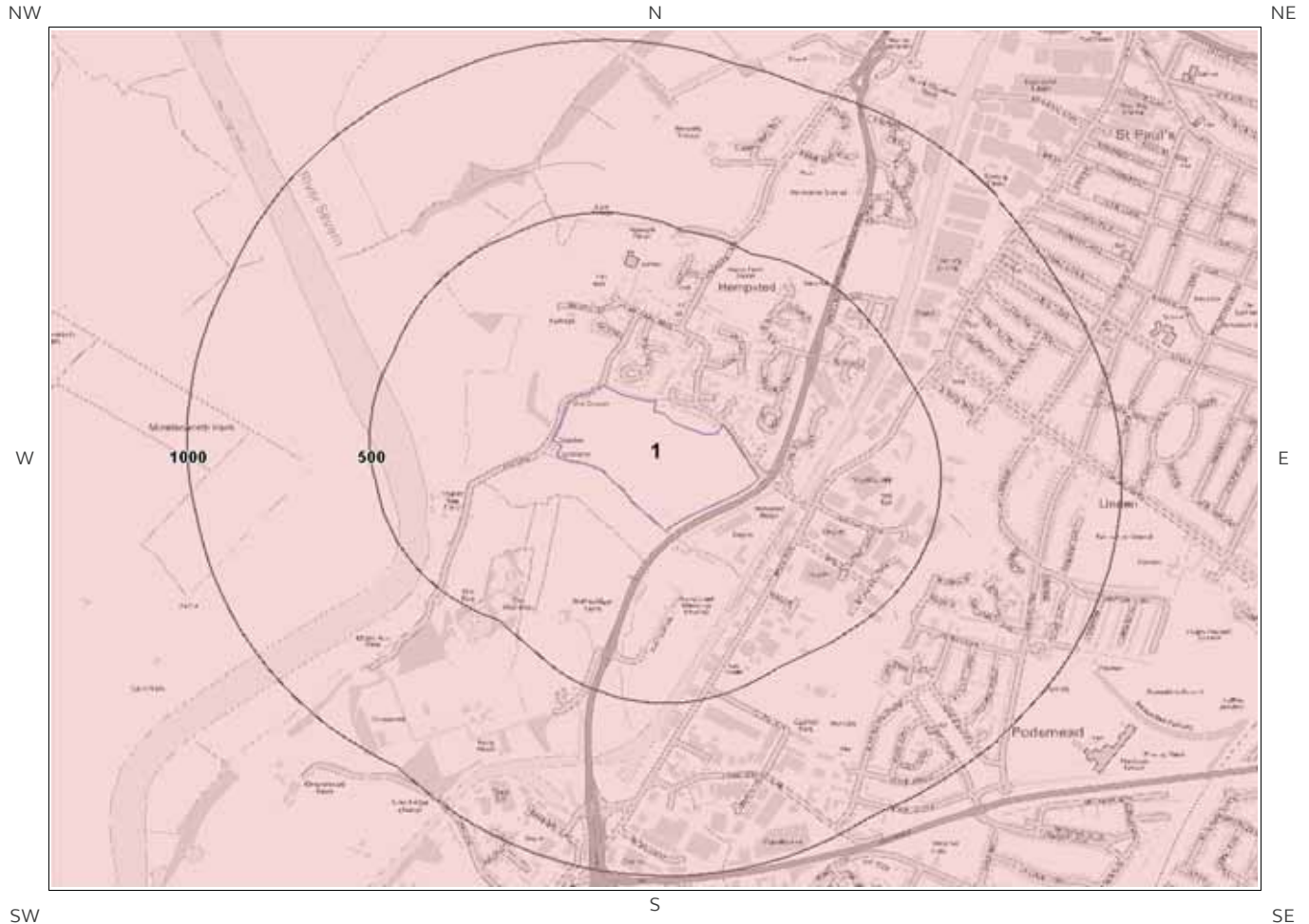
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

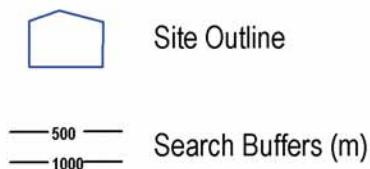
Are there any records relating to permeability of landslips within the study site boundary? No

Database searched and no data found.

2.3 Bedrock and linear features map (1:50,000 scale)



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2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 234

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	BLCR-MDST	BLUE LIAS FORMATION AND CHARMOUTH MUDSTONE FORMATION (UNDIFFERENTIATED) - MUDSTONE	RHAETIAN

2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Low	Low

2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.

3 Radon Data

3.1 Radon Affected Areas

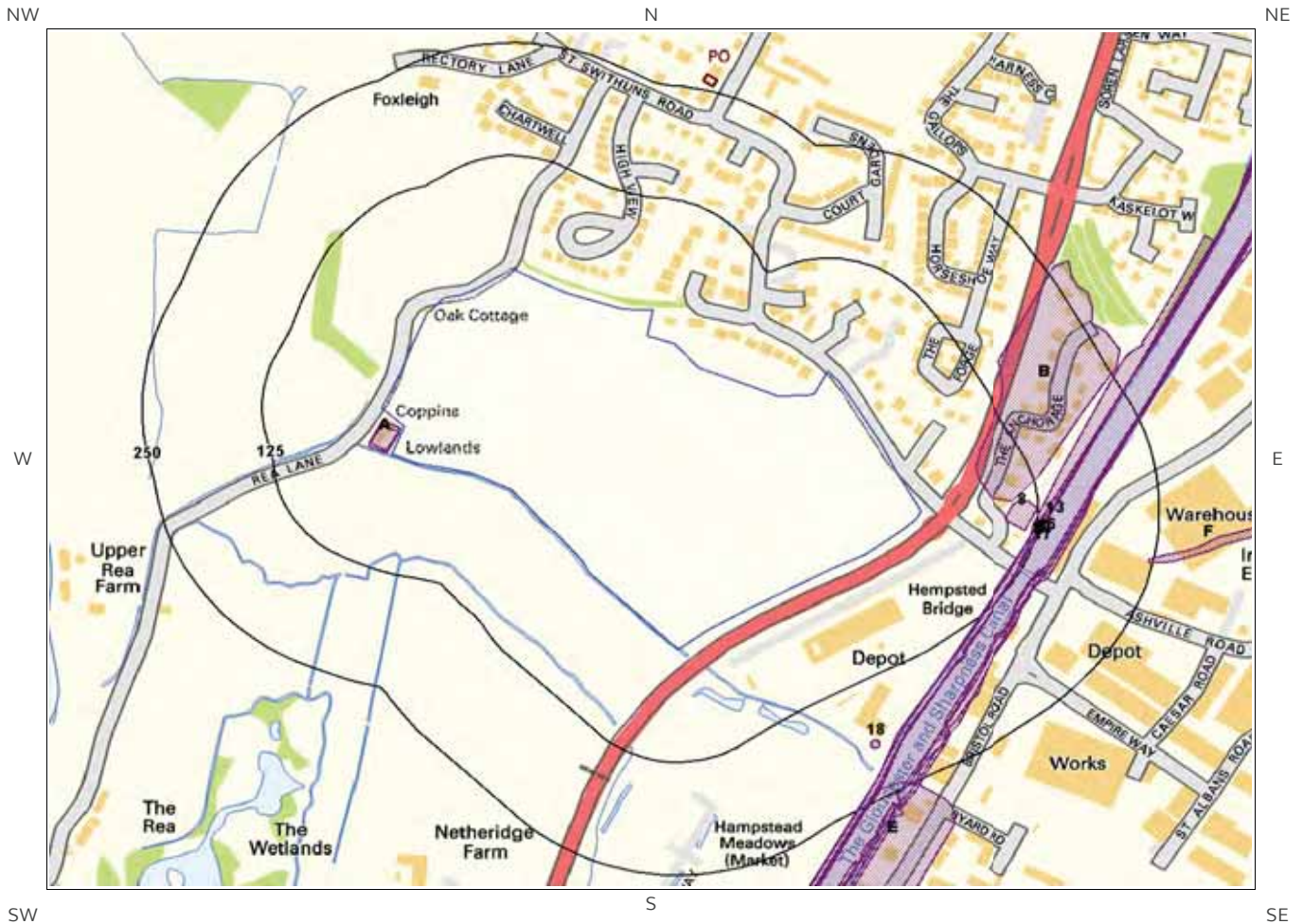
Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

3.2 Radon Protection





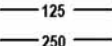
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

4 Ground Workings map



Ground Workings Legend

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-  Site Outline
-  Historic Surface Ground Workings
-  Historic Underground Workings
-  Current Ground Workings
-  Search Buffers (m)

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1A	2.0	NW	381241 216550	Pond	1924
2A	2.0	NW	381241 216550	Pond	1938
3A	2.0	NW	381241 216550	Reservoir	1901
4A	3.0	NW	381242 216554	Reservoir	1883
5B	69.0	NE	381935 216614	Unspecified Heap	1994
6B	69.0	NE	381935 216614	Unspecified Heap	1988
7B	69.0	NE	381935 216614	Unspecified Heap	1973
8	92.0	E	381910 216466	Unspecified Pit	1901
9	114.0	SE	382105 216748	Canal	1973
10C	115.0	SE	382105 216748	Canal	1988
11C	115.0	SE	382105 216748	Canal	1994
12	116.0	SE	381959 216489	Canal	1883
13	120.0	E	381961 216491	Canal	1924
14D	120.0	SE	381967 216491	Canal	1901
15D	120.0	SE	381967 216491	Canal	1938
16	120.0	SE	381967 216491	Canal	1924
17	122.0	SE	382105 216748	Canal	1960
18	189.0	SE	381754 216212	Filter Bed	1973
19E	241.0	SE	381722 216012	Dry Dock	1924
20E	241.0	SE	381722 216012	Dry Dock	1901
21E	241.0	SE	381722 216012	Dry Dock	1938

ID	Distance (m)	Direction	NGR	Use	Date
22F	245.0	E	382107 216433	Refuse Heap	1924
23F	245.0	E	382107 216433	Refuse Heap	1924

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? No

Database searched and no data found.

4.3 Current Ground Workings

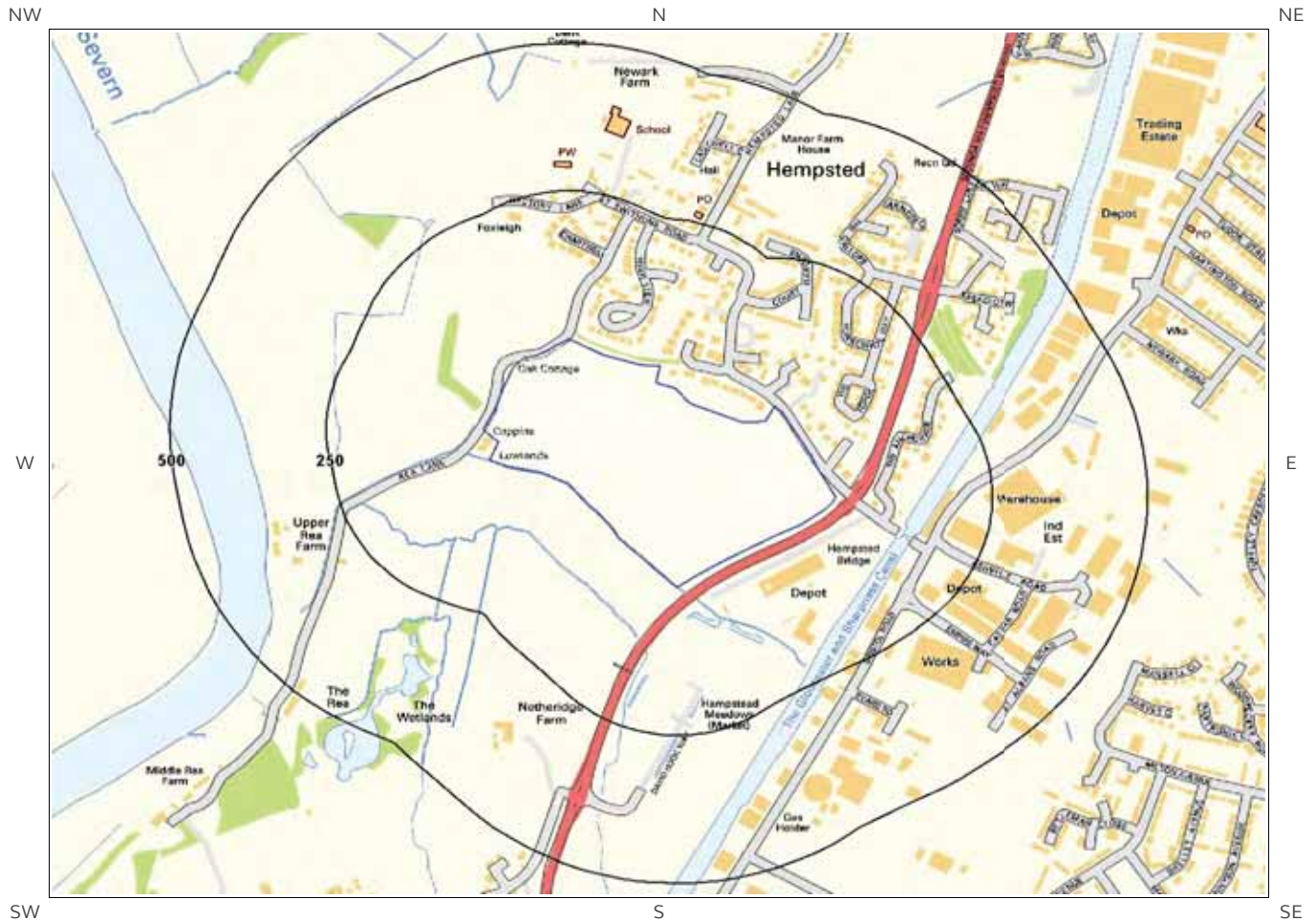
This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

The following Current Ground Workings information is provided by British Geological Survey:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	565.0	E	382357 216364	Marble	Manu Marble Works	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

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5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.9 Cornwall and Devon Metalliferous Mining

This dataset provides information on metalliferous mining areas in Cornwall/Devon and is derived from records held by Mining Searches UK.

Are there any Cornwall and Devon Metalliferous Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

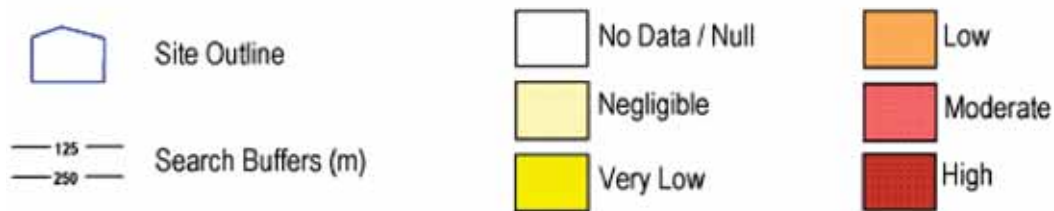
6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map

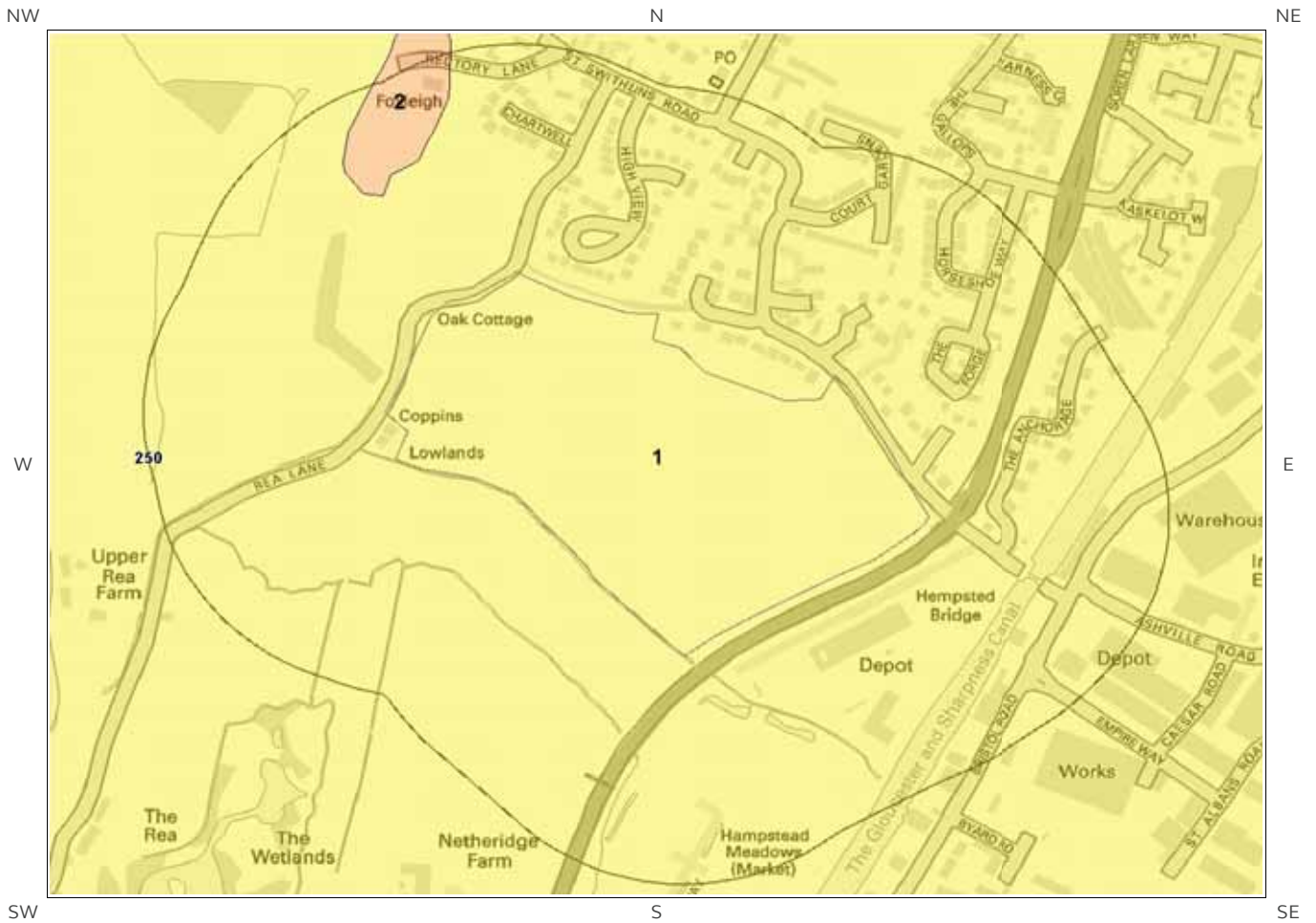


Shrink Swell Clay Legend

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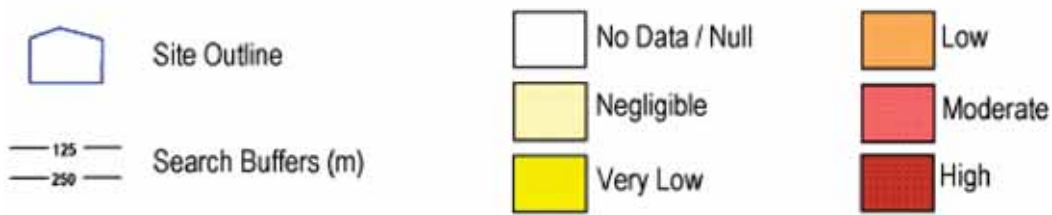


6.2 Landslides map

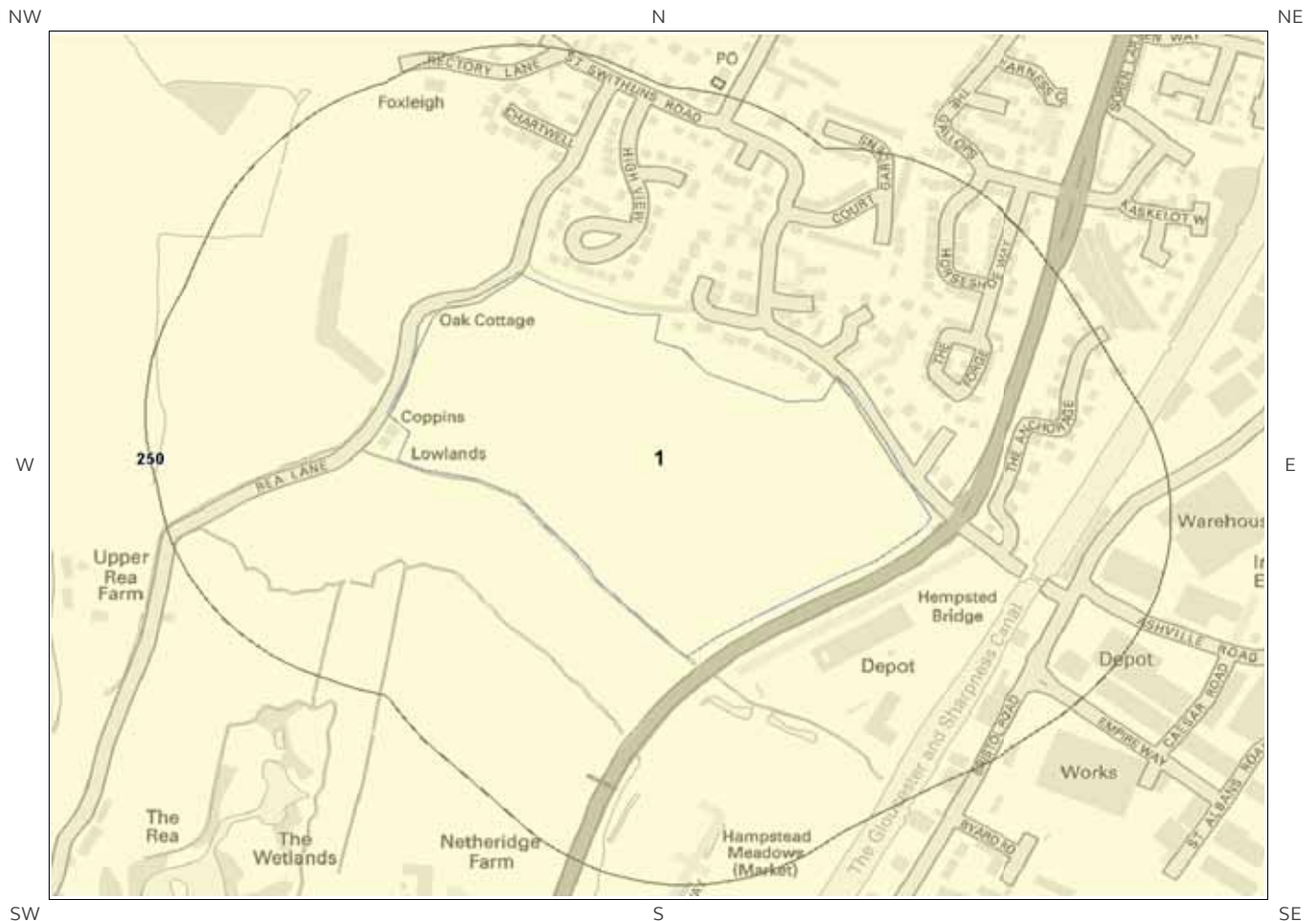


Landslides Legend

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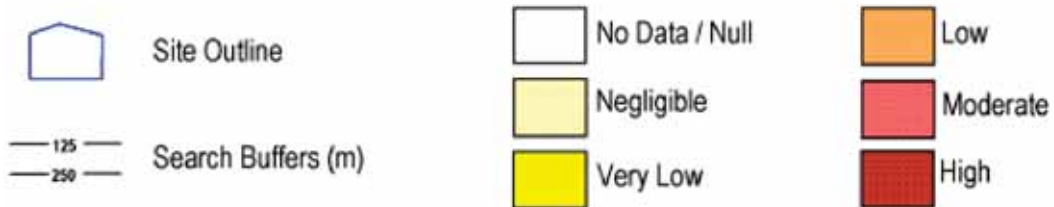


6.3 Ground Dissolution of Soluble Rocks map

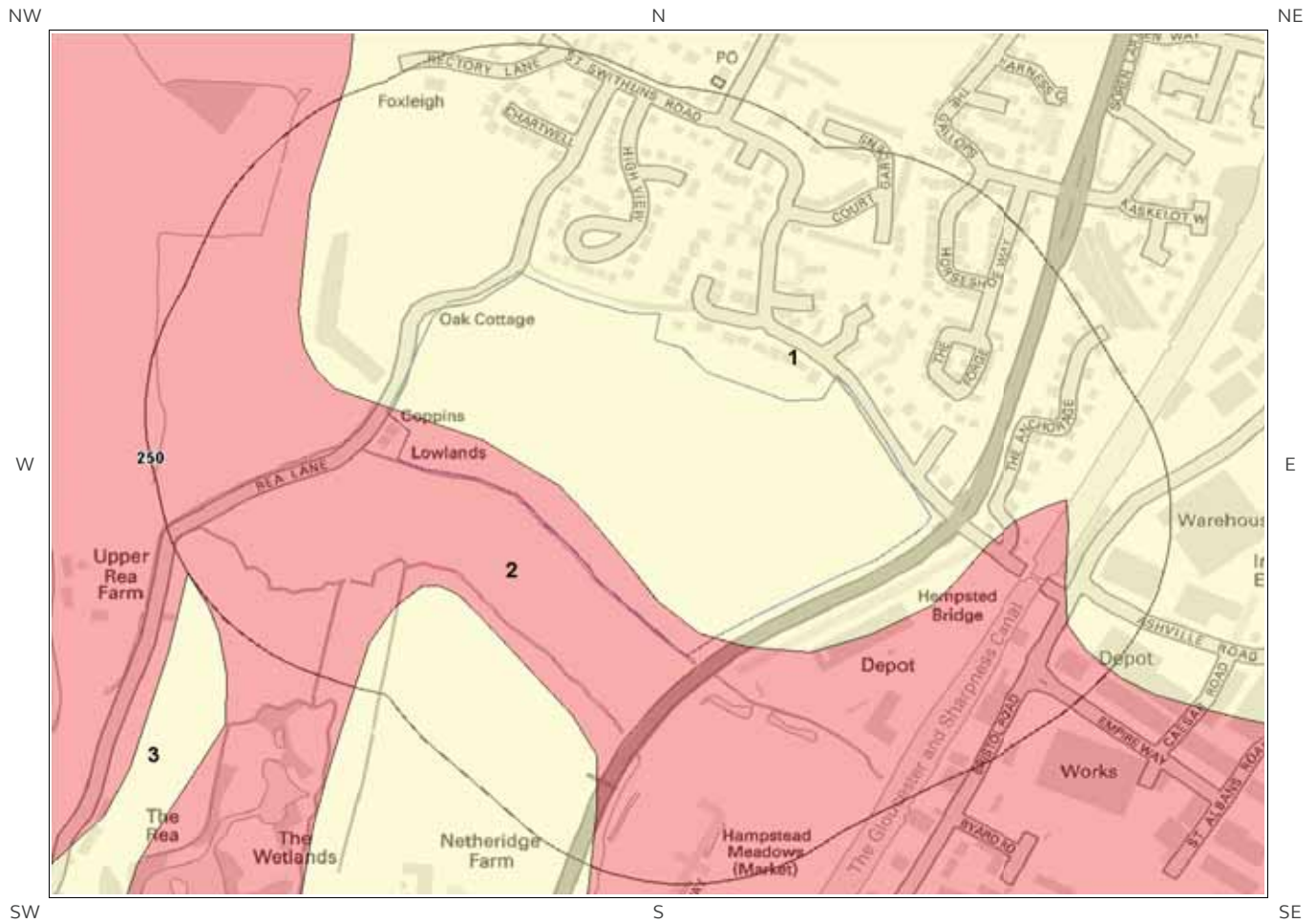


Ground Dissolution Soluble Rocks Legend

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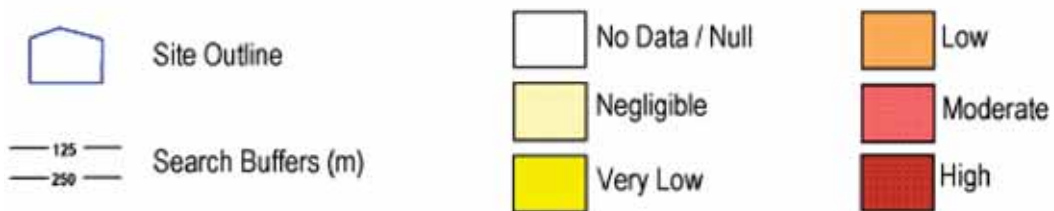


6.4 Compressible Deposits map

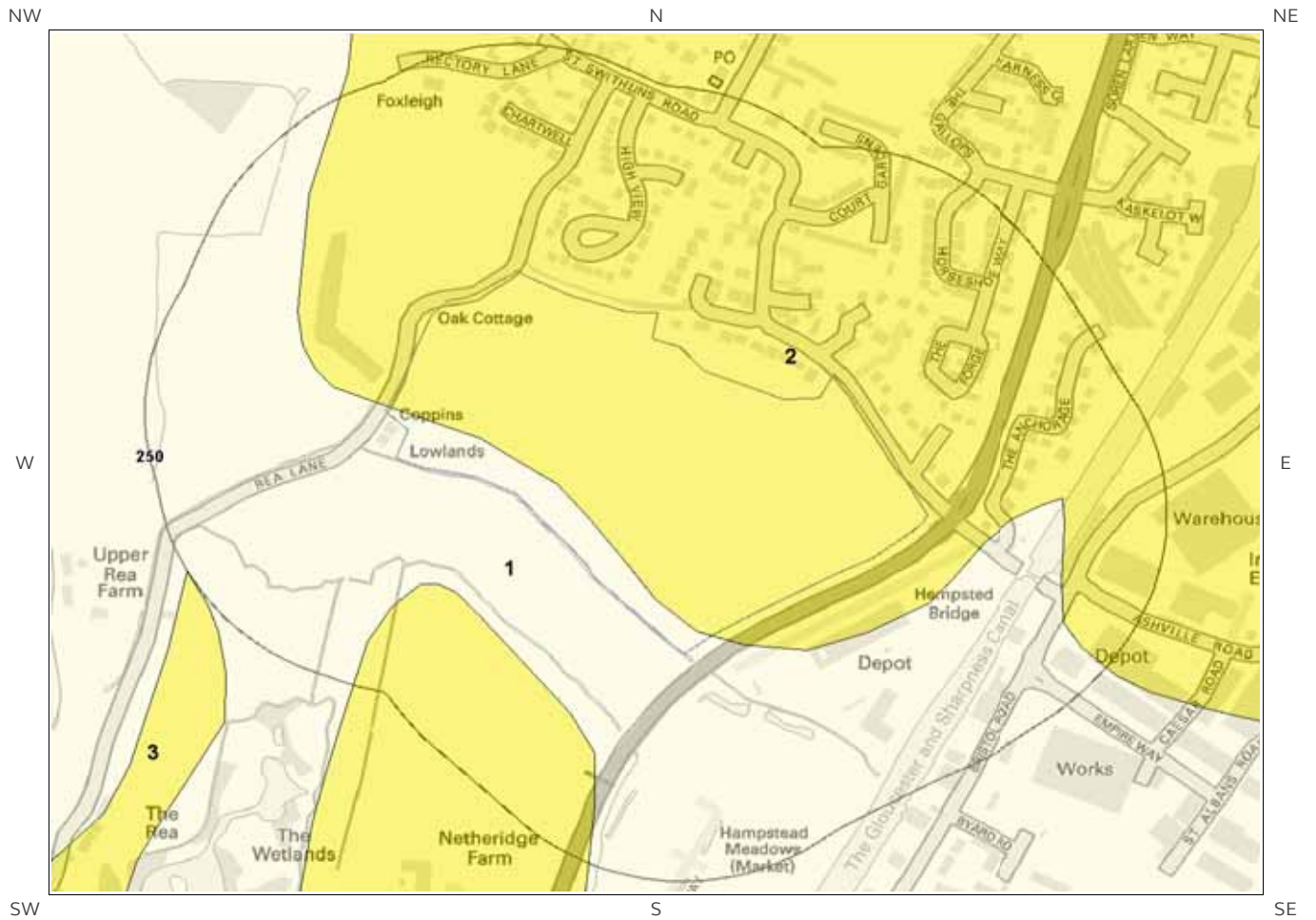


Compressible Deposits Legend

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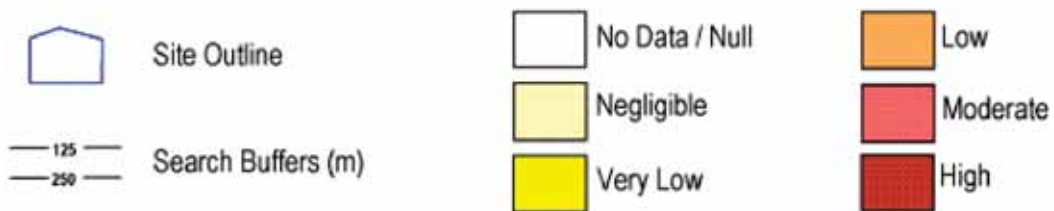


6.5 Collapsible Deposits map

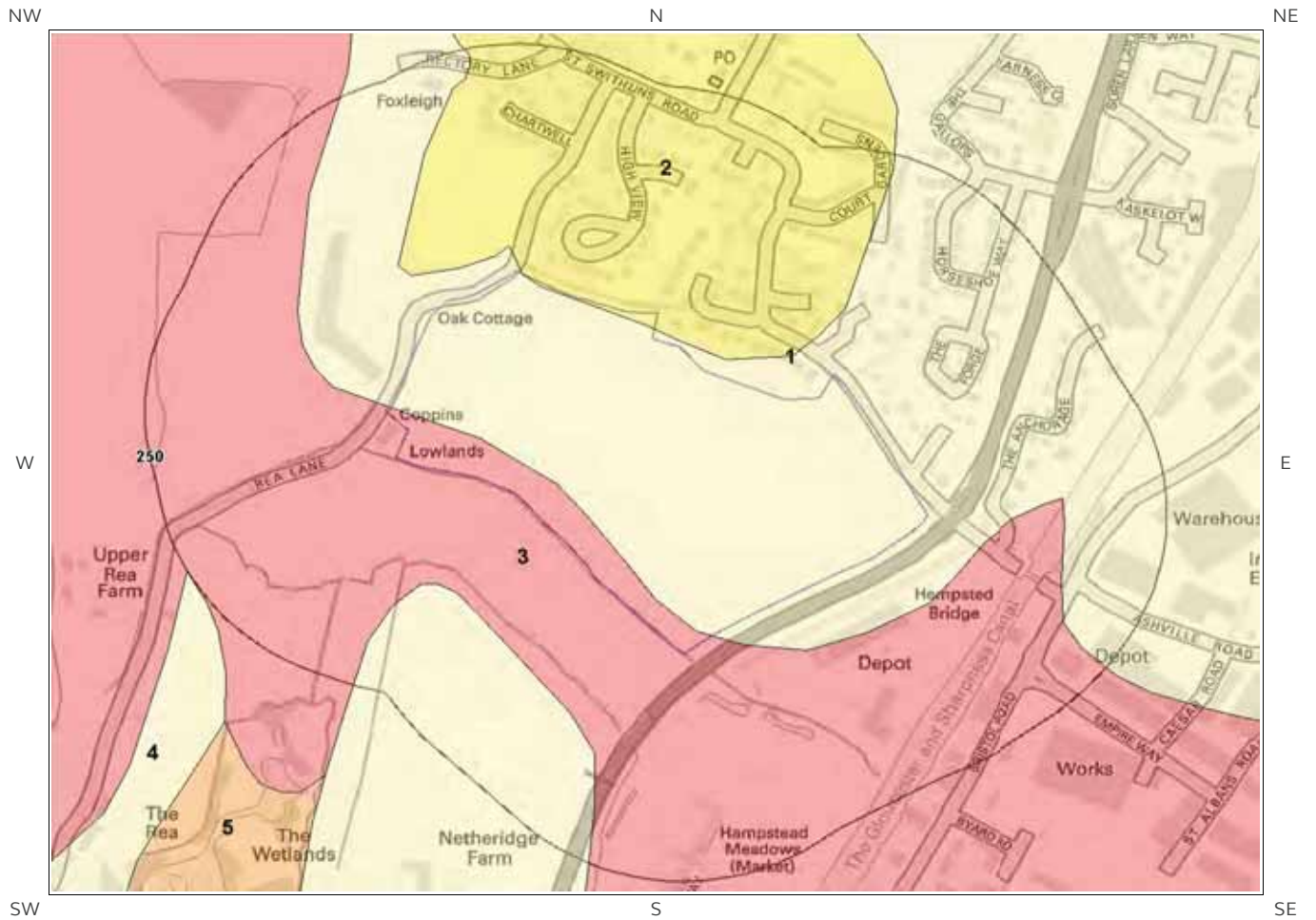


Collapsible Deposits Legend

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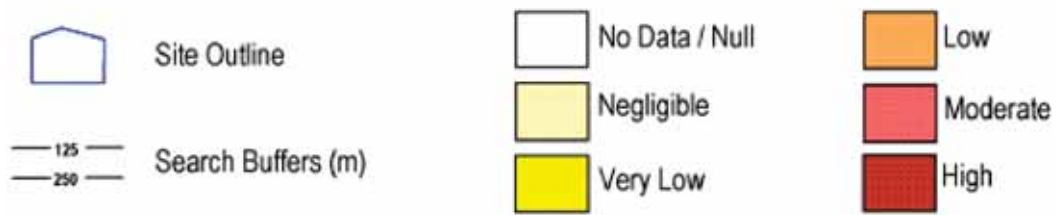


6.6 Running Sand map



Running Sand Legend

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6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site* boundary? Moderate

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.
2	28.0	N	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

* This includes an automatically generated 50m buffer zone around the site

6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
2	0.0	On Site	Moderate	Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build - consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

6.5 Collapsible Deposits

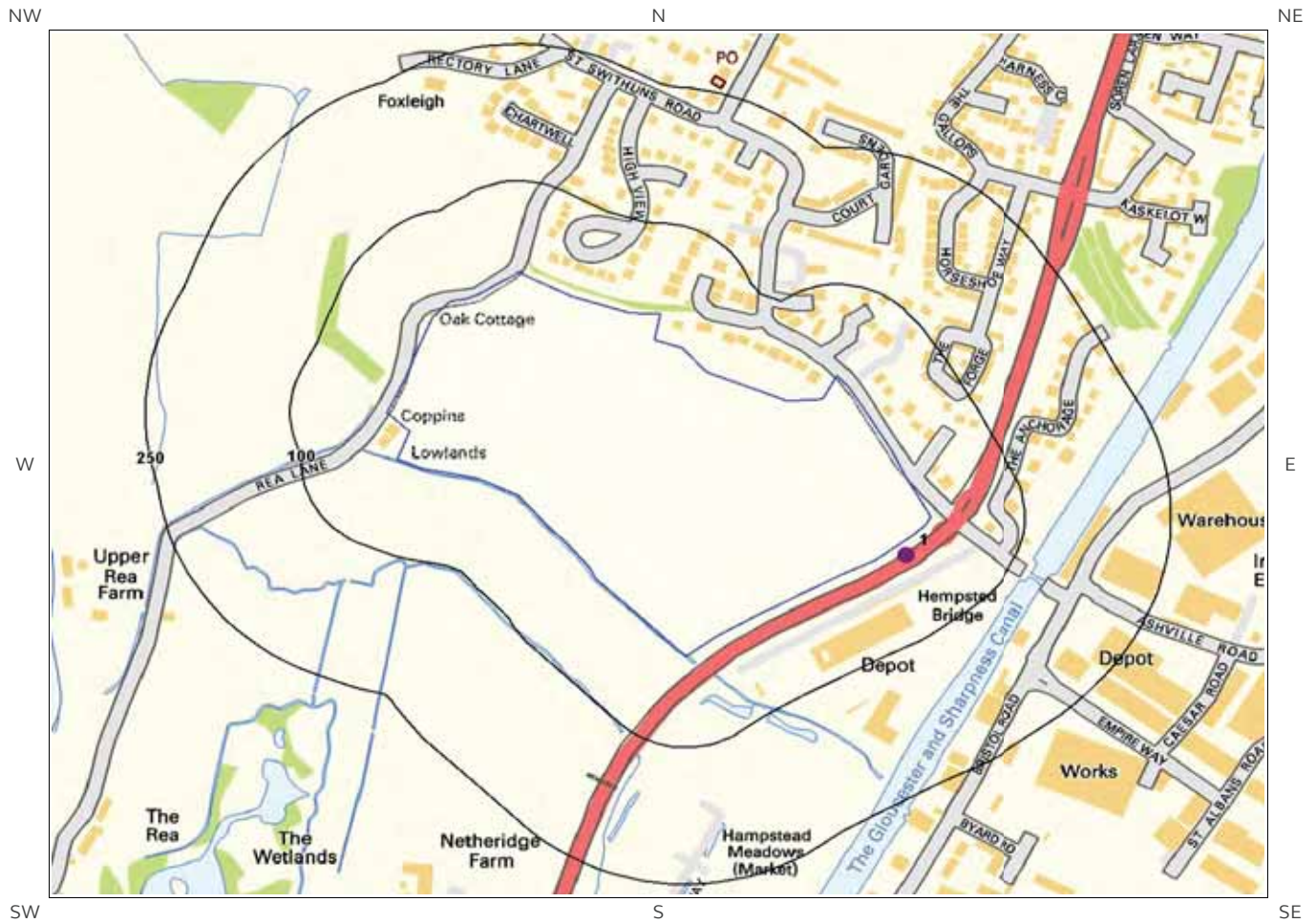
The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for collapsible deposits identified. No actions required to avoid problems due to collapsible deposits. No special ground investigation required, or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
2	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

The following Running Sands information provided by the British Geological Survey:

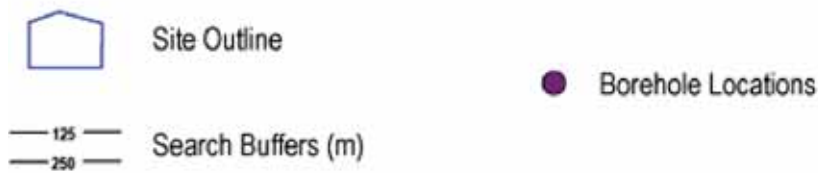
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
2	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
3	0.0	On Site	Moderate	Significant potential for running sand problems with relatively small changes in ground conditions. Avoid large amounts of water entering the ground (for example through pipe leakage or soak-aways). Do not dig (deep) holes into saturated ground near the property without technical advice. For new build - consider the consequences of soil and groundwater conditions during and after construction. For existing property - possible increase in insurance risk from running sand, for example, due to water leakage, high rainfall events or flooding.

7 Borehole Records map



Borehole Records Legend

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7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary: 1

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	14.0	SE	381776 216427	SO81NW169	Not available	GLOUCESTER CANAL 5

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

8 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

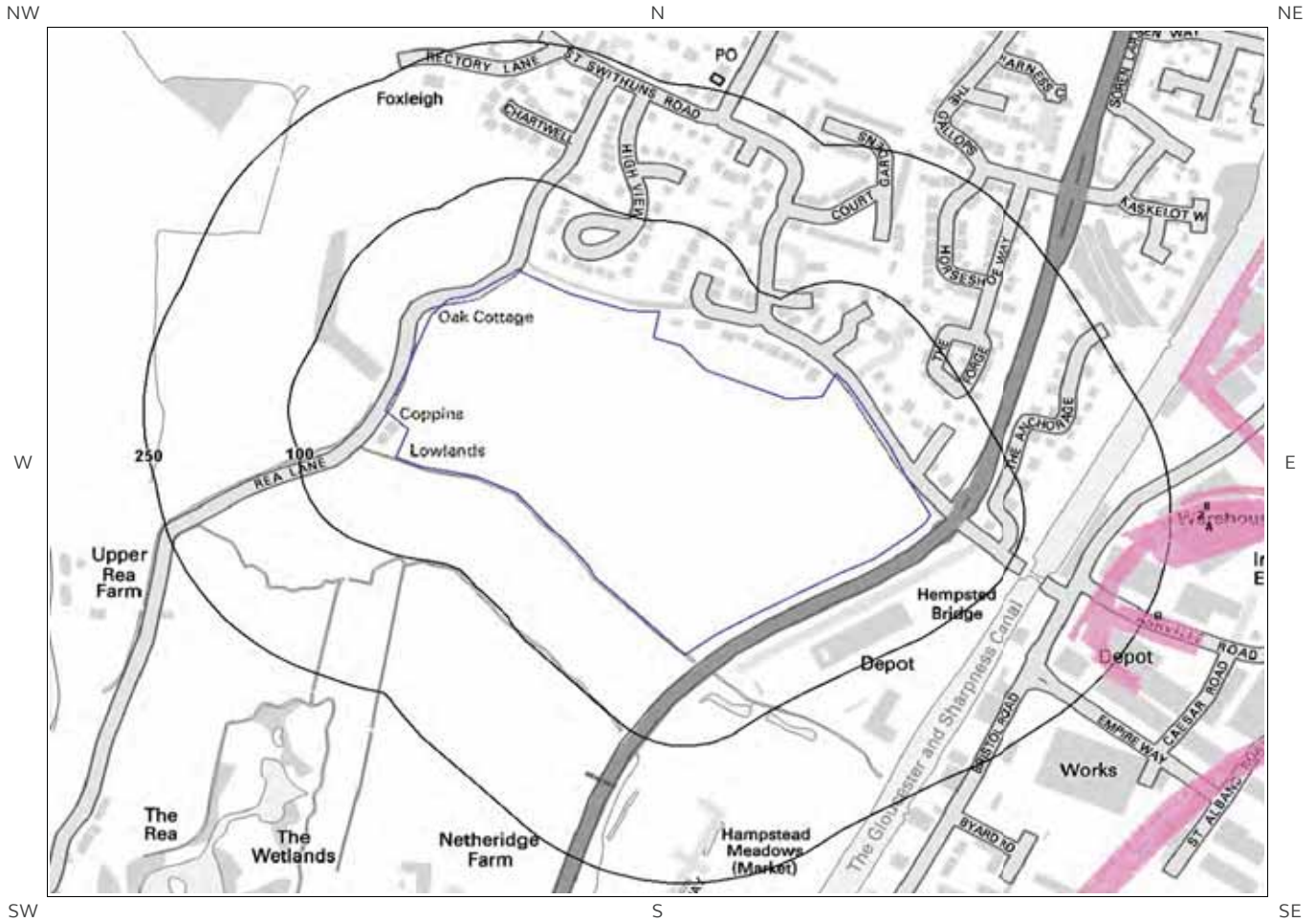
9

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	<100 mg/kg

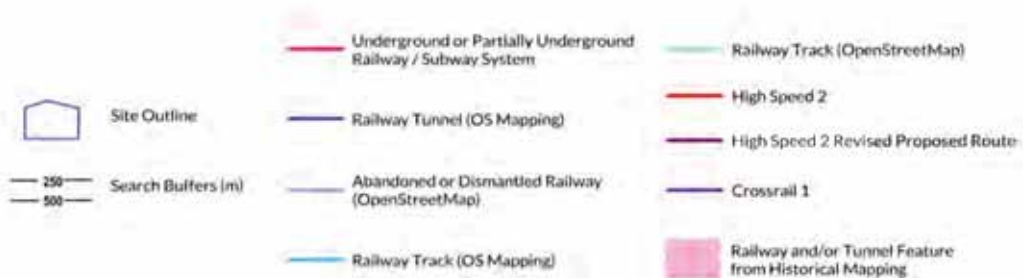
*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

9 Railways and Tunnels map



Railways and Tunnels Legend

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© OpenStreetMapContributors



9 Railways and Tunnels

9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
6	191	SE	382034 216129	Railway Sidings	1936
1	196	SE	382294 217117	Railway Sidings	1960
2	201	E	382330 216327	Railway Sidings	1901
7	203	E	382154 216541	Railway Sidings	1955
8	203	E	382302 216374	Railway Sidings	1955
3	220	E	382038 216129	Railway Sidings	1924

ID	Distance (m)	Direction	NGR	Details	Date
9B	221	SE	382041 216356	Railway Sidings	1955
4A	222	E	382135 216450	Railway Sidings	1938
5A	222	E	382135 216450	Railway Sidings	1924
10B	222	SE	382041 216355	Railway Sidings	1955
11A	223	E	382324 216338	Railway Sidings	1902
12	223	E	382041 216136	Railway Sidings	1923

Any records that have been identified are represented on the Railways and Tunnels map.

9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels map.

9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels map.

9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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BGS Geological Hazards Reports and general geological enquiries



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Standard Terms and Conditions

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<https://www.groundsure.com/terms-and-conditions-feb11-2019>



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	Report Date	2 Jul 2019
	Report Delivery Method:	Email - pdf

Enviro Insight

Address: Hempsted Lane, Gloucester, Hempsted Lane, Gloucester, GL2 5JA,

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.
Groundsure Enviroinsight

Enviro Insight

Address: Hempsted Lane, Gloucester, Hempsted Lane, Gloucester, GL2 5JA,
Date: 2 Jul 2019
Reference: EMS-553373_744047
Client: emapsite



Aerial Photograph Capture date: 14-May-2018
Grid Reference: 381514,216535
Site Size: 12.5218ha

Report Reference: EMS-553373_744047
Client Reference: EMS_553373_744047

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	6	35	91
1.2 Additional Information – Historical Tank Database	0	0	7	119
1.3 Additional Information – Historical Energy Features Database	0	0	7	40
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	1	1
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	1	4
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	4	19	27
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	1	0	12
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	1
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	1
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	1
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	5	7
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	3	5
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	2
2.2 Records of COMAH and NIHHS sites	0	0	0	3
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	3	5	1	6
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	1	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	1	1	3	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	1	0	1
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	3	5
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	3	6	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	1	11	13	33
Section 4: Current Land Use						
	On-site	0-50m	51-250	251-500		
4.1 Current Industrial Sites Data	0	0	15	Not searched		
4.2 Records of Petrol and Fuel Sites	0	0	1	1		
4.3 National Grid Underground Electricity Cables	0	0	0	0		
4.4 National Grid Gas Transmission Pipelines	0	0	0	0		
Section 5: Geology						
5.1 Records of Artificial Ground and Made Ground present beneath the study site				None identified		
5.2 Records of Superficial Ground and Drift Geology present beneath the study site				Identified		
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.						
Section 6: Hydrogeology and Hydrology						
			0-500m			
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site				Identified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site				Identified		
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	1	4	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	0	2	0	1	Not searched	Not searched

Section 6: Hydrogeology and Hydrology	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	Yes	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	2	8	60	36	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding	
7.1 Environment Agency Zone 2 floodplains within 250m of the study site	Identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	Identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	High
7.4 Flood Defences within 250m of the study site	Identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	High

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	4
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Moderate
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Moderate
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Moderate
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

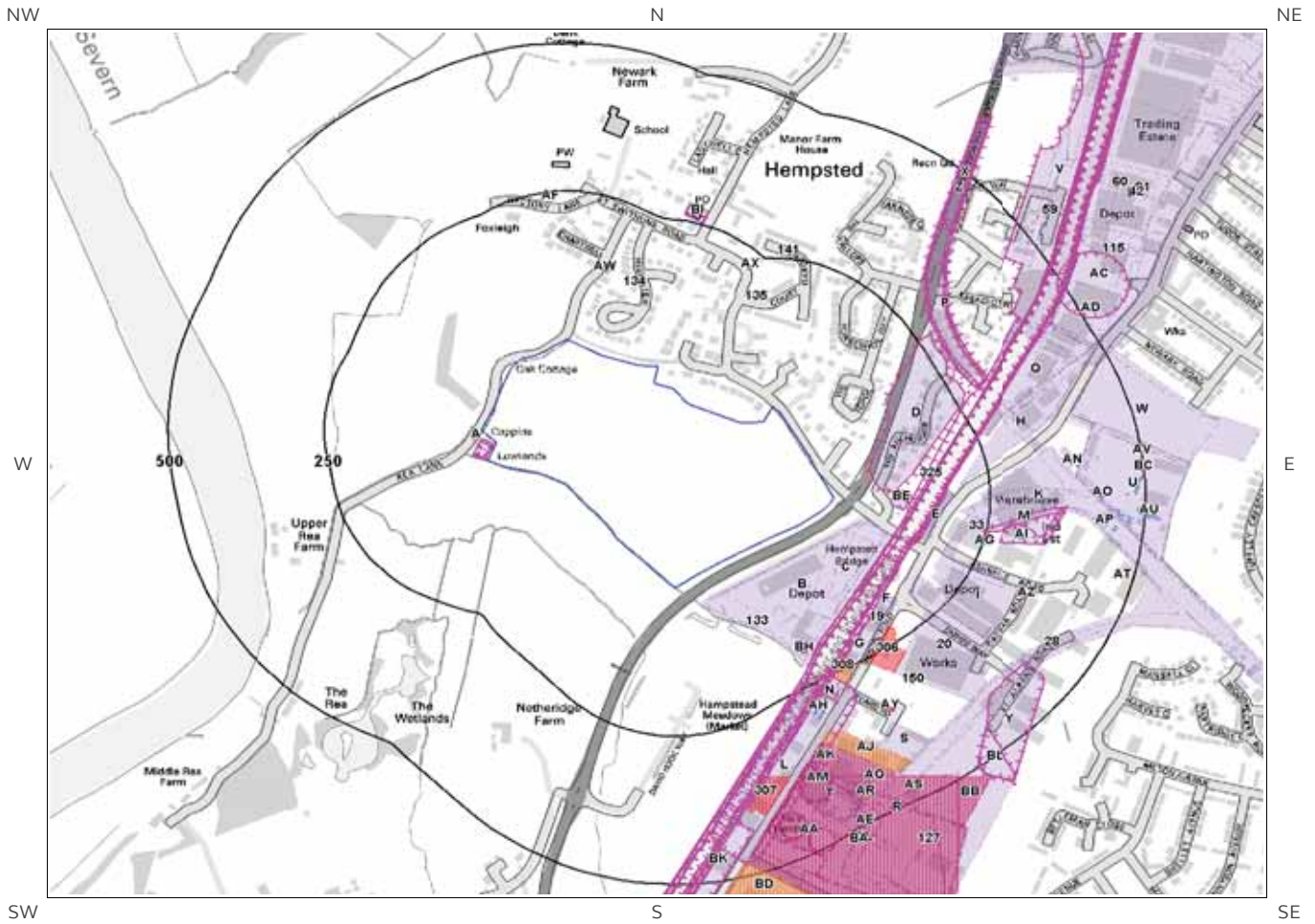
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 132

ID	Distance [m]	Direction	Use	Date
1A	10	SW	Engine House	1883
2A	14	SW	Engine House	1901
3B	41	SE	Unspecified Depot	1994
4B	41	SE	Unspecified Depot	1988
5B	41	SE	Unspecified Depot	1973
6B	43	SE	Unspecified Factory	1924
7C	53	SE	Unspecified Factory	1960
8C	64	SE	Unspecified Factory	1938
9D	69	NE	Unspecified Heap	1994
10D	69	NE	Unspecified Heap	1988
11D	69	NE	Unspecified Heap	1973
12C	78	SE	Match Factory	1924
13BE	92	E	Unspecified Pit	1901
14E	154	SE	Unspecified Warehouse	1901
15E	154	SE	Unspecified Warehouse	1924
16G	168	SE	Boat Houses	1924
17F	169	SE	Boat Houses	1924
18F	170	SE	Boat Houses	1938
19	172	SE	Boat Houses	1960
20	185	SE	Unspecified Works	1988
21BH	189	SE	Filter Bed	1973
22G	190	SE	Boat Houses	1938
23	196	SE	Railway Sidings	1960
24H	197	E	Timber Yard	1994
25H	197	E	Timber Yard	1973
26H	197	E	Timber Yard	1988
27J	201	E	Railway Sidings	1901
28	220	E	Railway Sidings	1924
29I	221	SE	Unspecified Depot	1994
30I	221	SE	Unspecified Depot	1988
31J	222	E	Railway Sidings	1924
32	222	E	Railway Sidings	1938
33	231	E	Unspecified Warehouse	1924
34K	232	E	Unspecified Warehouse	1994

35K	232	E	Unspecified Warehouse	1988
36K	232	E	Unspecified Warehouse	1973
37L	241	SE	Dry Dock	1938
38L	241	SE	Dry Dock	1901
39L	241	SE	Dry Dock	1924
40M	245	E	Refuse Heap	1924
41M	245	E	Refuse Heap	1924
42	260	NE	Railway Sidings	1883
43Q	260	NE	Timber Yard	1883
44N	265	SE	Dry Dock	1924
45N	265	SE	Dry Dock	1924
46M	276	E	Unspecified Ground Workings	1960
47O	277	NE	Cuttings	1924
48O	277	NE	Cuttings	1901
49O	277	NE	Cuttings	1938
50P	278	NE	Cuttings	1973
51P	278	NE	Cuttings	1960
52P	278	NE	Cuttings	1994
53P	278	NE	Cuttings	1988
54O	283	NE	Cuttings	1924
55AB	312	NE	Railway Sidings	1901
56	312	NE	Railway Sidings	1938
57Q	312	NE	Unspecified Commercial/Industrial	1938
58Q	312	NE	Sawmills	1901
59	313	NE	Timber Yard	1901
60	317	NE	Railway Sidings	1924
61Q	317	NE	Saw Mills and Joinery Works	1924
62Q	317	NE	Saw Mills and Joinery Works	1924
63Q	323	NE	Railway Sidings	1924
64AJ	330	SE	Unspecified Works	1973
65R	343	SE	Unspecified Works	1988
66R	343	SE	Unspecified Works	1973
67L	347	SE	Boat House	1901
68AM	360	SE	Gas Holders	1973
69AL	363	SE	Gas Works	1883
70S	364	SE	Unspecified Depot	1994
71S	364	SE	Unspecified Depot	1988
72R	368	SE	Gas Works	1924
73R	369	SE	Unspecified Commercial/Industrial	1938
74R	369	SE	Gas Works	1901
75R	369	SE	Unspecified Commercial/Industrial	1924
76R	371	SE	Unspecified	1960

Commercial/Industrial				
77T	375	SE	Unspecified Pit	1883
78T	378	SE	Unspecified Tank	1988
79T	378	SE	Unspecified Tank	1994
80T	382	SE	Gasometer	1924
81T	384	SE	Unspecified Tank	1938
82T	384	SE	Gasometer	1901
83T	384	SE	Unspecified Tank	1924
84T	386	SE	Unspecified Tank	1960
85U	391	E	Unspecified Works	1960
86U	393	E	Chemical Works	1938
87U	393	E	Chemical Works	1924
88U	395	E	Chemical Works	1924
89BK	398	S	Brick Works	1883
90U	398	E	Unspecified Works	1973
91	405	NE	Timber Yards	1883
92W	405	E	Unspecified Works	1960
93V	407	NE	Dock	1924
94V	407	NE	Dock	1924
95W	407	E	Unspecified Works	1988
96W	407	E	Unspecified Works	1994
97W	407	E	Unspecified Works	1973
98X	408	NE	Cuttings	1960
99X	408	NE	Cuttings	1973
100Y	410	SE	Unspecified Pit	1988
101Y	410	SE	Unspecified Pit	1973
102AA	417	SE	Gasometers	1924
103Z	417	NE	Cuttings	1988
104Z	417	NE	Cuttings	1994
105AC	419	NE	Timber Yard	1901
106AA	419	SE	Gasometer	1883
107AA	419	SE	Unspecified Tank	1988
108AA	419	SE	Gas Holders	1973
109AA	425	SE	Gasometer	1901
110AA	425	SE	Unspecified Tank	1924
111AA	425	SE	Unspecified Tank	1938
112AA	428	SE	Unspecified Tanks	1960
113AB	444	NE	Railway Sidings	1924
114AC	444	NE	Sawmills	1924
115	446	NE	Unspecified Commercial/Industrial	1960
116R	449	SE	Railway Sidings	1938
117R	449	SE	Railway Sidings	1924
118AC	451	NE	Timber Yard	1973
119AC	451	NE	Sawmills	1924
120AD	451	NE	Timber Yard	1994

121AD	451	NE	Timber Yard	1988
122BL	453	SE	Unspecified Ground Workings	1994
123AA	462	SE	Gasometer	1883
124AA	468	SE	Unspecified Tank	1924
125AA	468	SE	Unspecified Tank	1938
126AA	468	SE	Gasometer	1901
127	481	SE	Railway Sidings	1973
128AC	484	NE	Unspecified Wharf	1883
129AE	492	SE	Unspecified Tank	1924
130AE	492	SE	Unspecified Tank	1924
131AE	492	SE	Unspecified Tank	1938
132	493	NE	Railway Sidings	1901

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

126

ID	Distance (m)	Direction	Use	Date
133	118	SE	Unspecified Tank	1936
134	127	N	Unspecified Tank	1886
135	180	N	Unspecified Tank	1936
136AF	237	N	Unspecified Tank	1923
137AF	237	N	Unspecified Tank	1902
138AF	237	N	Unspecified Tank	1932
139AG	250	E	Unspecified Tank	1955
140AG	251	E	Unspecified Tank	1955
141	257	N	Unspecified Tank	1886
142AH	286	SE	Tanks	1986
143AH	286	SE	Tanks	1994
144AH	294	SE	Tanks	1986
145AH	295	SE	Tanks	1994
146AI	305	E	Tanks	1985
147AI	305	E	Tanks	1991
148AI	306	E	Tanks	1972
149AI	306	E	Tanks	1997
150	319	SE	Unspecified Tank	1968
151AJ	343	SE	Gas Works	1968
152AK	361	SE	Gasometer	1968
153AK	364	SE	Unspecified Tank	1968
154R	365	SE	Gas Works	1902

155R	365	SE	Gas Works	1923
156AL	365	SE	Gas Works	1886
157AL	375	SE	Gas Works	1968
158BA	375	SE	Gas Works	1968
159AM	379	SE	Gas Holder	1994
160AM	380	SE	Unspecified Tank	1936
161AM	380	SE	Gasometer	1902
162AM	380	SE	Gasometer	1923
163AM	381	SE	Gasholder	1968
164AM	381	SE	Gasholder	1968
165AM	382	SE	Gas Holder	1986
166AM	382	SE	Gas Holder	1984
167AM	382	SE	Gas Holder	1992
168AM	382	SE	Gas Holder	1987
169AN	384	E	Tanks	1985
170AN	384	E	Tanks	1992
171AN	384	E	Tanks	1992
172AN	394	E	Tanks	1985
173AN	394	E	Tanks	1992
174AN	394	E	Tanks	1992
175AN	394	E	Tanks	1995
176AN	395	E	Tanks	1972
177AN	397	E	Unspecified Tank	1955
178AN	398	E	Unspecified Tank	1955
179AA	421	SE	Gasometer	1902
180AA	421	SE	Gasometer	1923
181AA	421	SE	Unspecified Tank	1936
182AA	421	SE	Gasometer	1886
183AA	422	SE	Gasholder	1968
184AA	423	SE	Gasholder	1968
185AA	423	SE	Gas Holder	1984
186AA	423	SE	Gas Holder	1987
187AO	427	E	Tanks	1985
188AO	427	E	Tanks	1991
189AO	427	E	Tanks	1997
190AN	427	E	Unspecified Tank	1955
191AN	428	E	Unspecified Tank	1955
192AO	432	E	Unspecified Tank	1972
193AP	432	E	Tanks	1985
194AP	432	E	Tanks	1991
195AQ	433	SE	Tanks	1968
196AQ	433	SE	Tanks	1968
197AP	433	E	Tanks	1997
198T	435	SE	Unspecified Tank	1968
199T	435	SE	Unspecified Tank	1968
200AQ	440	SE	Tanks	1968

201AQ	440	SE	Tanks	1968
202AR	450	SE	Unspecified Tank	1968
203AR	450	SE	Unspecified Tank	1968
204AP	450	E	Unspecified Tank	1997
205AP	451	E	Tanks	1997
206AP	451	E	Unspecified Tank	1955
207AP	451	E	Unspecified Tank	1955
208AQ	454	SE	Unspecified Tank	1968
209AQ	454	SE	Unspecified Tank	1968
210AP	457	E	Tanks	1997
211AP	457	E	Unspecified Tank	1985
212AP	457	E	Unspecified Tank	1991
213AR	458	SE	Tanks	1936
214AP	458	E	Unspecified Tank	1972
215AP	462	E	Tanks	1985
216AP	462	E	Tanks	1991
217AP	463	E	Tanks	1972
218AA	466	SE	Gasholder	1968
219AR	466	SE	Unspecified Tank	1936
220AA	466	SE	Gasholder	1968
221AA	466	SE	Gasometer	1886
222AA	466	SE	Gasometer	1923
223AA	466	SE	Unspecified Tank	1936
224AA	466	SE	Gasometer	1902
225AE	469	SE	Unspecified Tank	1968
226AE	469	SE	Unspecified Tank	1968
227AO	470	E	Unspecified Tank	1985
228AO	470	E	Unspecified Tank	1991
229AO	470	E	Unspecified Tank	1997
230AP	471	E	Tanks	1972
231AE	472	SE	Tanks	1936
232AS	473	SE	Unspecified Tank	1968
233AS	474	SE	Unspecified Tank	1968
234AE	476	SE	Unspecified Tank	1902
235AT	479	E	Unspecified Tank	1985
236AT	479	E	Unspecified Tank	1991
237AT	480	E	Unspecified Tank	1997
238AT	480	E	Unspecified Tank	1972
239U	482	E	Unspecified Tank	1985
240U	482	E	Unspecified Tank	1991
241U	483	E	Unspecified Tank	1955
242U	483	E	Unspecified Tank	1955
243U	485	E	Unspecified Tank	1972
244AU	486	E	Tanks	1985
245AU	486	E	Tanks	1991
246AU	487	E	Tanks	1972

247AU	488	E	Tanks	1972
248U	491	E	Tanks	1972
249U	491	E	Unspecified Tank	1972
250AE	492	SE	Unspecified Tank	1936
251AE	492	SE	Unspecified Tank	1923
252U	492	E	Tanks	1972
253AE	494	SE	Unspecified Tank	1968
254BB	494	SE	Gasholder Station	1977
255AE	494	SE	Unspecified Tank	1968
256AV	496	E	Unspecified Tank	1955
257AV	496	E	Unspecified Tank	1955
258AU	496	E	Tanks	1997

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

47

ID	Distance (m)	Direction	Use	Date
259AW	129	NE	Electricity Substation	1994
260AW	130	NE	Electricity Substation	1968
261AW	130	NE	Electricity Substation	1986
262AX	218	NE	Electricity Substation	1969
263AX	218	NE	Electricity Substation	1994
264AX	219	NE	Electricity Substation	1968
265AX	219	NE	Electricity Substation	1986
266AY	336	SE	Electricity Substation	1986
267AY	337	SE	Electricity Substation	1994
268AY	338	SE	Electricity Substation	1968
269AJ	343	SE	Gas Works	1968
270AZ	350	SE	Electricity Substation	1985
271AZ	350	SE	Electricity Substation	1991
272AZ	350	SE	Electricity Substation	1972
273AZ	351	SE	Electricity Substation	1997
274AK	361	SE	Gasometer	1968
275AL	365	SE	Gas Works	1923
276AL	365	SE	Gas Works	1902
277AL	365	SE	Gas Works	1886
278AL	375	SE	Gas Works	1968
279BA	375	SE	Gas Works	1968
280AM	379	SE	Gas Holder	1994
281AM	380	SE	Gasometer	1902

282AM	380	SE	Gasometer	1923
283AM	381	SE	Gasholder	1968
284AM	381	SE	Gasholder	1968
285AM	382	SE	Gas Holder	1986
286AM	382	SE	Gas Holder	1987
287AM	382	SE	Gas Holder	1984
288AM	382	SE	Gas Holder	1992
289AA	421	SE	Gasometer	1923
290AA	421	SE	Gasometer	1886
291AA	421	SE	Gasometer	1902
292AA	422	SE	Gasholder	1968
293AA	423	SE	Gasholder	1968
294AA	423	SE	Gas Holder	1984
295AA	423	SE	Gas Holder	1987
296AA	466	SE	Gasholder	1968
297AA	466	SE	Gasholder	1968
298AA	466	SE	Gasometer	1902
299AA	466	SE	Gasometer	1886
300AA	466	SE	Gasometer	1923
301BB	494	SE	Gasholder Station	1977
302BC	496	E	Electricity Substation	1985
303BC	496	E	Electricity Substation	1992
304BC	496	E	Electricity Substation	1992
305BC	497	E	Electricity Substation	1995

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 2

ID	Distance (m)	Direction	Use	Date
306	220	SE	Filling Station	1986
307	347	SE	Filling Station	1992

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 5

ID	Distance (m)	Direction	Use	Date
308	224	SE	Garage	1923
309AJ	330	SE	Motor Body Repair Works	1968
310BD	478	S	Garage	1984
311BD	478	S	Garage	1987
312BD	478	S	Garage	1992

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

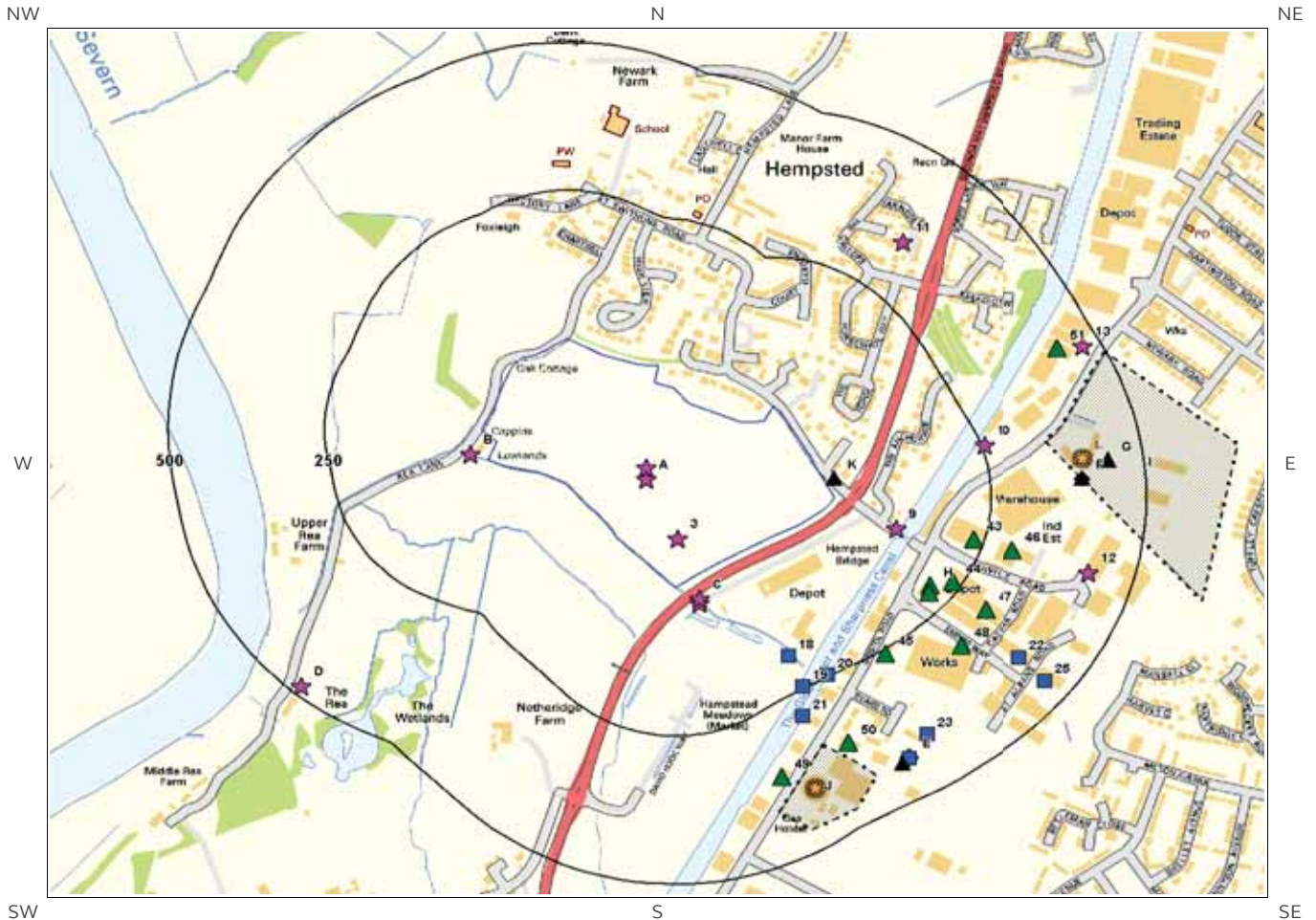
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 50

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
313A	2	NW	Pond	1924
314A	2	NW	Pond	1938
315A	2	NW	Reservoir	1901
316A	3	NW	Reservoir	1883
317D	69	NE	Unspecified Heap	1994
318D	69	NE	Unspecified Heap	1988
319D	69	NE	Unspecified Heap	1973
320BE	92	E	Unspecified Pit	1901
321BJ	114	SE	Canal	1973
322BF	115	SE	Canal	1988
323BF	115	SE	Canal	1994
324	116	SE	Canal	1883
325	120	E	Canal	1924
326BG	120	SE	Canal	1938
327BG	120	SE	Canal	1924
328BG	120	SE	Canal	1901
329BG	122	SE	Canal	1960
330BH	189	SE	Filter Bed	1973
331L	241	SE	Dry Dock	1938
332L	241	SE	Dry Dock	1901

333L	241	SE	Dry Dock	1924
334M	245	E	Refuse Heap	1924
335M	245	E	Refuse Heap	1924
336BI	252	N	Reservoir	1901
337BI	252	N	Pond	1924
338BI	252	N	Pond	1938
339BI	253	N	Pond	1883
340N	265	SE	Dry Dock	1924
341N	265	SE	Dry Dock	1924
342M	276	E	Unspecified Ground Workings	1960
343O	277	NE	Cuttings	1924
344O	277	NE	Cuttings	1938
345O	277	NE	Cuttings	1901
346BJ	278	NE	Cuttings	1988
347BJ	278	NE	Cuttings	1994
348BJ	278	NE	Cuttings	1973
349BJ	278	NE	Cuttings	1960
350O	283	NE	Cuttings	1924
351T	375	SE	Unspecified Pit	1883
352BK	398	S	Brick Works	1883
353V	407	NE	Dock	1924
354V	407	NE	Dock	1924
355X	408	NE	Cuttings	1960
356X	408	NE	Cuttings	1973
357Y	410	SE	Unspecified Pit	1988
358Y	410	SE	Unspecified Pit	1973
359Z	417	NE	Cuttings	1988
360Z	417	NE	Cuttings	1994
361BL	453	SE	Unspecified Ground Workings	1994
362AC	484	NE	Unspecified Wharf	1883

2. Environmental Permits, Incidents and Registers Map



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- | | | | | | |
|--|--------------------|--|-------------------------------|--|--|
| | Site Outline | | Recorded Pollution Incident | | RAS 3 & 4 Authorisations |
| | Search Buffers (m) | | Dangerous Substances (List 1) | | Part A(1) Authorised Processes and Historic IPC Authorisations |
| | 250 | | Dangerous Substances (List 2) | | Part A(2) and Part B Authorised Processes |
| | 500 | | Water Industry Referrals | | COMAH / NIHHS Sites |
| | | | Licenced Discharge Consents | | Sites Determined as Contaminated Land |
| | | | Red List Discharge Consents | | Hazardous Substance Consents and Enforcements |

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

13

The following IPC Authorisations are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
58K	14	NE	381800 216500	Operator: Pressweld Ltd Address: 2 - 28 Hempstead Lane, Gloucester Process: Acid Processes	Permit Number: AK9089 Original Permit Number: IPCAPP Date Approved: 28-2-1994 Effective Date: 1-10-1994 Status: Referred To La
59F	399	E	382200 216500	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: BI2656 Original Permit Number: IPCMINVAR Date Approved: - Effective Date: - Status: Valid
60G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: BD0885 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
61G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Inorganic Chemical Processes	Permit Number: AX0186 Original Permit Number: IPCAPP Date Approved: 27-3-1997 Effective Date: 4-4-1997 Status: Superseded By Variation
62G	442	E	382240 216530	Operator: Rhodia Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: AK4869 Original Permit Number: IPCAPP Date Approved: 28-2-1994 Effective Date: 7-3-1994 Status: Superseded By Variation
63G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: AP8985 Original Permit Number: IPCMINVAR Date Approved: 23-2-1995 Effective Date: 1-3-1995 Status: Superseded By Variation
64G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: AP8896 Original Permit Number: IPCMINVAR Date Approved: 7-3-1995 Effective Date: 15-3-1995 Status: Superseded By Variation

ID	Distance (m)	Direction	NGR	Details	
65G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: AK4842 Original Permit Number: IPCAIRAPP Date Approved: 28-2-1994 Effective Date: 7-3-1994 Status: Superseded By Variation
66G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: AK4834 Original Permit Number: IPCAIRAPP Date Approved: 28-2-1994 Effective Date: 7-3-1994 Status: Superseded By Variation
67G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: BD0893 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
68G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Inorganic Chemical Processes	Permit Number: BD7413 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
69G	442	E	382240 216530	Operator: Rhodia Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: BC6616 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked
70G	442	E	382240 216530	Operator: Contract Chemicals (gloucester) Ltd Address: 249-251 Bristol Road, Gloucester, GL2 5BX Process: Manufacture And Use Of Organic Chemicals	Permit Number: BH6907 Original Permit Number: IPCMINVAR Date Approved: 2-3-2000 Effective Date: 6-3-2000 Status: Revoked

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

1

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
57E	435	SE	381910 216020	Operator: UWIN BIO LTD Installation Name: BRISTOL ROAD BIODIESEL PLANT Process: ORGANIC CHEMICALS; OXYGEN CONTAINING COMPOUNDS EG ALCOHOLS	Permit Number: AP3234XR Original Permit Number: AP3234XR EPR Reference: - Issue Date: 30/05/2008 Effective Date: 30/05/2008 Last date noted as effective: 2019-04-30 Status: REVOKED

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

1

The following List 1 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
16F	399	E	382200 216500	Name: Rhodia 249-251 Bristol Road, Gloucester, Gloucestershire Status: Not Active Receiving Water: - Authorised Substances: Mercury (other), Cadmium

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
17E	430	SE	381920 216030	Name: Hempsted Site Status: Active Receiving Water: Black Ditch Authorised Substances: Iron, pH

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

12

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
40H	212	SE	381954 216319	Address: DCS Car Repairs Ltd, Unit 1 Empire Way, Bristol Road, Quedgeley, GL2 5HY Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
41H	212	SE	381954 216319	Address: DCS Car Repairs Ltd, Unit 1 Empire Way, Bristol Road, Quedgeley, GL2 5HY Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified

ID	Distance (m)	Direction	NGR	Details	
				Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Comment: No Enforcement Notified
42H	220	SE	381952 216306	Address: Warners Accident Repair Centre, Unit 1 Empire Way, Bristol Road, GL2 5HY Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
43	234	E	382023 216395	Address: Avon Metals Ltd, Ashville Road, Gloucester, GL2 5DA Process: Non-ferrous Metal Foundry Processes Status: Current Permit Permit Type: Part A2	Enforcement: Enforcement Notified Date of Enforcement: 01/08/2012 Comment: Complete works required as part of noise mitigation measures
44	238	SE	381991 216324	Address: Frasers Of Gloucester Ltd, 261 Bristol Road, GL2 5DB Process: Waste Oil Burner <0.4 MW Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
45	260	SE	381883 216203	Address: Elmcastle Ltd, Hempsted Bridge Service Station, 271 Bristol Road, GL2 5DB Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
46	302	E	382089 216377	Address: Trio Design & Engineering Ltd, Ashville Road, Gloucester, GL2 5DA Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
47	308	SE	382044 216277	Address: Travis Perkins, Ashville Road, Gloucester, GL2 5EU Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
48	321	SE	382004 216216	Address: Cms Repair And Maintenance, Empire House, Empire Way, GL2 5HY Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
49	364	SE	381717 215995	Address: P J Nicholls Ltd, Sparrows Wharf, Bristol Road, Gloucester, GL2 5DH Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
50	367	SE	381823 216053	Address: Uwin Bio Ltd, Units 4 & 5, 279 Bristol Road, Gloucester, Gloucestershire, GL2 5DD Process: Environment Agency Process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
51	435	NE	382160 216719	Address: Joseph Griggs & Co Ltd, Bristol Road, Gloucester, GL1 5TD Process: Timber Manufacture; Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

8

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
18	191	SE	381728 216202	Address: GLOUCESTER BOATHOUSE, HEMPSTED MEADOWS, DAVID HOOK WAY, GLOUCESTER, GLOUCESTERSHIRE, GL2 5LE Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPREB3899VY Permit Version: 1 Receiving Water: THE BLACK DITCH TO R.SEVERN Status: NEW ISSUED UNDER EPR 2010 Issue date: 03/11/2016 Effective Date: 03-Nov-2016 Revocation Date: -
19	247	SE	381750 216150	Address: FISHERY AT ELVER STATION, BRISTOL ROAD, GLOUCESTER Effluent Type: AGRICULTURE - FISH FARMING - NOT WATER COMPANY Permit Number: S/20/07991/T Permit Version: 1 Receiving Water: GLOUCESTER / SHARPNESSE CANAL Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 24/07/1980 Effective Date: 24-Jul-1980 Revocation Date: 01/02/2000
20	248	SE	381790 216170	Address: 334 AND 336 BRISTOL ROAD, GLOUCESTER, GLOUCESTERSHIRE Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: S/20/25518/S Permit Version: 1 Receiving Water: BLACK DITCH Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 14/09/1999 Effective Date: 14-Sep-1999 Revocation Date: -
21	291	SE	381750 216100	Address: THE ELVER STATION, BRISTOL ROAD, GLOUCESTER Effluent Type: AGRICULTURE - FISH FARMING - NOT WATER COMPANY Permit Number: S/20/25561/T Permit Version: 1 Receiving Water: GLOUCESTER-SHARPNESSE CANAL Status: SURRENDERED UNDER EPR 2010 Issue date: 02/02/2000 Effective Date: 02-Feb-2000 Revocation Date: 11/06/2012
22	400	SE	382100 216200	Address: SUDMEADOW ROAD SPS, UNIT 24, SEVERNSIDE TRADING EST., SUDMEADOW ROAD, GLOUCESTER, GLOUCESTERSHIRE, GL2 5HG Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TSC3962 Permit Version: 1 Receiving Water: RIVER SEVERN Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: 08/11/2016
23	408	SE	381950 216070	Address: PREMISES AT BYARD ROAD, GLOUCESTER, GLOUCESTERSHIRE, GL2 6DF Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: S/20/21948/T Permit Version: 1 Receiving Water: BLACK DITCH Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 30/10/1992 Effective Date: 30-Oct-1992 Revocation Date: -
24E	430	SE	381920 216030	Address: GLEVUM HOUSE, BRISTOL ROAD, GLOUCESTER, GLOUCESTERSHIRE Effluent Type: TRADE DISCHARGES - SITE Receiving Water: BLACK DITCH Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC

ID	Distance (m)	Direction	NGR	Details	
				DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT Permit Number: S/20/25018/T Permit Version: 1	ONLY) Issue date: 19/08/1996 Effective Date: 19-Aug-1996 Revocation Date: -
25	457	SE	382140 216160	Address: COLE AVENUE STORM OVERFLOW, COLE AVENUE, GLOUCESTER Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/20/23082/O Permit Version: 1	Receiving Water: TRIB OF RIVER SEVERN Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/06/1995 Effective Date: 14-Jun-1995 Revocation Date: -

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

2

The following records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Application Reference Number	NGR	Application Status	Application Date	Address	Details	Details of Enforcement Action
71L	402	E	H1022	382199 216536	Approved	13/08/2002	Contract Chemicals (Gloucester) Ltd, 249-251, Bristol Road, Gloucester, Gloucestershire, England, GL2 5BX	No Details	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
72J	405	SE	HS/96/1992	381771 215979	Historical Consent	21/09/1992	British Gas Plc, Hempsted Works, Bristol Road, Gloucester, Gloucester, GL2 6YA	Storage of Methane 29778 tonnes	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

3

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
52J	349	SE	British Gas	British Gas, Glevum House, Hempsted	Historical NIHHS Site	-
53I	351	E	Contract Chemicals (gloucester) Ltd	Contract Chemicals (gloucester) Ltd, 249 Bristol Road, Gloucester, GL2 5BX	Historical NIHHS Site	-
54I	351	E	Contract Chemicals (gloucester) Ltd	Contract Chemicals (gloucester) Ltd, 249-251 Bristol Road, Gloucester, GL2 6BX	Historical COMAH Site	-

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

15

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1A	0	On Site	381500.0 216500.0	Incident Date: 25-Sep-2001 Incident Identification: 32858.0 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
2A	0	On Site	381500.0 216520.0	Incident Date: 31-Jul-2001 Incident Identification: 20868.0 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
3	0	On Site	381550.0 216400.0	Incident Date: 19-Dec-2001 Incident Identification: 48912.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4B	31	W	381220.0 216543.0	Incident Date: 03-Oct-2001 Incident Identification: 34432.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5B	31	W	381220.0 216543.0	Incident Date: 03-Oct-2001 Incident Identification: 34432.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6C	37	SE	381585.0 216298.0	Incident Date: 17-Jan-2002 Incident Identification: 53639.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details	
7C	43	SE	381586.0 216291.0	Incident Date: 19-Dec-2001 Incident Identification: 53641.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8C	43	SE	381586.0 216291.0	Incident Date: 08-Jan-2002 Incident Identification: 53644.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
9	112	SE	381900.0 216417.0	Incident Date: 09-Jul-2002 Incident Identification: 90250.0 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
10	254	E	382040.0 216558.0	Incident Date: 23-Mar-2002 Incident Identification: 66105.0 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
11	344	NE	381910.0 216901.0	Incident Date: 07-Jan-2003 Incident Identification: 129672.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
12	427	E	382209.0 216343.0	Incident Date: 25-Jun-2003 Incident Identification: 170275.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
13	472	NE	382199.0 216725.0	Incident Date: 28-Aug-2001 Incident Identification: 27345.0 Pollutant: Organic Chemicals/Products Pollutant Description: Pesticides and Biocides	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
14D	486	SW	380949.0 216151.0	Incident Date: 09-May-2002 Incident Identification: 77496.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
15D	486	SW	380949.0 216151.0	Incident Date: 05-Jul-2001 Incident Identification: 14137.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

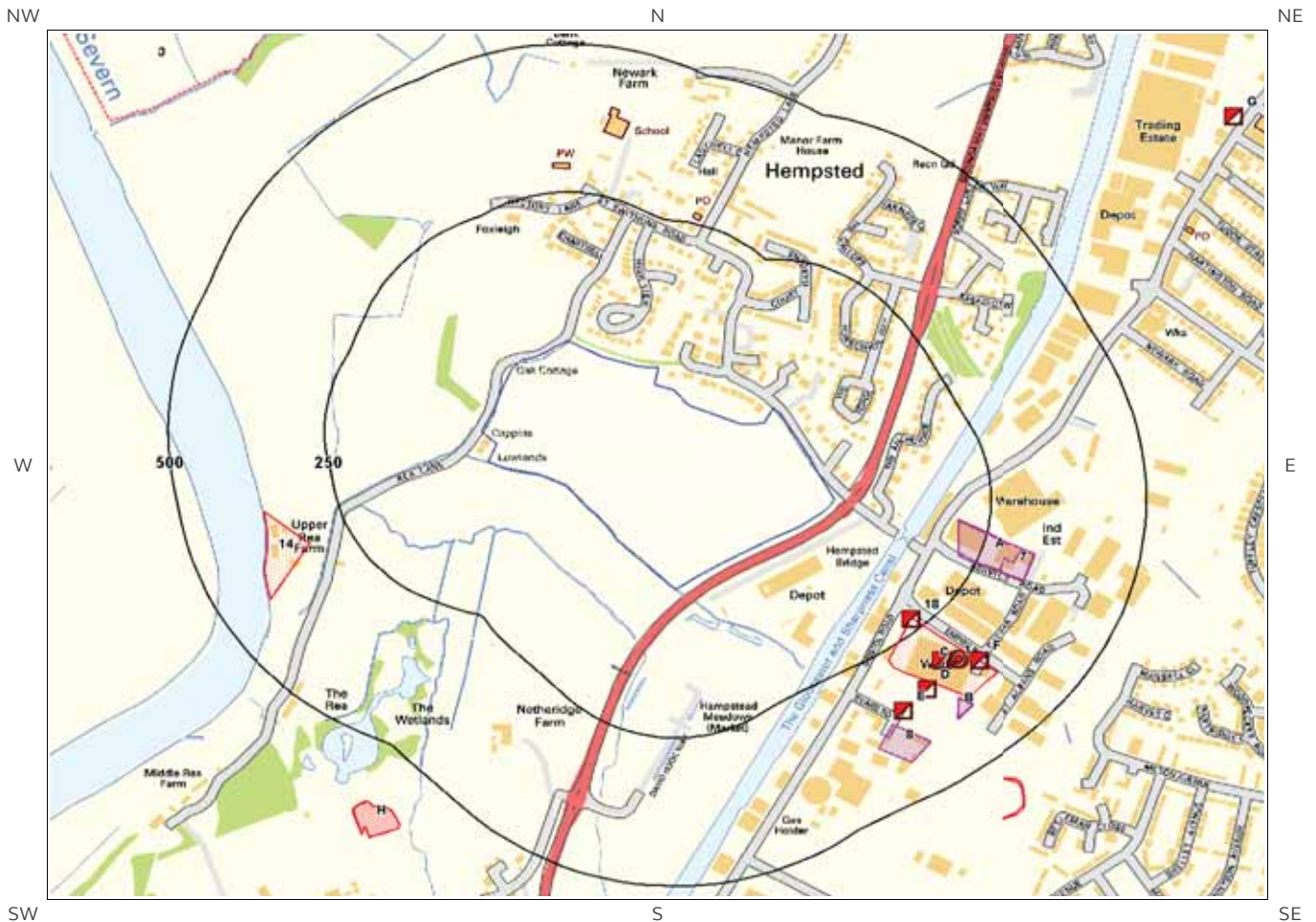
Database searched and no data found.

2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990










Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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- | | | | | | |
|---|--------------------------|---|----------------------------|---|---|
|  | Site Outline |  | EA/NRW Active Landfill |  | Historic and Planned Waste Sites |
|  | EA/NRW Historic Landfill |  | EA/NRW Licensed Waste Site |  | Local Authority/Historical Mapping Landfill Records |
|  | 250 Search Buffers (m) |  | BGS / DoE Survey Landfill | | |
|  | 500 Search Buffers (m) | | | | |

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

1

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
3	665	NW	381200 217800	<p>Address: Hempsted Landfill Site, Hempsted Lane, Hempsted, Gloucestershire, GL2 4FR Landfill Reference: 0.0 Environmental Permitting Regulations (Waste) Reference: - Landfill Type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE</p> <p>Operator: Enovert South Limited Status: Effective IPPC Reference: EPR Reference:</p>

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

5

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
13C	222	SE		<p>Site Address: Bristol Road, Gloucester, Gloucestershire Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Ashville Properties Limited Licence Holder: - First Recorded: 31-Dec-1970 Last Recorded: 31-Dec-1971</p>
14	317	SW		<p>Site Address: Upper Rea Farm, Rea Lane, Hempstead, Gloucestershire, Between Lane and River Waste Licence: - Site Reference: 141 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: Licence Surrendered: Licence Holder Address: Upper Rea Farm, Hempsted Operator: E C Meredith Licence Holder: E C Meredith First Recorded: - Last Recorded: -</p>
Not shown	800	N		<p>Site Address: Gloucester Refuse Tip, Sudmeadow Landfill, Hempsted, Licence Issue: 03-Aug-1992 Licence Surrendered:</p>

ID	Distance (m)	Direction	NGR	Details
				<p>Gloucestershire Waste Licence: Yes Site Reference: P/4098/80, 101/021, 101/21 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: BB1/L/COR004</p> <p>Licence Holder Address: - Operator: Cory Environmental Gloucestershire Limited Licence Holder: Cory Environmental (Gloucestershire) Limited First Recorded: 31-Dec-1965 Last Recorded: -</p>
Not shown	884	N		<p>Site Address: Sudmeadow Road, Hempsted, Gloucestershire Waste Licence: - Site Reference: - Waste Type: Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Gloucester County Borough Council Licence Holder: - First Recorded: 31-Dec-1965 Last Recorded: -</p>
Not shown	889	N		<p>Site Address: Between 24 and 28 Hempsted Lane, Hempsted Lane, Gloucester, Gloucestershire Waste Licence: - Site Reference: 344 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -</p>

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

2

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
1	330	SE	382000.0 216200.0	<p>Address: Bristol Rd, Gloucester BGS Number: 1474.0</p> <p>Risk: Risk to minor aquifer Waste Type: N/A</p>
Not shown	1479	N	381600.0 218200.0	<p>Address: Sudmeadow Rd, Hempsted, Glos BGS Number: 1472.0</p> <p>Risk: Risk to minor aquifer Waste Type: N/A</p>

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

8

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
76	535	SE	382108 215965	Refuse Tip	1961 mapping	Polygon
77H	581	SW	381072 215930	Refuse Tip	1968 mapping	Polygon
78H	582	SW	381071 215930	Refuse Tip	1967 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
Not shown	1268	N	381705 217974	Refuse Tip	1968 mapping	Polygon
Not shown	1271	N	381495 218071	Refuse Tip	1968 mapping	Polygon
Not shown	1316	N	382051 217957	Refuse Tip	1962 mapping	Polygon
Not shown	1431	NE	382342 217917	Refuse Tip	1962 mapping	Polygon
Not shown	1432	NE	382342 217917	Refuse Tip	1968 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

9

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details		
4A	201	E	382062 216384	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1985	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
5A	201	E	382062 216384	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1991	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
6A	203	E	382062 216382	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1997	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
7	289	SE	382095 216359	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1971	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
8	365	SE	381914 216058	Type of Site: Breaker's Yard Site Address: N/A	Planning Application Reference: N/A Date: 1968	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
9B	382	SE	382011 216117	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1991	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
10B	382	SE	382011 216117	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1985	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
11B	382	SE	382011 216117	Type of Site: Scrap Metal Yard Site Address: N/A	Planning Application Reference: N/A Date: 1971	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
12B	383	SE	382011	Type of Site: Scrap	Planning Application Reference:	Further Details: N/A

ID	Distance (m)	Direction	NGR	Details		
			216116	Metal Yard Site Address: N/A	N/A Date: 1997	Data Source: Historic Mapping Data Type: Polygon

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

58

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
18	229	SE	381924 216269	Site Address: Byard Road, Gloucester, Gloucestershire, GL2 6DF Type: Metal Recycling Site (mixed MRS's) Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COO001 EPR reference: EA/EPR/WP3295CM/A001 Operator: Coopers (Metals) Ltd Waste Management licence No: 48084 Annual Tonnage: 74999.0	Issue Date: 29/04/1995 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Coopers [Metals] Ltd Correspondence Address: -
19C	314	SE	381972 216199	Site Address: Empire House, Empire Way, Gloucester, Glos, GL2 5HY Type: - Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CMS001 EPR reference: - Operator: Cms Elv Centre Ltd Waste Management licence No: 48221 Annual Tonnage: 0.0	Issue Date: 14/04/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Cms Elv Centre Ltd Correspondence Address: Julian Grenville-cleave, Empire House, Empire Way, Gloucester, Glos, GL2 5HU
20C	314	SE	381972 216199	Site Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CMS001 EPR reference: - Operator: C M S Elv Centre Ltd Waste Management licence No: 48221 Annual Tonnage: 0.0	Issue Date: 14/04/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: C M S Elv Centre Ltd Correspondence Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY
21C	314	SE	381972 216199	Site Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CMS002 EPR reference: - Operator: C M S Vehicle Solutions Limited Waste Management licence No: 48221 Annual Tonnage: 24999.0	Issue Date: 14/04/2005 Effective Date: 13/06/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Empire House Correspondence Address: Empire House, Empire Way, Gloucester, GL2 5HY
22C	314	SE	381972 216199	Site Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY Type: Metal Recycling Site (Vehicle	Issue Date: 14/04/2005 Effective Date: 13/06/2007 Modified: -

ID	Distance (m)	Direction	NGR	Details
				<p>Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CMS001 EPR reference: - Operator: Cms Vehicle Solutions Ltd Waste Management licence No: 48221 Annual Tonnage: 24999.0</p> <p>Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Empire House Correspondence Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY</p>
23D	341	SE	381950 216150	<p>Site Address: Byard Road, Off Bristol Road, Gloucester, Gloucestershire, GL2 5DF Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMR002 EPR reference: - Operator: E M R Ltd Waste Management licence No: 48239 Annual Tonnage: 0.0</p> <p>Issue Date: 16/09/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Emr Gloucester Correspondence Address: Transport Avenue, Brentford, Middlesex, TW8 9HA</p>
24D	341	SE	381950 216150	<p>Site Address: Byard Road, Off Bristol Road, Gloucester, Gloucestershire, GL2 5DF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMR002 EPR reference: - Operator: E M R Ltd Waste Management licence No: 48239 Annual Tonnage: 0.0</p> <p>Issue Date: 16/09/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Emr Gloucester Correspondence Address: Transport Avenue, Brentford, Middlesex, TW8 9HA</p>
25E	351	SE	381912 216114	<p>Site Address: E M R Ltd, Byard Road, Off Bristol Road, Gloucester, Gloucestershire, GL2 5DF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMR002 EPR reference: - Operator: E M R Ltd Waste Management licence No: 48239 Annual Tonnage: 64092.0</p> <p>Issue Date: 16/09/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: E M R Gloucester Correspondence Address: E M R Ltd, Transport Avenue, Brentford, Middlesex, TW8 9HA</p>
26E	351	SE	381912 216114	<p>Site Address: Land/premises At, Byard Road, Off Bristol Road, Gloucester, Gloucestershire, GL2 5DF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMR002 EPR reference: EA/EPR/GP3298CA/V002 Operator: European Metal Recycling Ltd Waste Management licence No: 48239 Annual Tonnage: 130500.0</p> <p>Issue Date: 16/09/2005 Effective Date: - Modified: 11/12/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: European Metal Recycling Limited - Gloucester Correspondence Address: -</p>
27E	351	SE	381912 216114	<p>Site Address: Byard Road, Off Bristol Road, Gloucester, Gloucestershire, GL2 5DF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMR002 EPR reference: EA/EPR/GP3298CA/V004 Operator: European Metal Recycling Limited Waste Management licence No: 48239 Annual Tonnage: 124999.0</p> <p>Issue Date: 16/09/2005 Effective Date: - Modified: 16/03/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: European Metal Recycling Limited - Gloucester Correspondence Address: -</p>

ID	Distance (m)	Direction	NGR	Details	
28F	354	SE	382033 216198	<p>Site Address: Empire House, Empire Way, Gloucester, Gloucestershire, GL2 5HY Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CMS002 EPR reference: EA/EPR/XP3098CG/T003 Operator: C M S Vehicle Solutions Limited Waste Management licence No: 48221 Annual Tonnage: 24999.0</p>	<p>Issue Date: 14/04/2005 Effective Date: 13/06/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Empire House Correspondence Address: -</p>
29F	354	SE	382033 216198	<p>Site Address: Empire House, 6, Empire Way, Gloucester, Gloucestershire, GL2 5HY Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DON047 EPR reference: EA/EPR/LB3336RS/T001 Operator: Mr Richard Martin & Mr David Martin Waste Management licence No: 48221 Annual Tonnage: 24999.0</p>	<p>Issue Date: 14/04/2005 Effective Date: 17/10/2012 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Doncaster Motor Spares (Motorhog) Correspondence Address: -</p>
Not shown	669	SW	381163 215770	<p>Site Address: Netheridge Sewage Treatment Wks, Hempsted Lane, Gloucester, GL2 6LF Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006 EPR reference: - Operator: Severn Trent Water Ltd Waste Management licence No: 48001 Annual Tonnage: 17524.0</p>	<p>Issue Date: 09/07/1999 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Netheridge Sewage Treatment Works Correspondence Address: 2297, Coventry Road, Sheldon, Birmingham, B26 3PU</p>
Not shown	669	SW	381163 215770	<p>Site Address: Netheridge Sewage Treatment Wks, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 6LE Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006 EPR reference: EA/EPR/HP3095CT/V002 Operator: Severn Trent Water Ltd Waste Management licence No: 48001 Annual Tonnage: 17524.0</p>	<p>Issue Date: 09/07/1999 Effective Date: - Modified: 12/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Netheridge Sewage Treatment Works Correspondence Address: -</p>
Not shown	669	SW	381163 215770	<p>Site Address: Netheridge Sewage Treatment Wks, Hempsted Lane, Hempsted, Gloucester, GL2 6LE Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006 EPR reference: - Operator: Severn Trent Water Ltd Waste Management licence No: 48001 Annual Tonnage: 17524.0</p>	<p>Issue Date: 09/07/1999 Effective Date: - Modified: 12/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Netheridge Sewage Treatment Works Correspondence Address: 2297, Coventry Road, Sheldon, Birmingham, B26 3PU</p>
Not shown	669	SW	381163 215770	<p>Site Address: Netheridge Farm, Netheridge Close, Netheridge, Gloucester, Gloucestershire, GL2 5LF Type: Biological Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006</p>	<p>Issue Date: 09/07/1999 Effective Date: - Modified: 27/07/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified</p>

ID	Distance (m)	Direction	NGR	Details
				<p>EPR reference: EA/EPR/HP3095CT/V003 Operator: Severn Trent Water Ltd Waste Management licence No: 48001 Annual Tonnage: 499500.0</p> <p>Site Name: Netheridge Sewage Treatment Plant Correspondence Address: -</p>
Not shown	757	SW	381110 215700	<p>Site Address: Netheridge Sewerage Treatment Plant, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5LF Type: Landfill Gas Engine (<3 mW) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV132 EPR reference: EA/EPR/LP3632HA/V003 Operator: Severn Trent Water Limited Waste Management licence No: 400030 Annual Tonnage: 0.0</p> <p>Issue Date: 03/04/2013 Effective Date: - Modified: 27/07/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Netheridge Sewerage Treatment Plant Correspondence Address: -</p>
Not shown	757	SW	381110 215700	<p>Site Address: Netheridge Sewerage Treatment Plant, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5LF Type: Landfill Gas Engine (<3 mW) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV132 EPR reference: EA/EPR/LP3632HA/V003 Operator: Severn Trent Water Ltd Waste Management licence No: 400030 Annual Tonnage: 0.0</p> <p>Issue Date: 03/04/2013 Effective Date: - Modified: 27/07/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Netheridge Sewerage Treatment Plant Correspondence Address: -</p>
Not shown	818	SW	380981 215727	<p>Site Address: Netheridge Farm, Netheridge Close, Netheridge, Gloucester, Gloucestershire, GL2 5LF Type: Biological Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006 EPR reference: EA/EPR/HP3095CT/V005 Operator: Severn Trent Water Limited Waste Management licence No: 48001 Annual Tonnage: 499500.0</p> <p>Issue Date: 09/07/1999 Effective Date: - Modified: 26/06/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Netheridge Sewage Treatment Plant Correspondence Address: -</p>
Not shown	818	SW	380981 215727	<p>Site Address: Netheridge Farm, Netheridge Close, Netheridge, Gloucester, Gloucestershire, GL2 5LF Type: Biological Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SEV006 EPR reference: EA/EPR/HP3095CT/V005 Operator: Severn Trent Water Limited Waste Management licence No: 48001 Annual Tonnage: 499500.0</p> <p>Issue Date: 09/07/1999 Effective Date: - Modified: 26/06/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Netheridge Sewage Treatment Plant Correspondence Address: -</p>
38G	882	NE	382440 217116	<p>Site Address: 232a, Bristol Road, Gloucester, Gloucestershire, GL1 5TA Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CLE001 EPR reference: - Operator: Cleave Mr J G Waste Management licence No: 48075 Annual Tonnage: 6240.0</p> <p>Issue Date: 25/05/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Cleave Motor Spares Correspondence Address: 232a, Bristol Road, Gloucester, Gloucestershire, GL1 5TL</p>
39G	882	NE	382440 217116	<p>Site Address: 232a, Bristol Road, Gloucester, Gloucestershire, GL1 5TA Type: Metal Recycling Site (Vehicle Dismantler)</p> <p>Issue Date: 25/05/1994 Effective Date: - Modified: - Surrendered Date: -</p>

ID	Distance (m)	Direction	NGR	Details
				<p>Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CLE001 EPR reference: EA/EPR/VP3695CF/A001 Operator: Grenville- Cleave Mr J Waste Management licence No: 48075 Annual Tonnage: 6240.0</p> <p>Expiry Date: - Cancelled Date: - Status: Issued Site Name: Cleave Motor Spares Correspondence Address: -</p>
40G	882	NE	382440 217116	<p>Site Address: 232a, Bristol Road, Gloucester, Gloucestershire, GL1 5TA Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CLE001 EPR reference: EA/EPR/VP3695CF/A001 Operator: Grenville- Cleave Mr J Waste Management licence No: 48075 Annual Tonnage: 6240.0</p> <p>Issue Date: 25/05/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Cleave Motor Spares Correspondence Address: -</p>
Not shown	905	NW	380908 217520	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Composting in open systems Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR001 EPR reference: EA/EPR/FB3109GK/A001 Operator: Cory Environmental (Gloucestershire) Ltd Waste Management licence No: 404046 Annual Tonnage: 26400.0</p> <p>Issue Date: 08/05/2017 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hempsted Landfill Site Correspondence Address: -</p>
Not shown	905	NW	380908 217520	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Composting in open systems Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR001 EPR reference: EA/EPR/FB3109GK/V002 Operator: Enovert South Limited Waste Management licence No: 404046 Annual Tonnage: 26400.0</p> <p>Issue Date: 08/05/2017 Effective Date: - Modified: 30/01/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Hempsted Landfill Site Correspondence Address: -</p>
Not shown	1019	N	381783 217677	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5JA Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR015 EPR reference: - Operator: Cory Environmental (Gloucestershire) Limited Waste Management licence No: 48253 Annual Tonnage: 667568.0</p> <p>Issue Date: 4/7/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC Site Name: Dummy Regis Number For Hempsted Landfill P P C Permit (Np3234su) Correspondence Address: Phoenix House, Stoke Road, Elmstone Hardwicke, Cheltenham, Gloucestershire, GL51 9SY</p>
Not shown	1019	N	381783 217677	<p>Site Address: Sudmeadow Landfill, Hempsted, Gloucestershire, GL2 6FR Type: Household, Commercial & Industrial Waste Landfill Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: - Operator: Cory Environmental Gloucestershire Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0</p> <p>Issue Date: 03/08/1992 Effective Date: - Modified: 09/11/1999 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Tip Correspondence Address: Sudmeadow, Hempsted, Gloucestershire, GL2 6FR</p>
Not	1019	N	381783	<p>Site Address: Sudmeadow Landfill, Issue Date: 03/08/1992</p>

ID	Distance (m)	Direction	NGR	Details	
shown			217677	<p>Hempsted, Gloucestershire, GL2 6FR Type: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: - Operator: Cory Environmental Gloucestershire Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0</p>	<p>Effective Date: - Modified: 09/11/1999 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Tip Correspondence Address: Sudmeadow, Hempsted, Gloucestershire, GL2 6FR</p>
Not shown	1019	N	381783 217677	<p>Site Address: - Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR015 EPR reference: - Operator: Cory Environmental (gloucestershire) Ltd Waste Management licence No: 48253 Annual Tonnage: 0.0</p>	<p>Issue Date: 07/04/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC Site Name: Hempsted Landfill P P C Permit Correspondence Address: Phoenix House, Stoke Road, Elmstone Hardwicke, Cheltenham, GL52 9SY</p>
Not shown	1019	N	381783 217677	<p>Site Address: Hempsted Landfill Site, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: EA/EPR/CP3593LR/V011 Operator: Cory Environmental (Gloucestershire) Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0</p>	<p>Issue Date: 03/08/1992 Effective Date: - Modified: 28/06/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Hempstead Landfill Site Correspondence Address: -</p>
Not shown	1019	N	381783 217677	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5JA Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR015 EPR reference: EA/EPR/KP3498CS/A001 Operator: Cory Environmental (Gloucestershire) Ltd Waste Management licence No: 48253 Annual Tonnage: 667568.0</p>	<p>Issue Date: 07/04/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Hempsted Landfill P P C Permit (Np3235su) Correspondence Address: -</p>
Not shown	1019	N	381783 217677	<p>Site Address: Sudmeadow Landfill, Hempsted, Gloucestershire, GL2 6FR Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: - Operator: Cory Environmental Gloucestershire Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0</p>	<p>Issue Date: 03/08/1992 Effective Date: - Modified: 09/11/1999 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Tip Correspondence Address: Mr Chris Connet, Sudmeadow, Hempsted, Gloucestershire, GL2 6FR</p>
Not shown	1019	N	381783 217677	<p>Site Address: Gloucester Refuse Site, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: -</p>	<p>Issue Date: 8/3/1992 Effective Date: - Modified: 3/30/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Site</p>

ID	Distance (m)	Direction	NGR	Details	
				Operator: Cory Environmental (Gloucestershire) Limited Waste Management licence No: 48038 Annual Tonnage: 500000.0	Correspondence Address: Phoenix House, Stoke Road, Elmstone Hardwicke, Cheltenham, Gloucestershire, GL51 9SY
Not shown	1019	N	381783 217677	Site Address: Sudmeadow Landfill, Hempsted, Gloucestershire, GL2 6FR Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: - Operator: Cory Environmental Gloucestershire Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0	Issue Date: 03/08/1992 Effective Date: - Modified: 09/11/1999 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Tip Correspondence Address: Sudmeadow, Hempsted, Gloucestershire, GL2 6FR
Not shown	1019	N	381783 217677	Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: - Operator: Cory Environmental (Gloucestershire) Ltd Waste Management licence No: 48038 Annual Tonnage: 500000.0	Issue Date: 03/08/1992 Effective Date: - Modified: 30/03/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Gloucester Refuse Tip Correspondence Address: Phoenix House, Stoke Road, Elmstone Hardwicke, Cheltenham, Glos, GL51 9SY
Not shown	1019	N	381783 217677	Site Address: Hempsted Landfill Site, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR004 EPR reference: EA/EPR/CP3593LR/V012 Operator: Enovert South Limited Waste Management licence No: 48038 Annual Tonnage: 500000.0	Issue Date: 03/08/1992 Effective Date: - Modified: 30/01/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Hempstead Landfill Site Correspondence Address: -
Not shown	1023	NE	382127 217557	Site Address: Monkmeadow Dock, Hempsted Lane, Gloucester, Gloucestershire, GL2 5LY Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WES001 EPR reference: EA/EPR/CP3295CK/V004 Operator: Westguard Stephen Waste Management licence No: 48028 Annual Tonnage: 24999.0	Issue Date: 22/05/1992 Effective Date: - Modified: 17/02/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: West Oils Correspondence Address: -
Not shown	1023	NE	382127 217557	Site Address: Monkmeadow Dock, Hempsted Lane, Gloucester, Gloucestershire, GL2 5LY Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WES001 EPR reference: CP3295CK/A001 Operator: Westguard Mr Stephen Waste Management licence No: 48028 Annual Tonnage: 6000.0	Issue Date: 22/05/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: West Oil Correspondence Address: -
Not shown	1023	NE	382127 217557	Site Address: Monkmeadow Dock, Hempsted Lane, Gloucester, Gloucestershire, GL2 5LY Type: Special Waste Transfer Station Size: < 25000 tonnes	Issue Date: 22/05/1992 Effective Date: 13/01/2012 Modified: 29/01/2014 Surrendered Date: May 30 2018 12:00AM Expiry Date: -

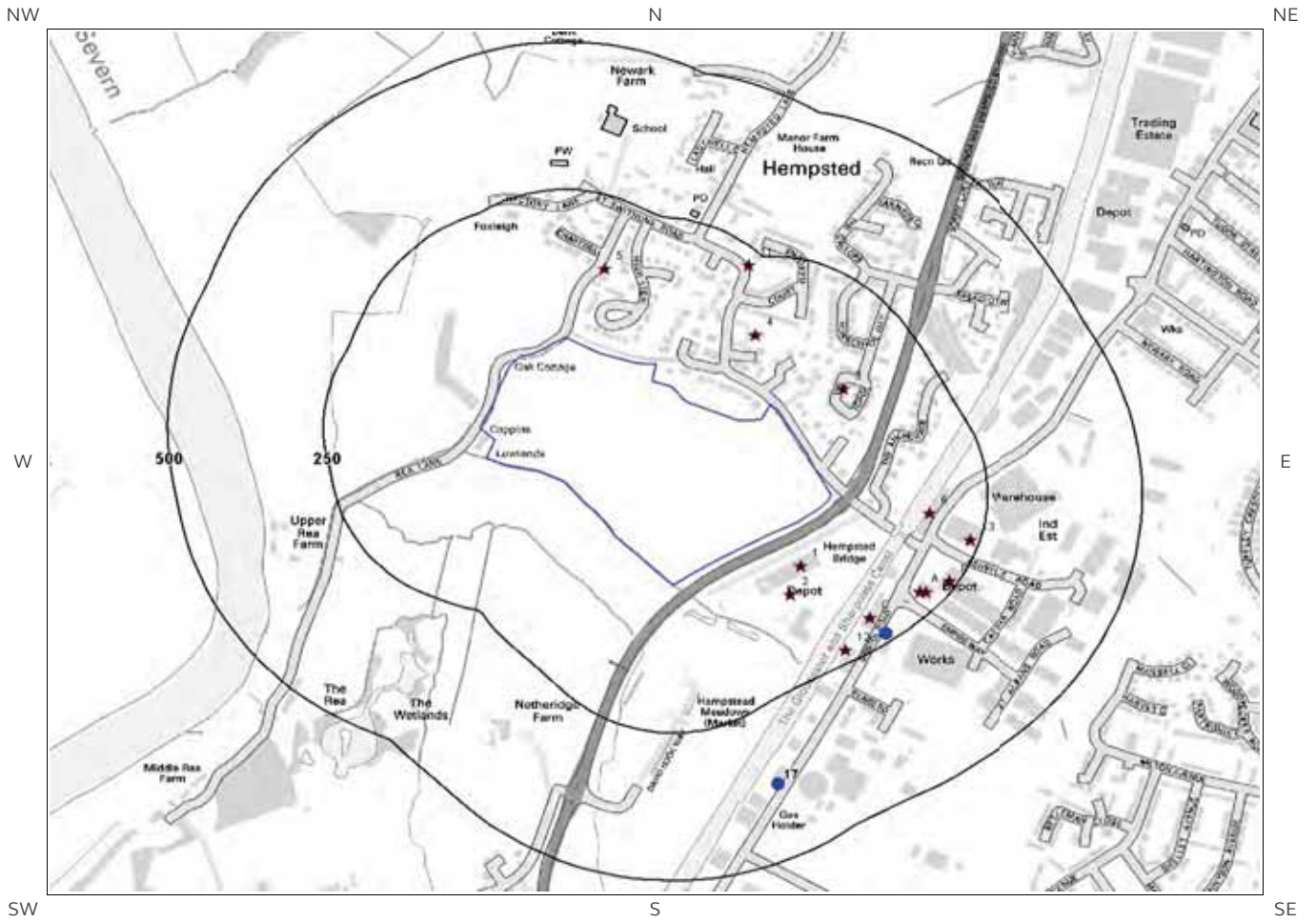
ID	Distance (m)	Direction	NGR	Details
				<p>Environmental Permitting Regulations (Waste) Licence Number: WES679 EPR reference: EA/EPR/ZP3530CY/S003 Operator: West Oils Environmental Ltd Waste Management licence No: 48028 Annual Tonnage: 0.0</p> <p>Cancelled Date: - Status: Surrendered Site Name: Monkmeadow Dock Correspondence Address: -</p>
Not shown	1090	N	381216 217817	<p>Site Address: Sudmeadow H W S, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAY036 EPR reference: CP3898LF/T001 Operator: May Gurney Ltd Waste Management licence No: 48039 Annual Tonnage: 18250.0</p> <p>Issue Date: 14/07/1993 Effective Date: 28/05/2009 Modified: 21/11/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Sudmeadow H W S Correspondence Address: -</p>
Not shown	1090	N	381216 217817	<p>Site Address: - Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR010 EPR reference: - Operator: Cory Environmental (Gloucestershire) Ltd Waste Management licence No: 48039 Annual Tonnage: 18250.0</p> <p>Issue Date: 14/07/1993 Effective Date: 07/08/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Sudmeadow H W S Correspondence Address: Phoenix House, Stoke Road, Elmstone Hardwicke, Cheltenham, Gloucestershire, GL51 9SY</p>
Not shown	1090	N	381216 217817	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, GL2 5FR Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENV052 EPR reference: - Operator: Environmental Waste Control Plc Waste Management licence No: 48039 Annual Tonnage: 18250.0</p> <p>Issue Date: 14/07/1993 Effective Date: 07/10/2006 Modified: 21/11/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Sudmeadow H W S Correspondence Address: E W C House, 298, Hale Road, Widness, Cheshire, WA8 8PX</p>
Not shown	1090	N	381216 217817	<p>Site Address: Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAY036 EPR reference: EA/EPR/CP3898LF/V002 Operator: May Gurney Ltd Waste Management licence No: 48039 Annual Tonnage: 18250.0</p> <p>Issue Date: 14/07/1993 Effective Date: 28/05/2009 Modified: 06/10/2010 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Sunmeadow H W S Correspondence Address: -</p>
Not shown	1090	N	381216 217817	<p>Site Address: Sudmeadow H W S, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENV052 EPR reference: - Operator: Environmental Waste Controls Plc Waste Management licence No: 48039 Annual Tonnage: 18250.0</p> <p>Issue Date: 14/07/1993 Effective Date: 07/10/2006 Modified: 21/11/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Sudmeadow H W S Correspondence Address: Laurel House, Kitling Road, Knowsley Business Park, Prescot, Merseyside, L34 9JA</p>
Not	1147	NE	382180	<p>Site Address: Unit 1, Abbey Road,</p> <p>Issue Date: 12/07/1993</p>

ID	Distance (m)	Direction	NGR	Details	
shown			217669	Hempstead, Gloucester, GL2 5HU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: KEY001 EPR reference: - Operator: Eamonn Mcgurk Waste Management licence No: 48045 Annual Tonnage: 15000.0	Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Keyway Correspondence Address: Mr Eamonn McGurk, Luther Challis Business Centre, Barnwood, Gloucester, Glos, GL4 3HX
Not shown	1147	NE	382180 217669	Site Address: Unit 1, Abbey Road, Hempstead, Gloucester, GL2 5HU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: KEY001 EPR reference: - Operator: Keyway Ltd Waste Management licence No: 48045 Annual Tonnage: 15000.0	Issue Date: 12/07/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Keyway Correspondence Address: Luther Challis Business Centre, Barnwood, Gloucester, Glos, GL4 3HX
Not shown	1159	N	381220 217887	Site Address: Sudmeadow H W S, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAY036 EPR reference: EA/EPR/CP3898LF/V004 Operator: Kier M G Limited Waste Management licence No: 48039 Annual Tonnage: 24999.0	Issue Date: 14/07/1993 Effective Date: 28/05/2009 Modified: 27/11/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Sudmeadow Household Waste Site Correspondence Address: -
Not shown	1159	N	381220 217887	Site Address: Sudmeadow H W S, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAY036 EPR reference: EA/EPR/CP3898LF/V005 Operator: Kier Integrated Services Limited Waste Management licence No: 48039 Annual Tonnage: 24999.0	Issue Date: 14/07/1993 Effective Date: 28/05/2009 Modified: 04/03/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Sudmeadow Household Waste Site Correspondence Address: -
Not shown	1159	N	381220 217887	Site Address: Sudmeadow H W S, Hempsted Lane, Hempsted, Gloucester, Gloucestershire, GL2 5FR Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: UBL001 EPR reference: EA/EPR/EB3307KF/T001 Operator: Ubico Ltd Waste Management licence No: 48039 Annual Tonnage: 24999.0	Issue Date: 14/07/1993 Effective Date: 20/07/2016 Modified: 04/03/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Sudmeadow Household Waste Site Correspondence Address: -
Not shown	1270	N	381979 217877	Site Address: Spinnaker Park, Spinnaker Road, Hemsted, Gloucester, Gloucestershire, GL2 5FD Type: 75kte HCI Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RSH002 EPR reference: EA/EPR/BB3900KX/A001 Operator: Rutherfords Skip Hire Limited Waste Management licence No: 401645 Annual Tonnage: 74999.0	Issue Date: 31/10/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Rutherfords Skip Hire Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details
Not shown	1306	NE	382313 217780	<p>Site Address: Speedy Skips, Benbow's Yard, Abbey Road, Hempsted, Gloucester, Gloucestershire, GL2 5HU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STI001 EPR reference: EA/EPR/NP3195CW/A001 Operator: Stiles Mr Waste Management licence No: 48054 Annual Tonnage: 1800.0</p> <p>Issue Date: 07/12/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: Benbows Yard Correspondence Address: -</p>
Not shown	1360	N	381990 217968	<p>Site Address: Sudmeadow Road, Gloucester, Gloucestershire, GL2 5FD Type: Use of waste in a deposit for recovery op Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GLO001 EPR reference: EA/EPR/EB3807FV/A001 Operator: Gloucester City Football Club Limited Waste Management licence No: 403818 Annual Tonnage: 100000.0</p> <p>Issue Date: 16/03/2017 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Meadow Park Correspondence Address: -</p>
Not shown	1397	NE	382389 217843	<p>Site Address: Unit 1, Abbey Road, Hempsted, Gloucester, Gloucestershire, GL2 5HU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: KEY005 EPR reference: EA/EPR/NP3395CY/S004 Operator: Keyway (Gloucester) Ltd Waste Management licence No: 48045 Annual Tonnage: 0.0</p> <p>Issue Date: 12/07/1993 Effective Date: - Modified: 14/03/2006 Surrendered Date: Jun 19 2007 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Keyway Correspondence Address: -</p>
Not shown	1412	NE	382397 217856	<p>Site Address: Land/premises At, Abbey Road, Hempstead, Gloucester, Gloucestershire, GL2 5HU Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RUT001 EPR reference: EA/EPR/CP3395CH/A001 Operator: M A Rutherford Demolition & Excavation Contractors (Gloucester) Ltd Waste Management licence No: 48021 Annual Tonnage: 10920.0</p> <p>Issue Date: 25/01/1990 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Rutherford Skip Hire Correspondence Address: -</p>
Not shown	1412	NE	382397 217856	<p>Site Address: Site 4, Abbey Road, Hempstead, Gloucester, GL2 5HU Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RUT001 EPR reference: - Operator: M A Rutherford Glos Ltd Waste Management licence No: 48021 Annual Tonnage: 10920.0</p> <p>Issue Date: 25/01/1990 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Rutherfords Correspondence Address: Site 4, Abbey Road, Hempsted, Gloucester, GL2 5HU</p>
Not shown	1433	NE	382256 217948	<p>Site Address: Abbey Works, Hempstead Lane, Gloucester, GL2 6HT Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HAY002 EPR reference: - Operator: Hayes Metals</p> <p>Issue Date: 08/01/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hayes Metals [Gloucester] Ltd</p>

ID	Distance (m)	Direction	NGR	Details	
				Waste Management licence No: 48082 Annual Tonnage: 24960.0	Correspondence Address: Abbey Works, Hempstead Lane, Gloucester, GL2 6HT
Not shown	1433	NE	382256 217948	Site Address: Abbey Works, Hempstead Lane, Gloucester, GL2 6HT Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HAY002 EPR reference: - Operator: Mountstar Metal Corporation Limited Waste Management licence No: 48082 Annual Tonnage: 24960.0	Issue Date: 08/01/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hayes Metals [Gloucester] Ltd Correspondence Address: Rail Works, Railway Sidings, Biggleswade, Bedfordshire, SG18 8BD
Not shown	1433	NE	382256 217948	Site Address: Abbey Works, Abbey Road, Hempsted, Gloucester, Gloucestershire, GL2 5HU Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HAY002 EPR reference: EA/EPR/WP3895CV/S002 Operator: Mountstar Metal Corporation Ltd Waste Management licence No: 48082 Annual Tonnage: 0.0	Issue Date: 08/01/1992 Effective Date: - Modified: - Surrendered Date: Jul 30 2007 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Hayes Metals [Gloucester] Ltd Correspondence Address: -

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

15

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	68	SE	B T Gmt Workshops	381752 216351	Hempsted Lane, Gloucester, Gloucestershire, GL2 5BT	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	105	SE	Depot	381736 216303	Gloucestershire, GL2	Container and Storage	Transport, Storage and Delivery
3	108	NE	Electricity Sub Station	381820 216652	Gloucestershire, GL2	Electrical Features	Infrastructure and Facilities
4	120	N	UK Glass Eels	381679 216742	123, Hempsted Lane, Gloucester, Gloucestershire, GL2 5JY	Fish and Shellfish	Farming
5	133	NE	Electricity Sub Station	381438 216855	Gloucestershire, GL2	Electrical Features	Infrastructure and Facilities
6	159	E	Works	381958 216441	Gloucestershire, GL1	Unspecified Works Or Factories	Industrial Features
7C	198	SE	Protyre	381862 216263	324, Bristol Road, Gloucester, Gloucestershire, GL2 5DH	Vehicle Parts and Accessories	Motoring
8A	213	SE	Ultimate Accident Repair Service	381943 216307	Unit B 1, Empire Way, Gloucester, Gloucestershire, GL2 5HY	Vehicle Repair, Testing and Servicing	Repair and Servicing
9A	213	SE	Ultimate Accident Repair Service	381943 216307	Unit B 1, Empire Way, Gloucester, Gloucestershire, GL2 5HY	Industrial Coatings and Finishings	Industrial Products
10A	219	SE	Enterprise Rent-A-Car	381952 216306	1, Empire Way, Gloucester, Gloucestershire, GL2 5HY	Vehicle Hire and Rental	Hire Services
11	224	NE	Electricity Sub Station	381668 216861	Gloucestershire, GL2	Electrical Features	Infrastructure and Facilities
12	227	SE	Severn Rewinds	381823 216208	330, Bristol Road, Gloucester, Gloucestershire, GL2 5DH	Vehicle Repair, Testing and Servicing	Repair and Servicing
13	235	E	Avon Metals Ltd	382024 216395	Ashville Works, Ashville Road, Gloucester, Gloucestershire, GL2 5DA	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
14B	237	SE	Fraser's Motorcycles	381990 216325	261, Bristol Road, Gloucester, Gloucestershire, GL2 5DB	New Vehicles	Motoring
15B	237	SE	Nick King Car Sales Ltd	381990 216325	261, Bristol Road, Gloucester, Gloucestershire, GL2 5DB	Secondhand Vehicles	Motoring

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

2

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
16C	236	SE	381889 216236	UNBRANDED	271 Bristol Road, Gloucester, Gloucestershire, GL2 5DB	Not Applicable	Obsolete
17	376	SE	381715 215981	ESSO	Bristol Road, Linden, Gloucester, Gloucestershire, GL2 5DD	No	Open

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
KRT-XSV	KIDDERMINSTER STATION MEMBER	SAND AND GRAVEL
TFD-XCZS	TIDAL FLAT DEPOSITS	CLAY, SILT AND SAND

5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
BLCR-MDST	BLUE LIAS FORMATION AND CHARMOUTH MUDSTONE FORMATION (UNDIFFERENTIATED)	MUDSTONE

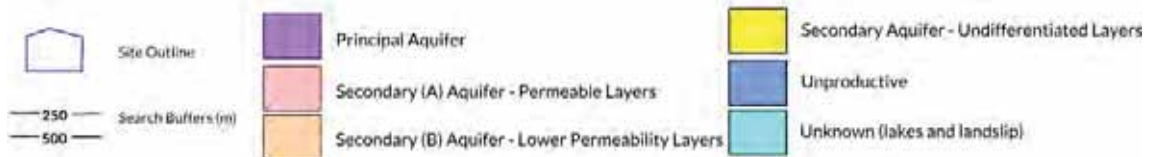
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

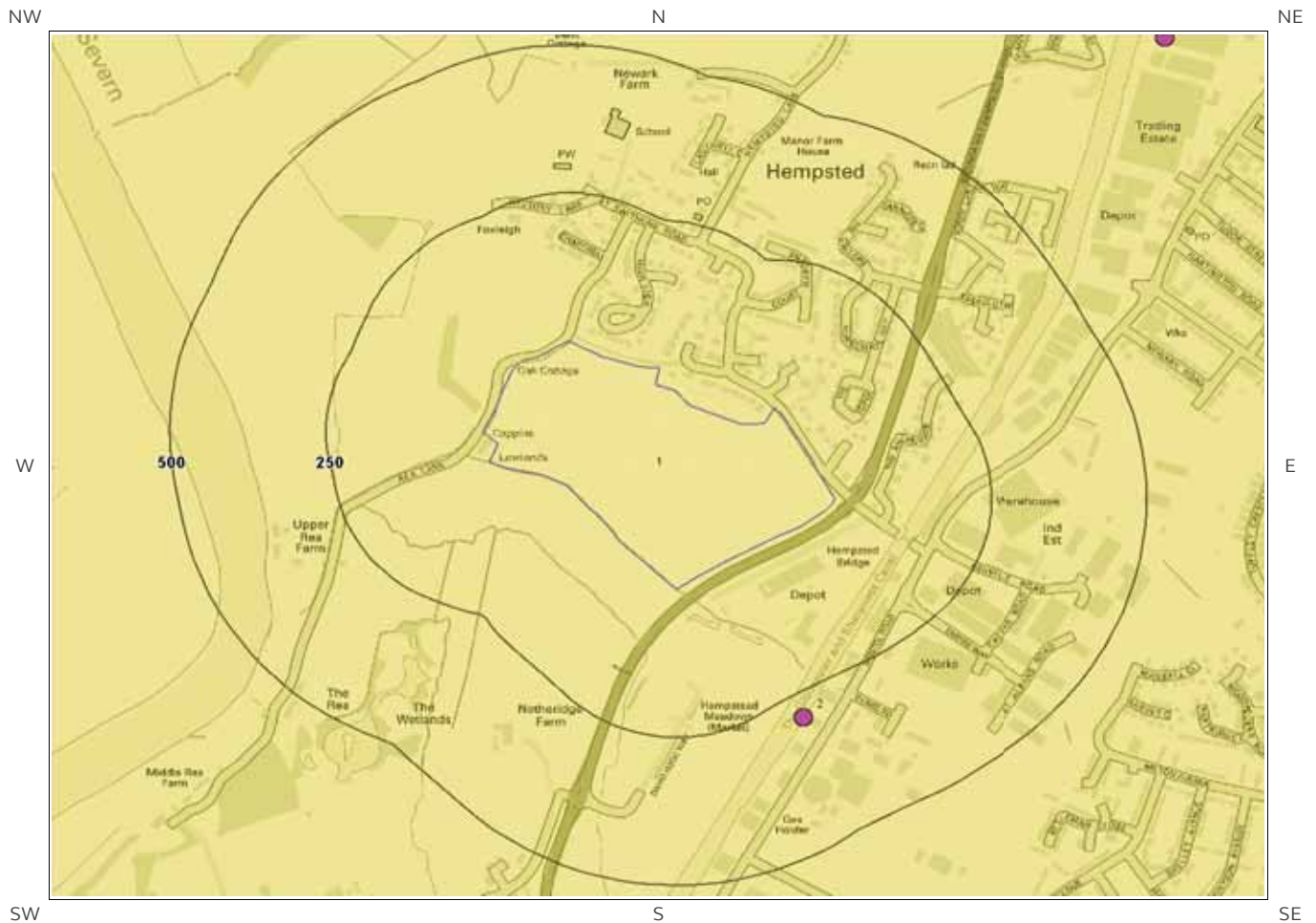
6a. Aquifer Within Superficial Geology



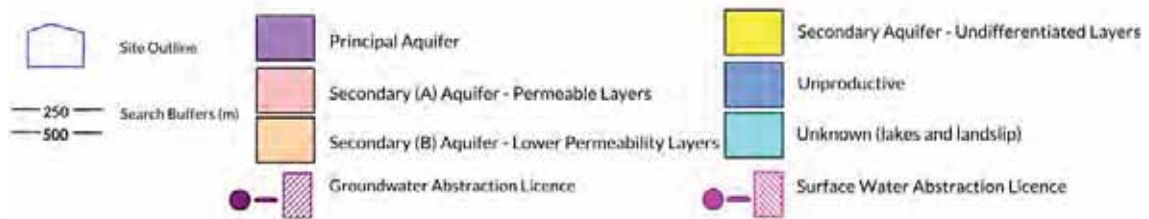
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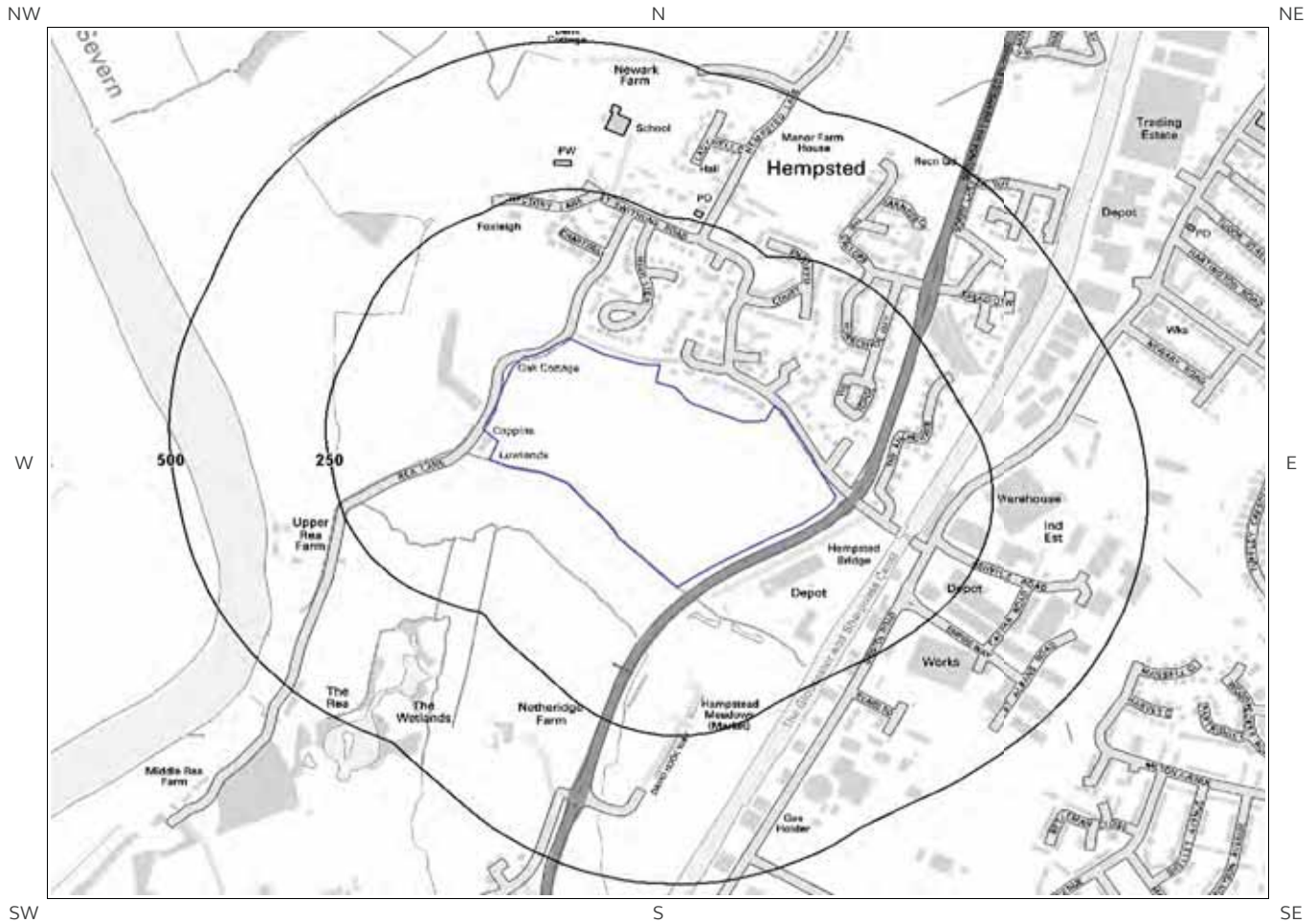
6b. Aquifer Within Bedrock Geology and Abstraction Licences



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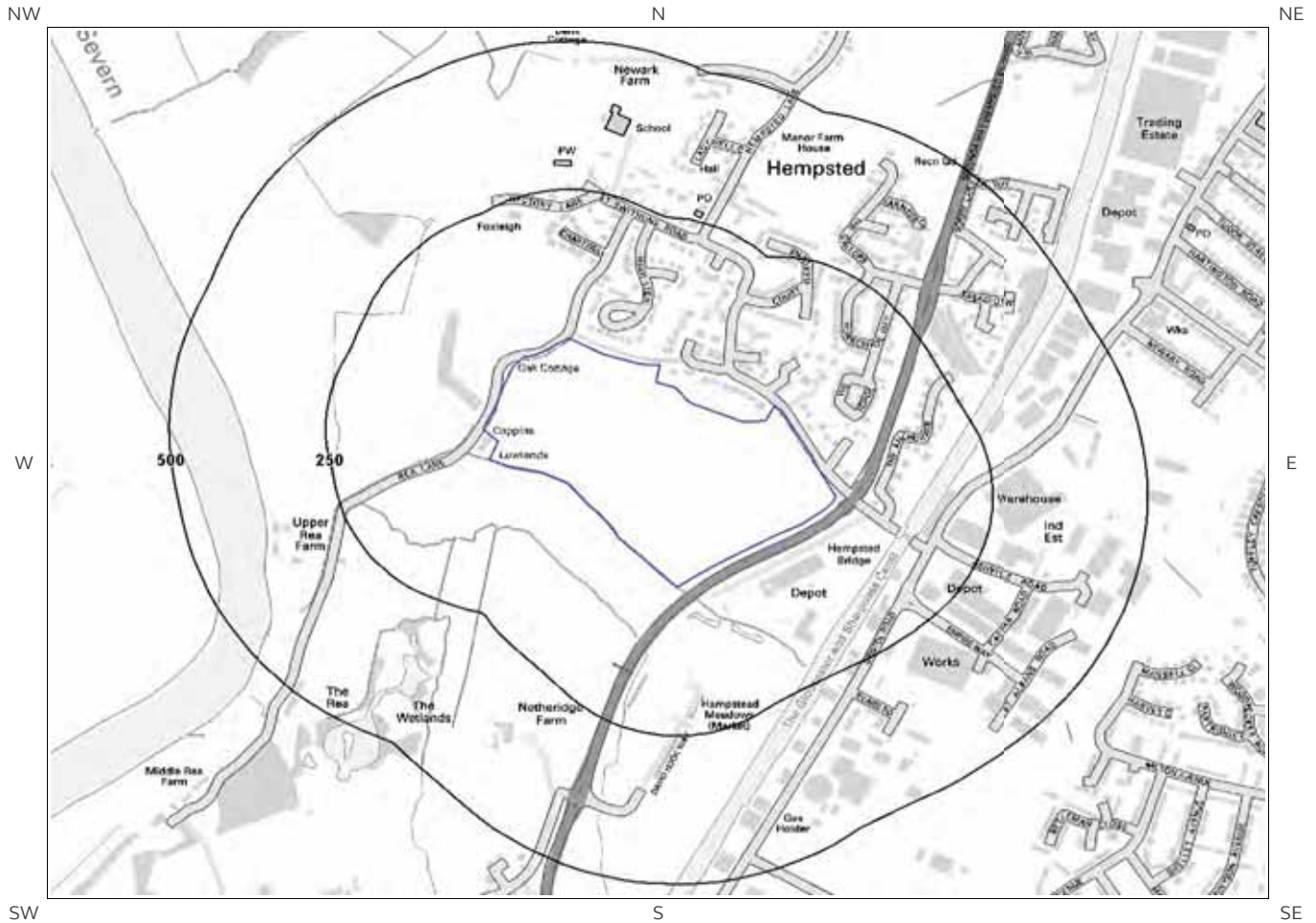
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



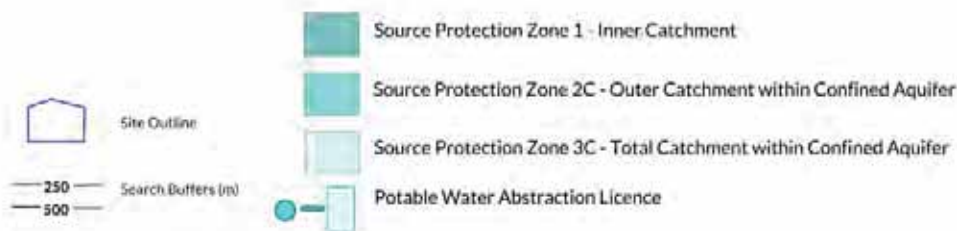
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6d. Hydrogeology – Source Protection Zones within confined aquifer

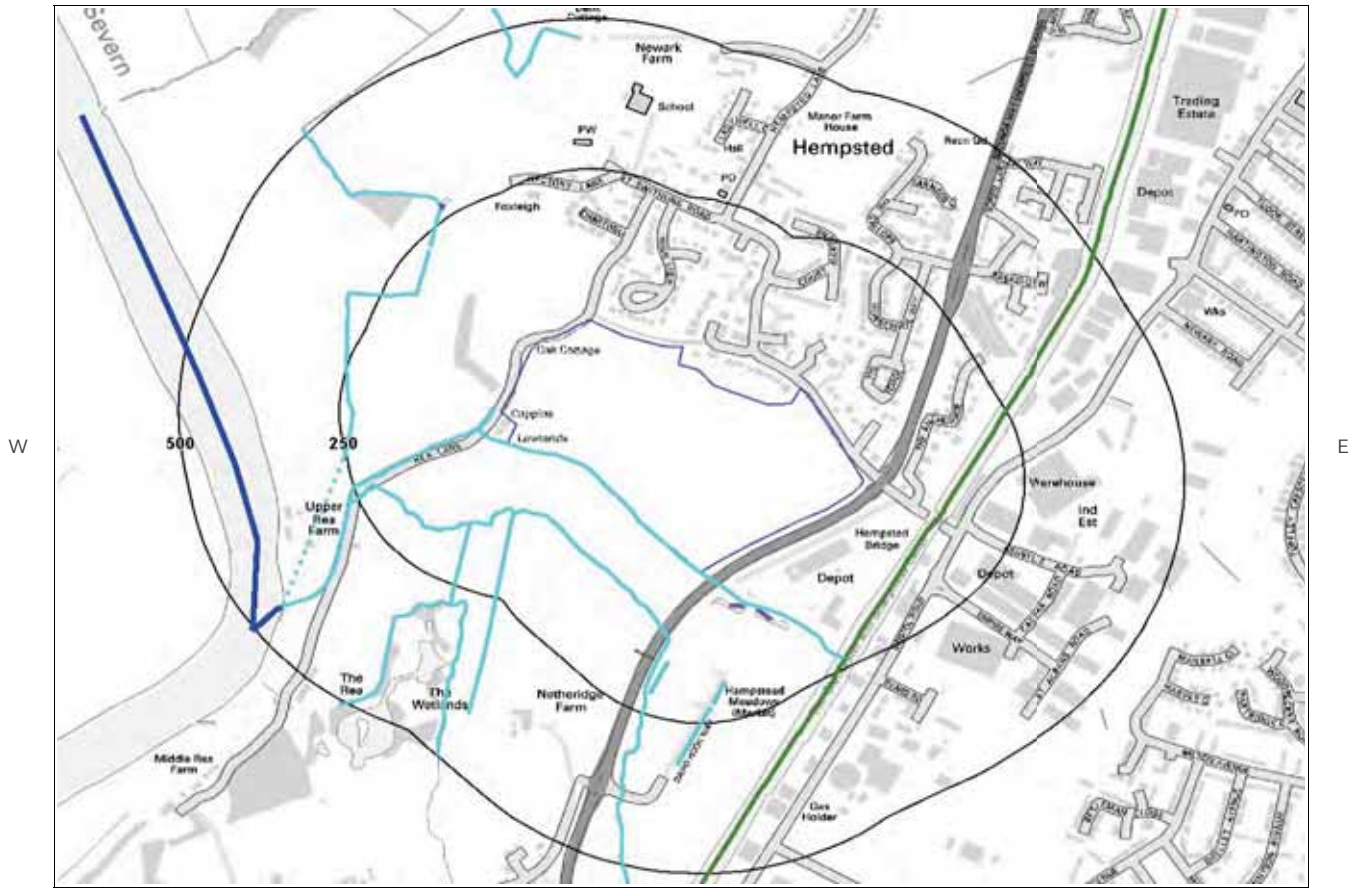


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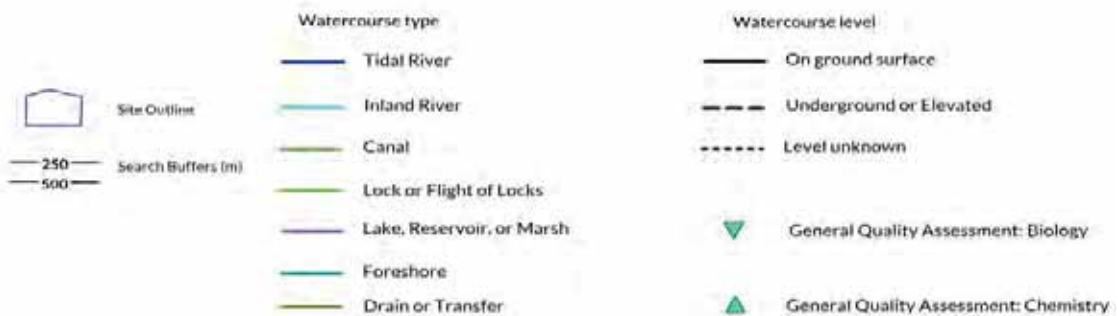
6e. Hydrology – Watercourse Network and River Quality

NW N NE



SW S SE

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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	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. These are generally aquifers formerly classified as minor aquifers
3	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	340	SW	Secondary A	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. These are generally aquifers formerly classified as minor aquifers

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site None identified

Database searched and no data found.

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
2	291	SE	381750 216100	<p>Status: Active Licence No: 18/54/20/0368 Details: Fish Farm/Cress Pond Throughflow Direct Source: Surface Water Midlands Region Point: BRISTOL CHANNEL FISHERIES - GLOUCESTER & SHARPNESS CANAL Data Type: Point Name: Canal and River Trust</p> <p>Annual Volume (m³): 109100 Max Daily Volume (m³): 2620 Application No: - Original Start Date: 28/01/1991 Expiry Date: - Issue No: 101 Version Start Date: 18/04/2008 Version End Date:</p>
Not shown	537	S	381560 215780	<p>Status: Historical Licence No: 18/54/20/0331 Details: Hydraulic Testing Direct Source: Surface Water Midlands Region Point: SERCK BAKER LTD, HUCCLECOTE - GLOUCESTER & SHARPNESS CANAL Data Type: Point Name: Canal and River Trust</p> <p>Annual Volume (m³): 75000 Max Daily Volume (m³): 2000 Application No: - Original Start Date: 04/05/1979 Expiry Date: - Issue No: 101 Version Start Date: 18/04/2008 Version End Date:</p>
Not shown	709	S	381500 215610	<p>Status: Historical Licence No: 18/54/20/0142 Details: Process Water Direct Source: Surface Water Midlands Region Point: HEMPSTEAD, GLOUCESTERSHIRE - GLOUCESTER & SHARPNESS CANAL Data Type: Point Name: Canal and River Trust</p> <p>Annual Volume (m³): 10001.2 Max Daily Volume (m³): 10001.2 Application No: - Original Start Date: 19/07/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2012 Version End Date:</p>
Not shown	709	S	381500 215610	<p>Status: Historical Licence No: 18/54/20/0142 Details: General Washing/Process Washing Direct Source: Surface Water Midlands Region Point: HEMPSTEAD, GLOUCESTERSHIRE - GLOUCESTER & SHARPNESS CANAL Data Type: Point Name: Canal and River Trust</p> <p>Annual Volume (m³): 10001.2 Max Daily Volume (m³): 10001.2 Application No: - Original Start Date: 19/07/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2012 Version End Date:</p>
6	884	NE	382330 217250	<p>Status: Historical Licence No: 18/54/20/0325 Details: Non-Evaporative Cooling Direct Source: Surface Water Midlands Region Point: GLOUCESTER - GLOUCESTER & SHARPNESS CANAL Data Type: Point Name: BRITISH WATERWAYS BOARD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 09/11/1977 Expiry Date: - Issue No: 100 Version Start Date: 09/11/1984 Version End Date:</p>

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
4	N	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
15	N	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
361	SW	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site

Identified

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	830	S	381400 215500	River Name: Gloucester Sharpness Canal (severn) Reach: Gloucester Lock To Conf. Daniels Bk End/Start of Stretch: End of Stretch NGR	E	E	E	E	E
Not shown	830	S	381400 215500	River Name: Gloucester Sharpness Canal (severn) Reach: Conf. Daniels Bk To Conf. River Frome End/Start of Stretch: Start of Stretch NGR	C	C	B	B	B

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	830	S	381400 215500	River Name: Gloucester/ Sharpness Reach: Conf Daniels Bk To Conf River Frome End/Start of Stretch: Start of Stretch NGR	C	C	C	C	C
Not shown	830	S	381400 215500	River Name: Daniel's Bk Reach: Us Brookthorpe To Glossharpness Canal End/Start of Stretch: End of Stretch NGR	D	D	C	B	B
Not shown	830	S	381400 215500	River Name: Gloucester/ Sharpness Reach: Gloucester Lock To Conf Daniels Bk End/Start of Stretch: End of Stretch NGR	B	B	B	B	B
Not shown	972	S	381330 215370	River Name: Daniel's Bk Reach: Us Brookthorpe To Glossharpness Canal End/Start of Stretch: Sample Point NGR	D	D	C	B	B

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
79	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
2	11 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
80	11 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	12 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
81	12 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	32 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
82	32 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
5	46 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
83	46 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
6	70 SE	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.7
84	70 SE	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.7
7	82 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	82 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
85	82 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
86	82 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
9	94 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
87	94 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
10	96 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	96 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
88	96 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
89	96	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	SE			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
12	100	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.5
	SE			
90	100	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.5
	SE			
13	102	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
	S			
91	102	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
	S			
14	105	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
	SW			
92	105	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
	SW			
15	107	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
	S			
93	107	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
	S			
16	116	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
	SW			
94	116	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
	SW			
17	121	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
	SW			
95	121	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)
	SW			

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
18	127 SE	The Gloucester and Sharpness Canal	Canal. A manmade watercourse for inland navigation.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 30.5
96	127 SE	The Gloucester and Sharpness Canal	Canal. A manmade watercourse for inland navigation.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 30.5
19	141 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
97	141 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	143 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
98	143 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
21	145 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
22	145 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
99	145 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
100	145 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
23	156 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.4
101	156 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.4

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
24	159 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
102	159 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
25	162 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
103	162 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
26	185 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
104	185 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
27	200 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
105	200 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	218 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
106	218 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
29	230 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
30	230 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
107	230	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
108	230 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
31	231 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
109	231 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
32	237 SE	The Gloucester and Sharpness Canal	Canal. A manmade watercourse for inland navigation.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 31.4
110	237 SE	The Gloucester and Sharpness Canal	Canal. A manmade watercourse for inland navigation.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 31.4
33	245 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.2
111	245 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.2
34	247 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
112	247 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
35	249 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
113	249 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
36	255 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
37	255 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
114	255 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
115	255 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
38	261 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
116	261 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
39	264 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
117	264 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
40	267 NW	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
41	267 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
118	267 NW	-	Lake, loch or reservoir.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
119	267 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
42	271 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
43	271 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
120	271 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
121	271 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
44	276 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
122	276 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
45	280 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
123	280 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
46	283 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
124	283 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
47	395 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
125	395 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
48	417 W	Afon Hafren Alternative Name: River Severn	Tidal river or stream.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	417	Afon Hafren Alternative Name:	Tidal river or stream.	Catchment Area: Severn Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W	River Severn		Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
49	420 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
Not shown	420 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
50	423 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	423 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
51	426 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
Not shown	426 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
52	444 SW	-	Tidal river or stream.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
130	444 SW	-	Tidal river or stream.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
53	467 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	467 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
54	500 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.9
Not shown	500 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Severn Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
Average Width in Watercourse Section (m): 4.9				

6.11 Surface Water Features

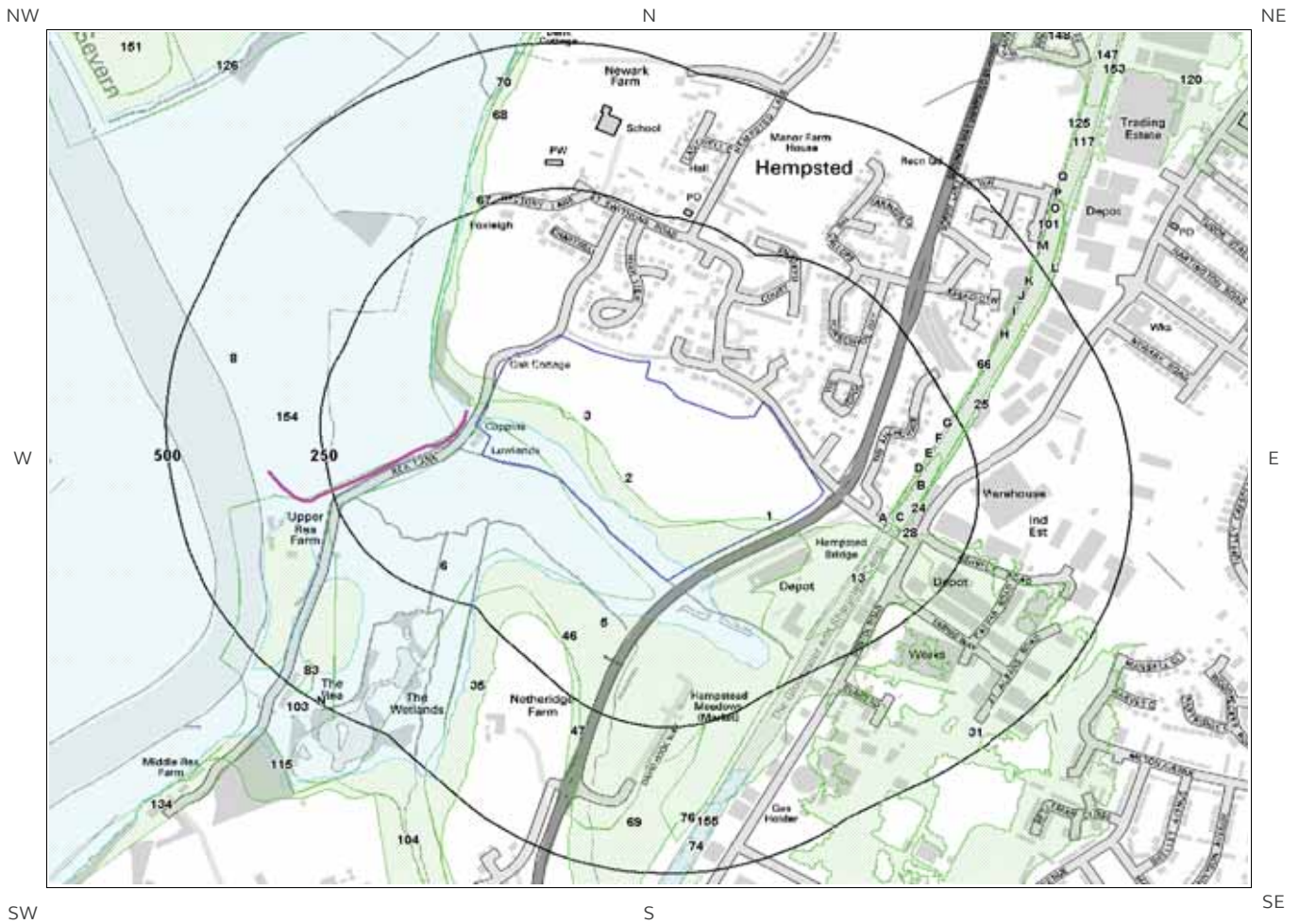
Surface water features within 250m of the study site

Identified

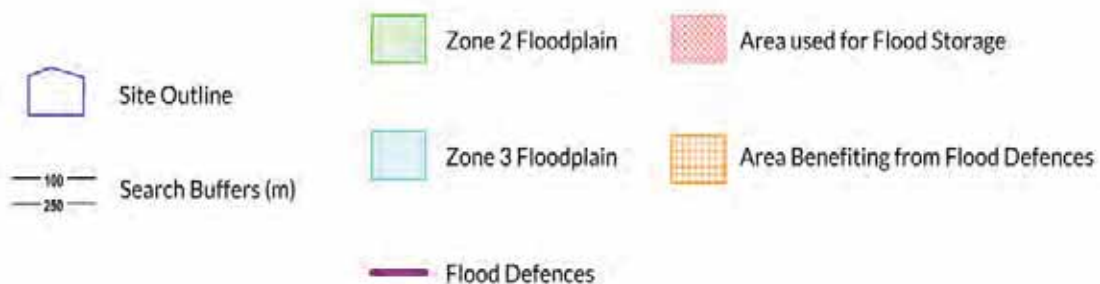
The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
12	NW
32	SE
44	SW
49	SE
92	SW
99	S
100	SE
115	SE
121	SW
142	S
162	SW
200	NW
231	NW

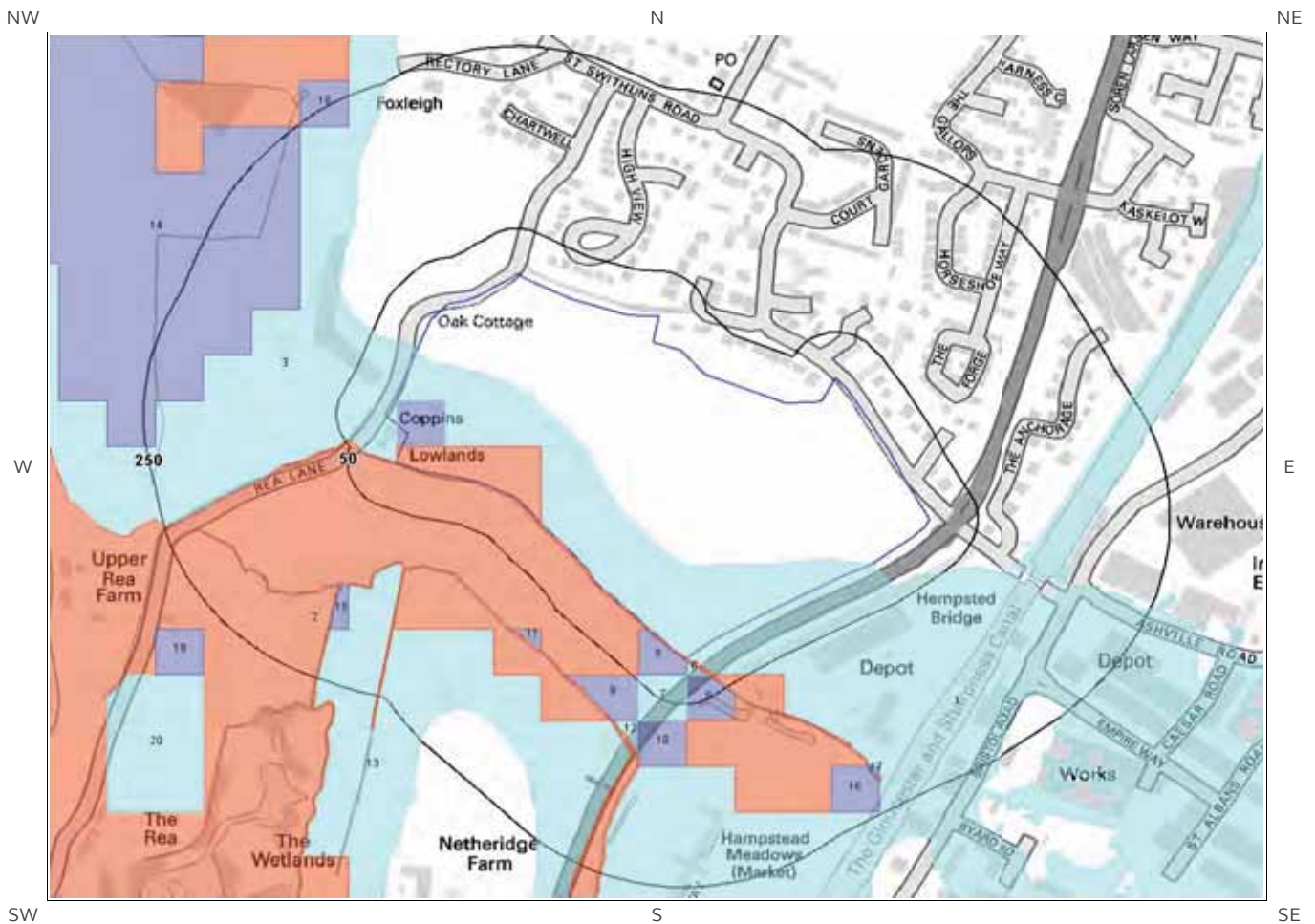
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



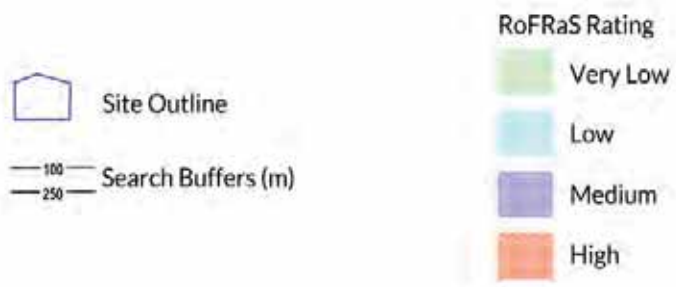
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

Identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
2	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
3	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
4	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
5	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
6	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
7	31	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
8	33	W	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
9A	98	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
10A	106	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
11A	111	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
12A	111	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
13	111	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
14H	111	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
15B	111	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
16C	112	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
17B	126	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
18B	139	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
19B	139	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)

20C	140	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
21D	144	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
22C	147	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
23D	149	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
24	150	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
25	151	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
26D	151	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
27D	152	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
28	153	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
29D	154	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
30D	155	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
31	161	SE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
32D	162	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
33D	164	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
34E	165	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
35	165	SW	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
36E	171	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
37E	173	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
38E	174	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
39E	180	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
40E	181	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
41E	182	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
42E	185	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
43E	187	E	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
44E	189	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
45F	189	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
46	192	SW	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
47	194	SW	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)

48F	195	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
49F	198	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
50F	199	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
51F	204	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
52F	207	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
53F	208	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
54F	209	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
55F	211	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
56F	212	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
57G	214	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
58G	218	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
59G	221	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
60G	222	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
61G	225	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
62G	226	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
63G	228	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
64G	230	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
65G	232	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
66	246	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m Identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

High

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a High (1 in 30 or greater) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	Low
2	0.0	On Site	High
3	0.0	On Site	Low
4	0.0	On Site	Medium
5	0.0	SW	Medium
6	3.0	SE	Low
7	17.0	S	Low
8	17.0	S	Medium
9	45.0	SW	Medium

7.4 Flood Defences

Flood Defences within 250m of the study site

Identified

The following flood defence records are represented as lines on the Flood Map:

ID	Distance (m)	Direction	Update
161	20	NW	17-Jun-2019

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site Identified

Clearwater Flooding or Superficial Deposits Flooding Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

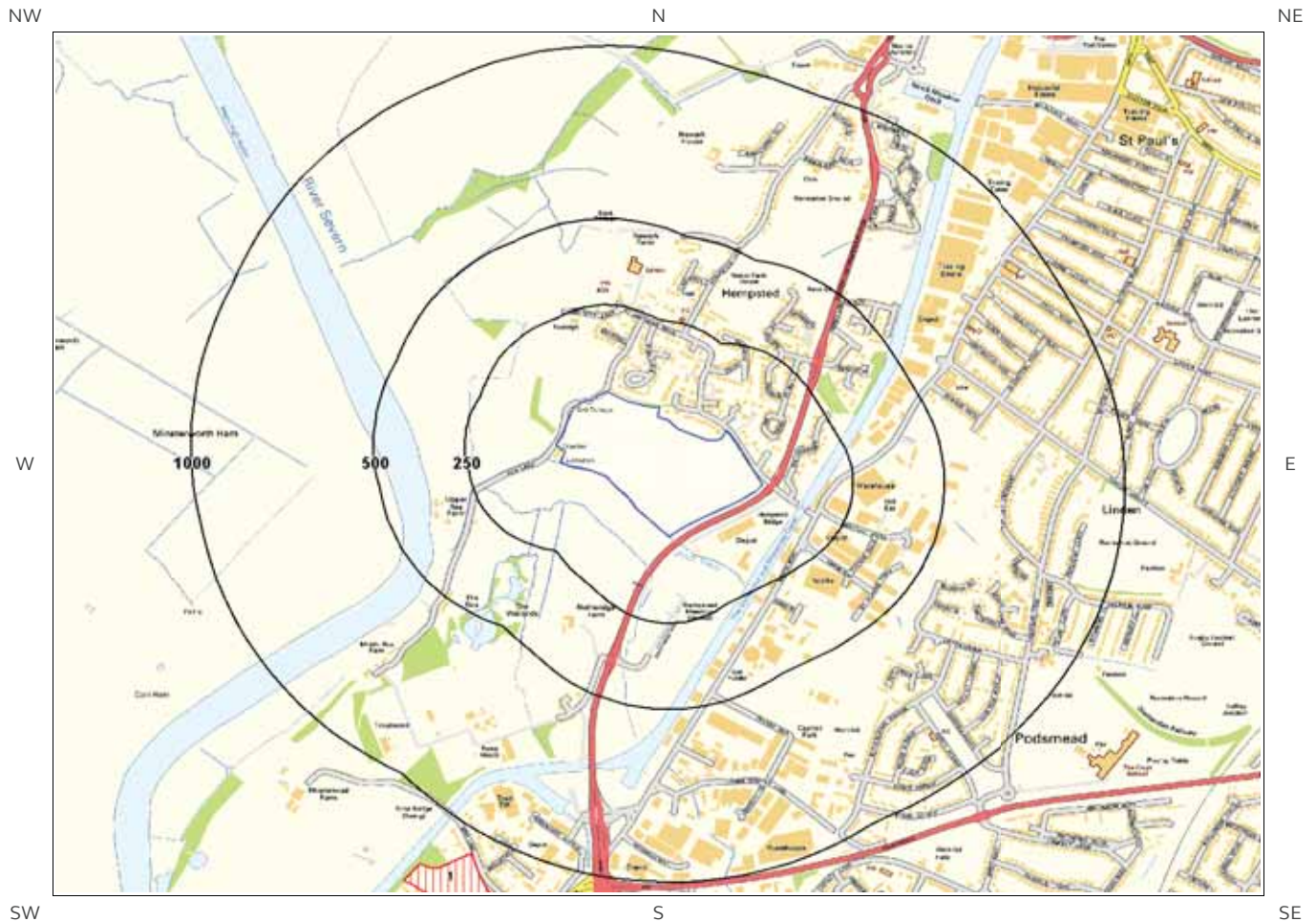
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result High

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

0

Database searched and no data found.

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

4

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
1	1062	SW	Green Farm Orchard	Natural England
Not shown	1746	N	Alney Island	Natural England
Not shown	1773	N	Alney Island	Natural England
Not shown	1964	SE	Robinswood Hill	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Significant potential for running sand problems with relatively small changes in ground conditions. Avoid large amounts of water entering the ground (for example through pipe leakage or soak-aways). Do not dig (deep) holes into saturated ground near the property without technical advice. For new build consider the consequences of soil and groundwater conditions during and after construction. For existing property possible increase in insurance risk from running sand, for example, due to water leakage, high rainfall events or flooding.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

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sales@emapsite.com

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Keyworth, Nottingham NG12 5GG
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Fax: 0115 936 3276.
Email:

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BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe

Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane
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Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Gloucester City Council
Phone: 01452 396396
Web: <http://www.gloucester.gov.uk/>
Address: Herbert Warehouse, The Docks, Gloucester, GL1 2EQ

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
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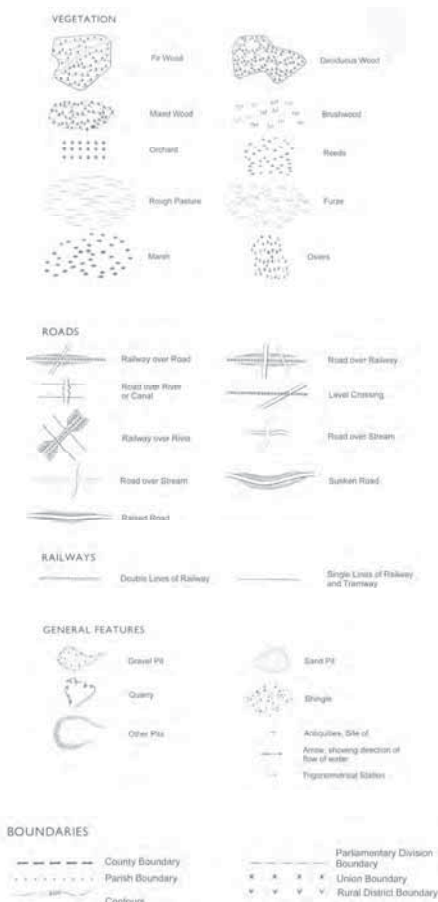
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Technical Helpline

Tel 08444159000

groundsureinsight@groundsure.com
www.groundsure.com

County Series 1:2,500 scale

LANDING FEATURES

10	Highway	11	Footpath
12	Footpath	13	Footpath
14	Footpath	15	Footpath
16	Footpath	17	Footpath
18	Footpath	19	Footpath
20	Footpath	21	Footpath
22	Footpath	23	Footpath
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34	Footpath	35	Footpath
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38	Footpath	39	Footpath
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42	Footpath	43	Footpath
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100	Footpath	101	Footpath

ROADS

102	Major Road
103	Minor Road
104	Footpath
105	Footpath
106	Footpath
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110	Footpath
111	Footpath
112	Footpath
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RAILWAYS

151	Major Railway
152	Minor Railway
153	Footpath
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188	Footpath
189	Footpath
190	Footpath

ABBREVIATIONS

A	Abbey	J	Juniper	W	Well
B	Barn	K	Kiln	X	Cross
C	Church	L	Lane	Y	Yard
D	Ditch	M	Mill	Z	Zealand
E	Enclosure	N	Nook		
F	Farm	O	Orchard		
G	Gate	P	Parish		
H	House	Q	Quarry		
I	Island	R	Road		
J	Juniper	S	Square		
K	Kiln	T	Tower		
L	Lane	U	Upland		
M	Mill	V	Village		
N	Nook	W	Well		
O	Orchard	X	Cross		
P	Parish	Y	Yard		
Q	Quarry	Z	Zealand		
R	Road				
S	Square				
T	Tower				
U	Upland				
V	Village				
W	Well				
X	Cross				
Y	Yard				
Z	Zealand				

National Grid 1:2,500 / 1:1,250 scale

GENERAL FEATURES

1	Watercourse	10	Watercourse	19	Watercourse
2	Watercourse	11	Watercourse	20	Watercourse
3	Watercourse	12	Watercourse	21	Watercourse
4	Watercourse	13	Watercourse	22	Watercourse
5	Watercourse	14	Watercourse	23	Watercourse
6	Watercourse	15	Watercourse	24	Watercourse
7	Watercourse	16	Watercourse	25	Watercourse
8	Watercourse	17	Watercourse	26	Watercourse
9	Watercourse	18	Watercourse	27	Watercourse
10	Watercourse	28	Watercourse	36	Watercourse
11	Watercourse	29	Watercourse	37	Watercourse
12	Watercourse	30	Watercourse	38	Watercourse
13	Watercourse	31	Watercourse	39	Watercourse
14	Watercourse	32	Watercourse	40	Watercourse
15	Watercourse	33	Watercourse	41	Watercourse
16	Watercourse	34	Watercourse	42	Watercourse
17	Watercourse	35	Watercourse	43	Watercourse
18	Watercourse	44	Watercourse	44	Watercourse

BOUNDARIES

England & Wales

1	County Boundary (approximate)
2	County & Civil Parish Boundary (approximate)
3	Administrative County or County Borough Boundary
4	London Borough Boundary
5	County District Boundary
6	Civil Parish Boundary
7	Parish & Ward Boundary (not based on civil parish)
8	Parish & Ward Boundary (not based on civil parish)
9	Parish & Ward Boundary (not based on civil parish)
10	Parish & Ward Boundary (not based on civil parish)

Scotland

1	County Boundary (approximate)
2	County Council Boundary
3	Civil Parish Boundary
4	County of the City Boundary
5	Borough Boundary
6	County Council Boundary
7	County Council Boundary
8	County Council Boundary
9	County Council Boundary
10	County Council Boundary

ABBREVIATIONS

A	Abbey	J	Juniper	W	Well
B	Barn	K	Kiln	X	Cross
C	Church	L	Lane	Y	Yard
D	Ditch	M	Mill	Z	Zealand
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H	House	Q	Quarry		
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J	Juniper	S	Square		
K	Kiln	T	Tower		
L	Lane	U	Upland		
M	Mill	V	Village		
N	Nook	W	Well		
O	Orchard	X	Cross		
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R	Road				
S	Square				
T	Tower				
U	Upland				
V	Village				
W	Well				
X	Cross				
Y	Yard				
Z	Zealand				



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Scale: 1:10,560

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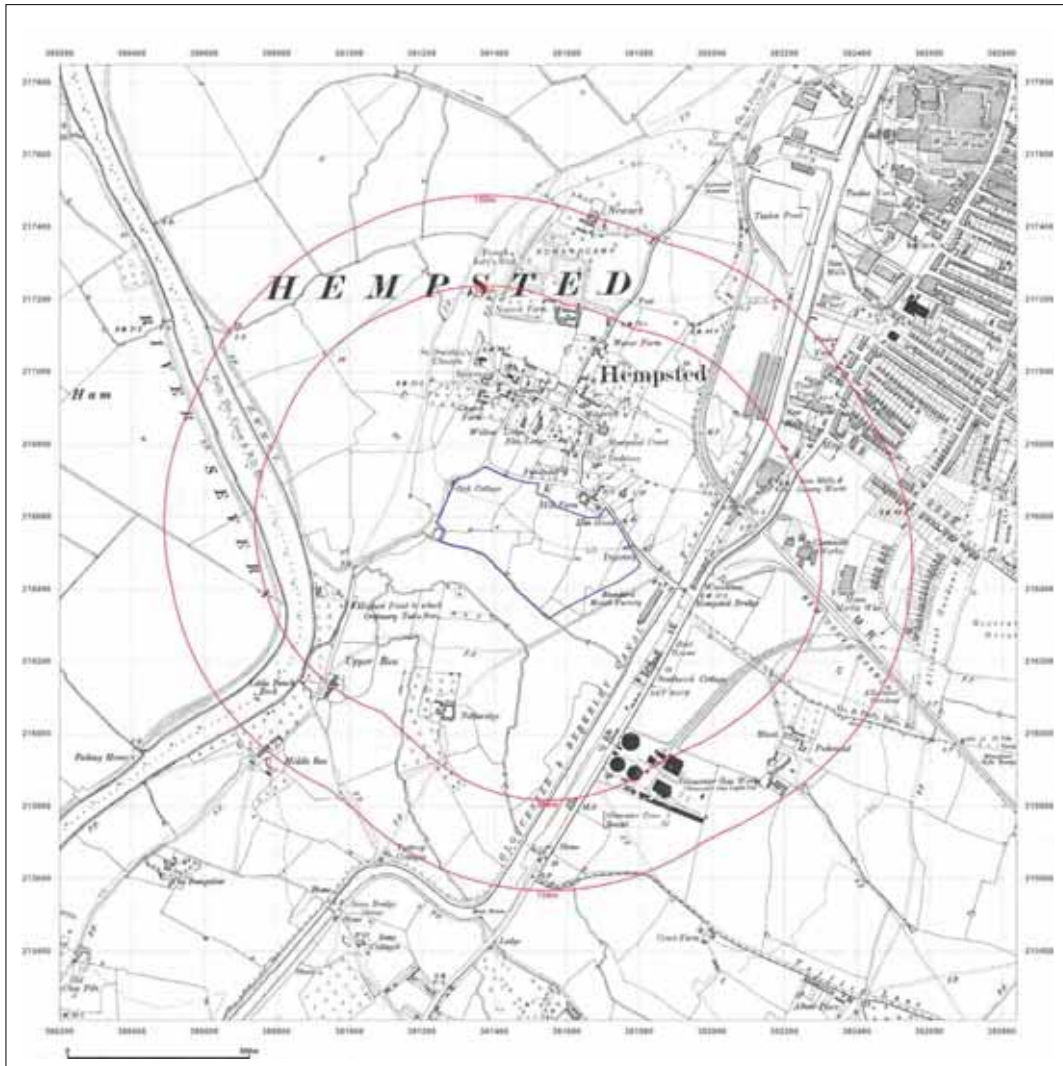


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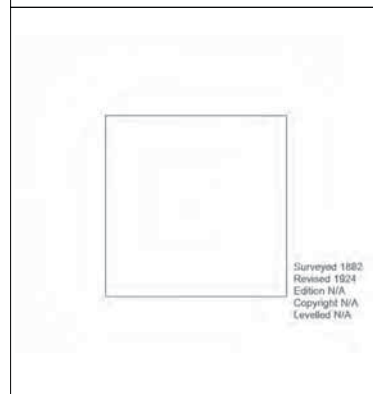
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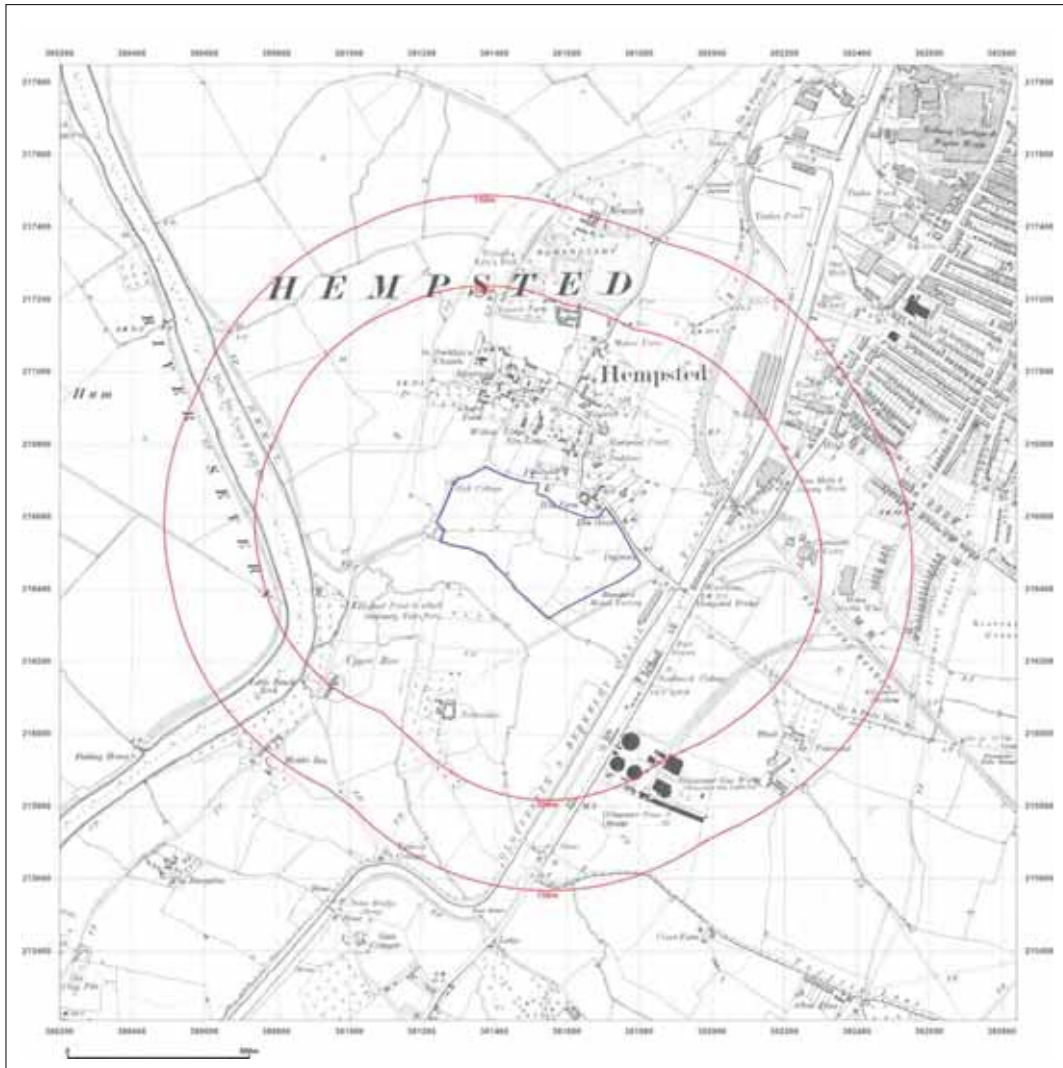
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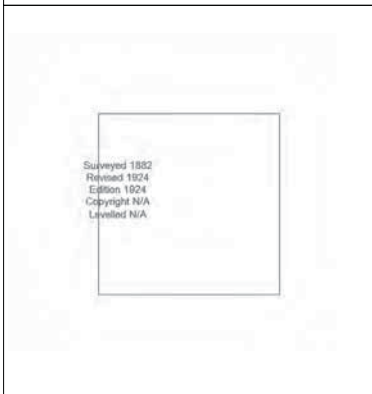
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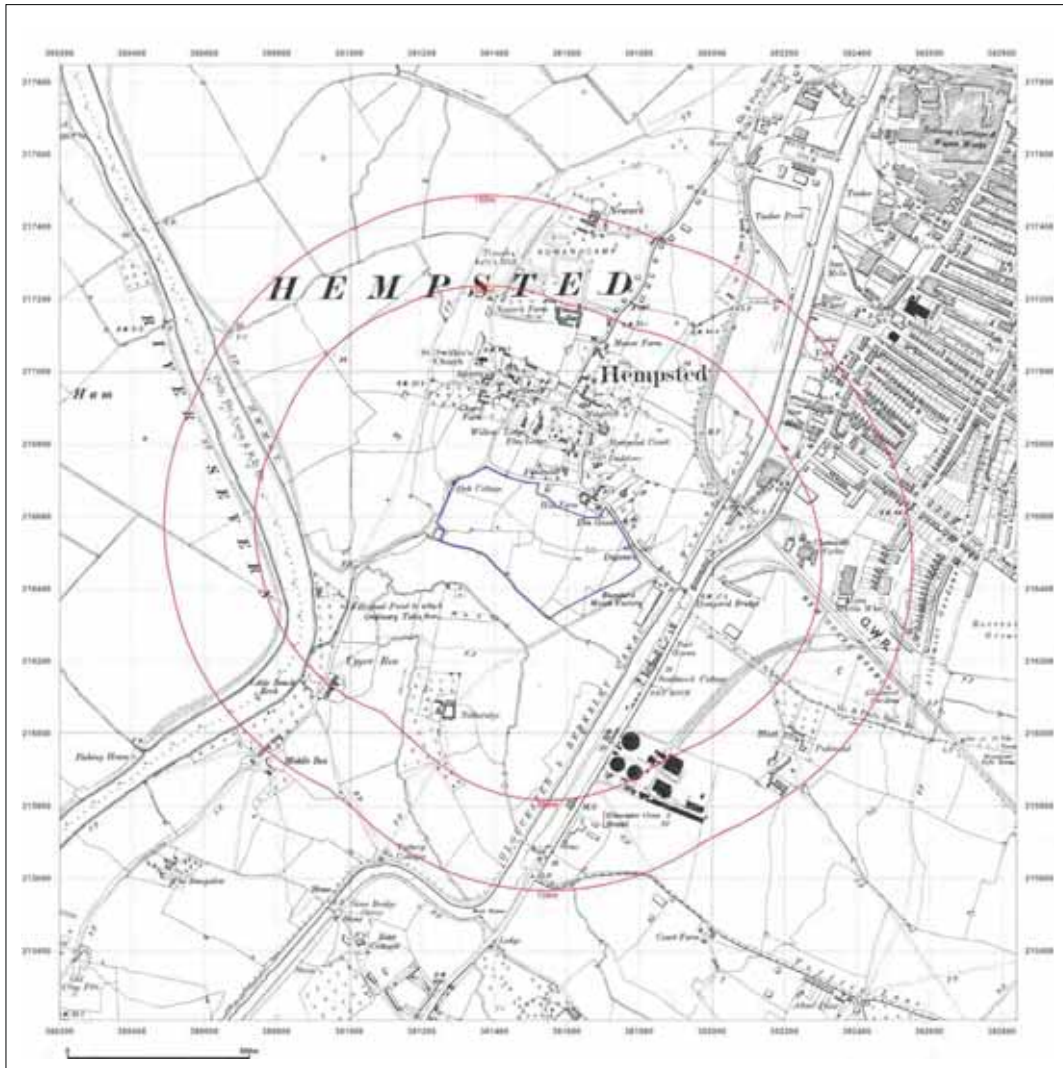
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Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



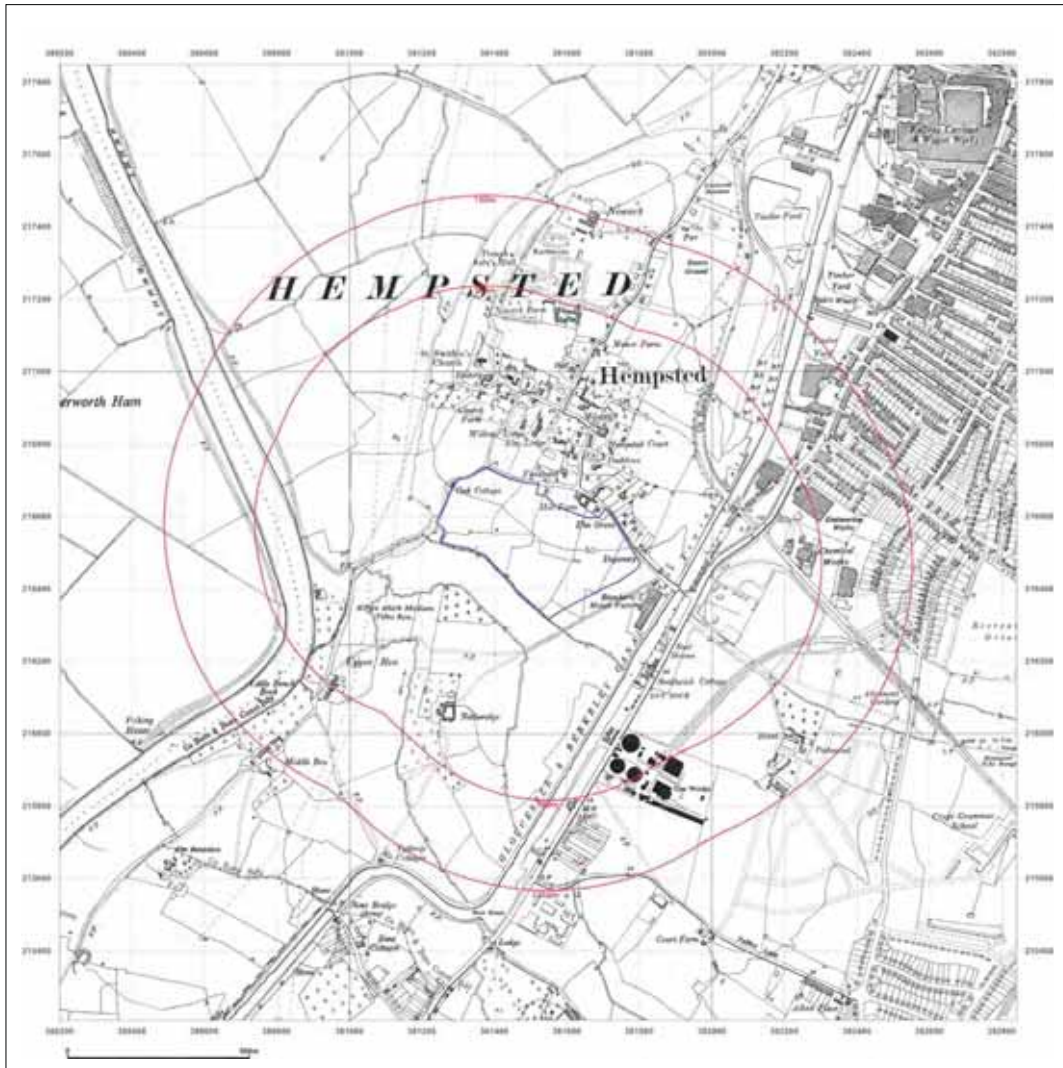
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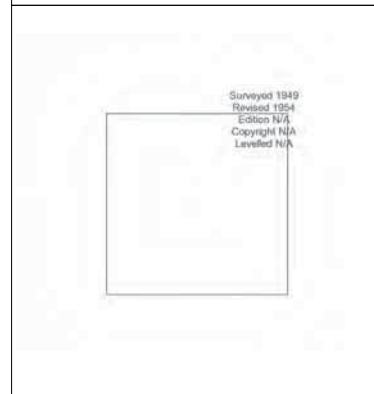
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Grid Ref: 381520, 216528

Map Name: Provisional

Map date: 1954

Scale: 1:10,560

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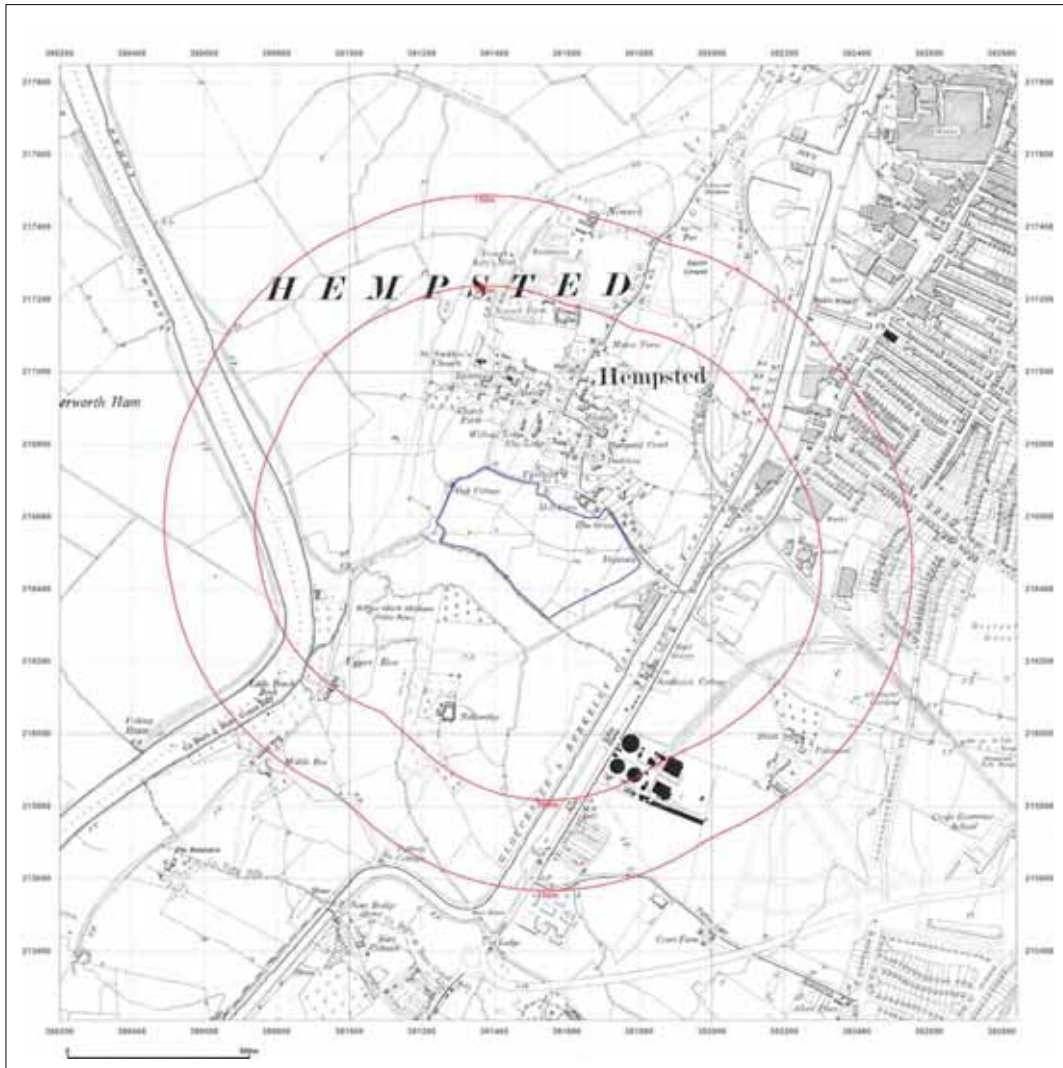
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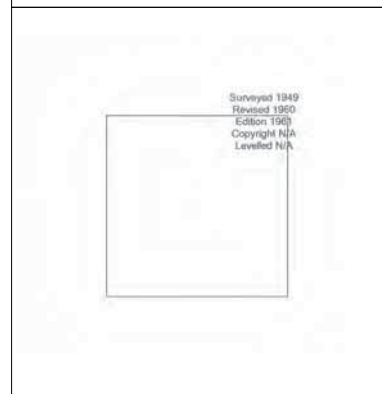
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Map Name: Provisional

Map date: 1961

Scale: 1:10,560

Printed at: 1:10,560



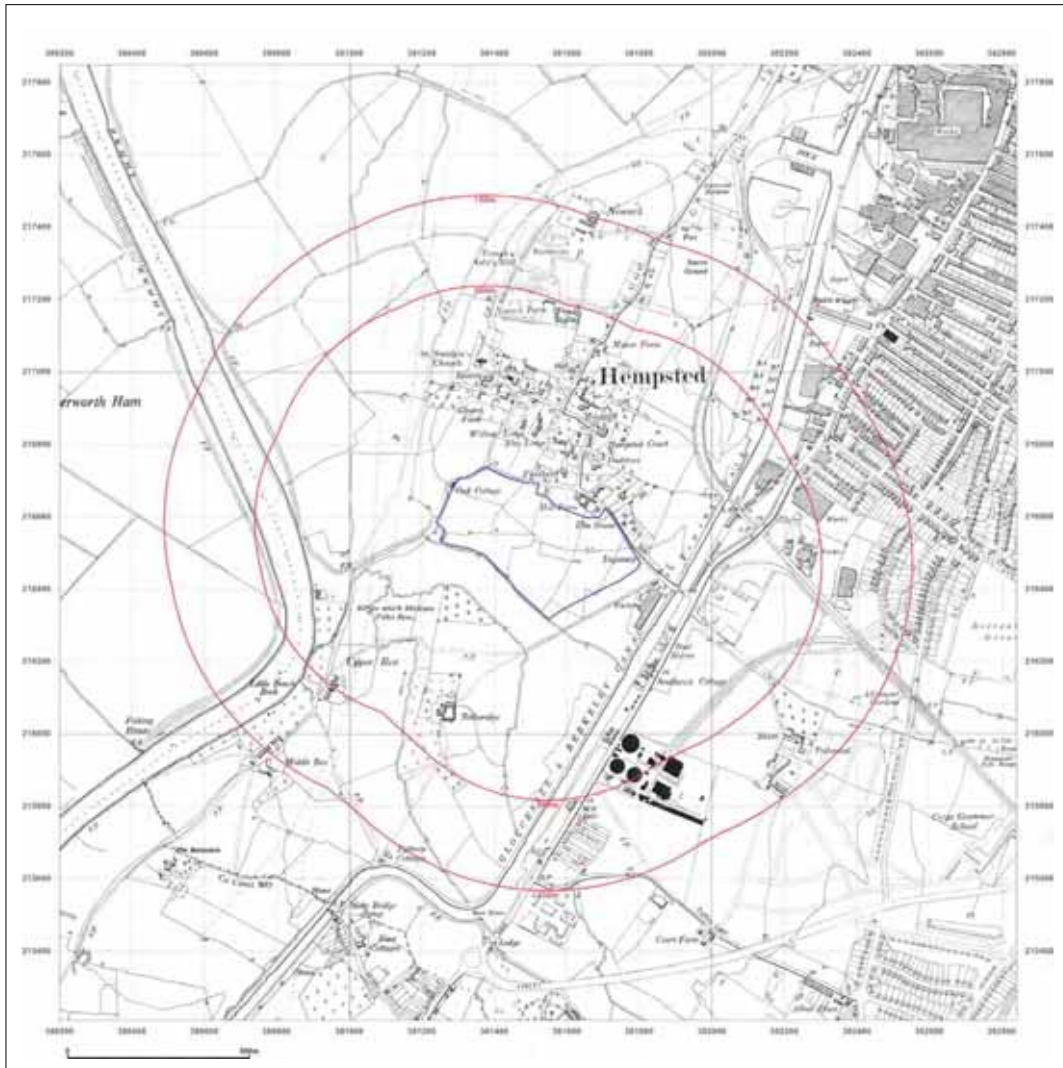
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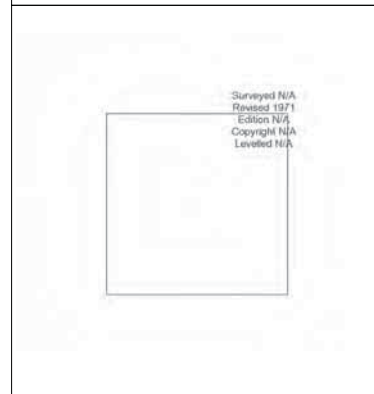
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Report Ref: EMS-553373_744045
Grid Ref: 381520, 216528

Map Name: Provisional

Map date: 1971

Scale: 1:10,560

Printed at: 1:10,560



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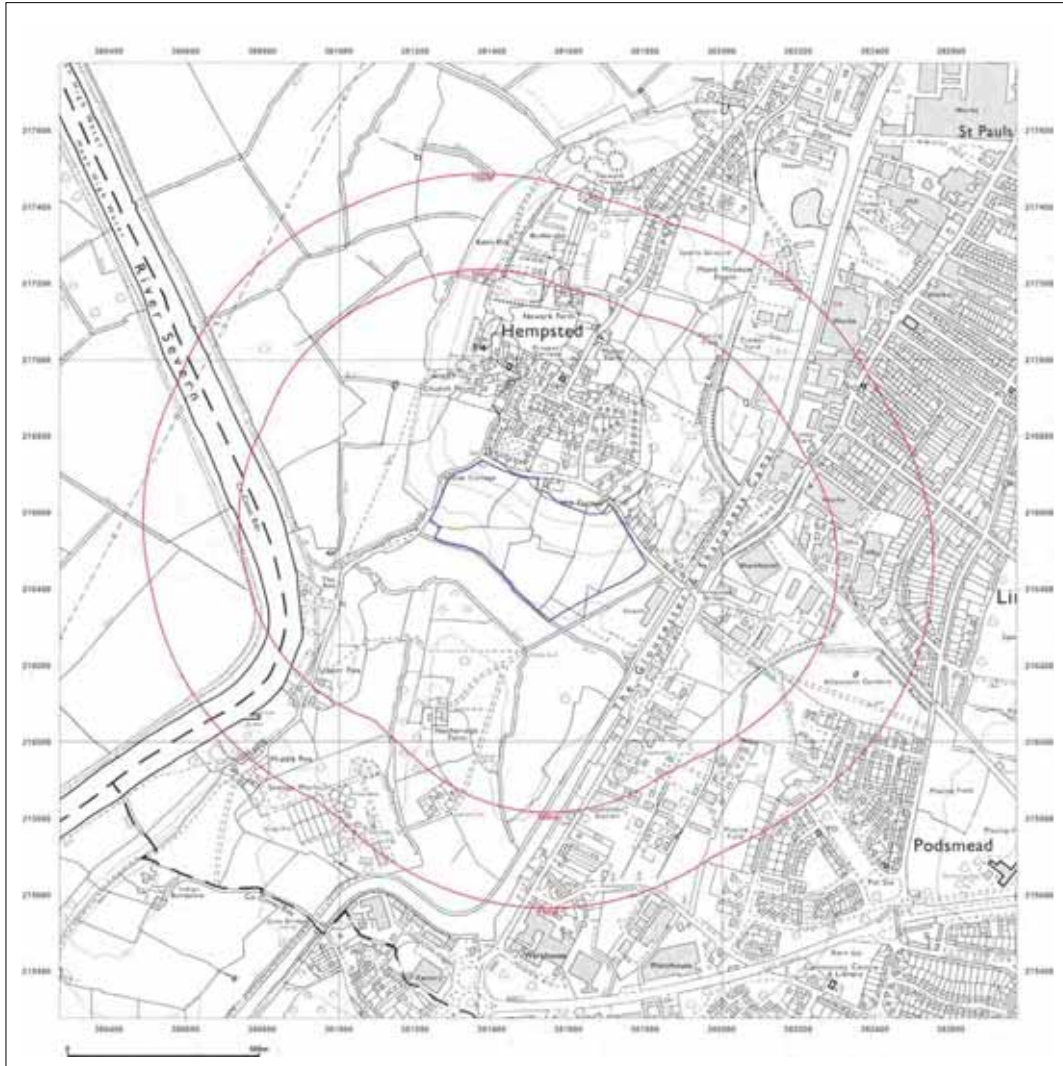


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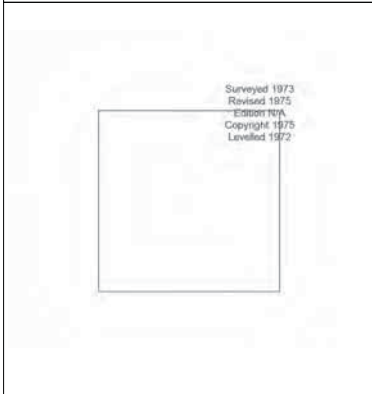
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Grid Ref: 381520, 216528

Map Name: National Grid

Map date: 1975

Scale: 1:10,000

Printed at: 1:10,000



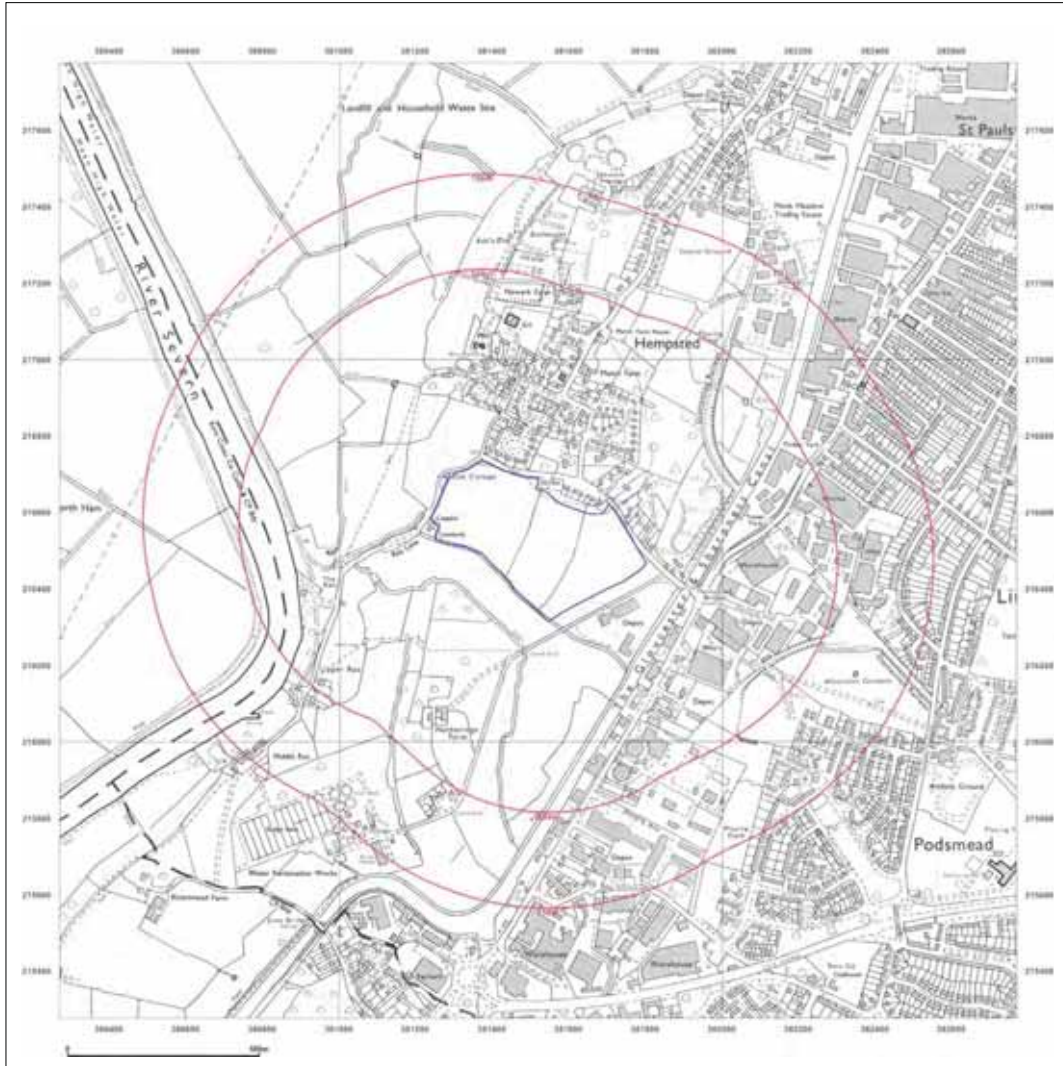
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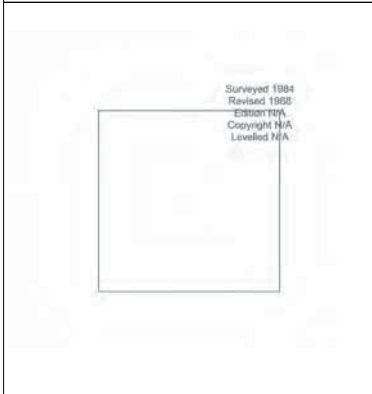
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Map Name: National Grid

Map date: 1988

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Printed at: 1:10,000



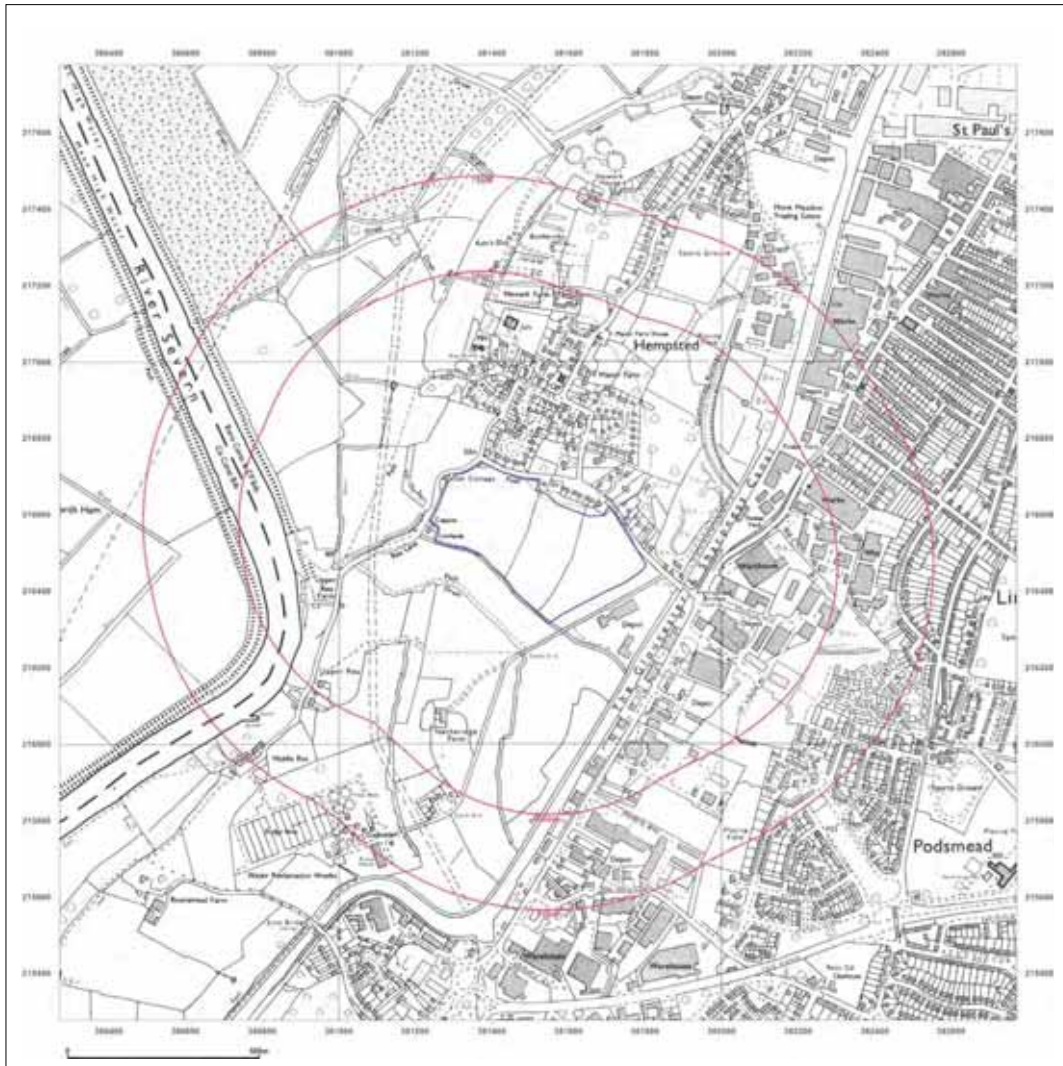
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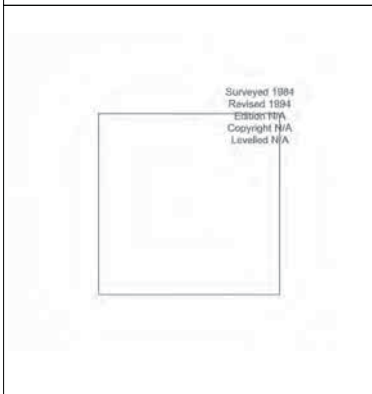
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Grid Ref: 381520, 216528

Map Name: National Grid

Map date: 1994

Scale: 1:10,000

Printed at: 1:10,000



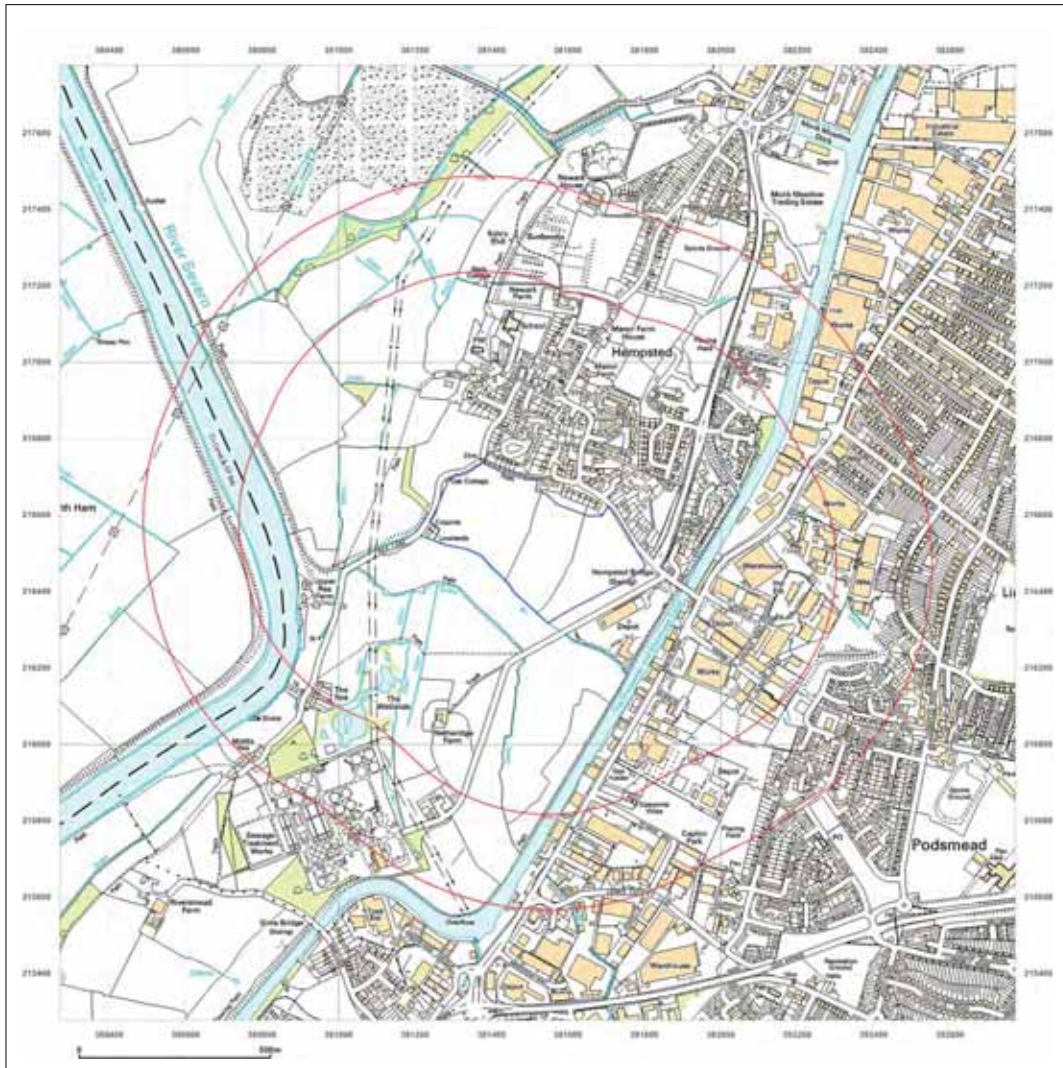
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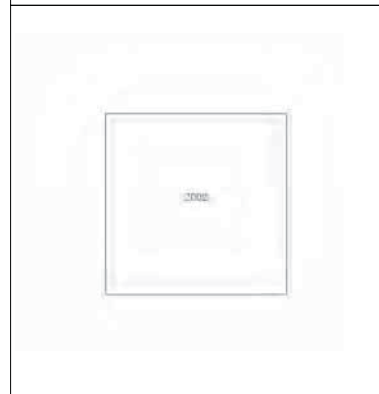
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Report Ref: EMS-553373_744045
Grid Ref: 381520, 216528

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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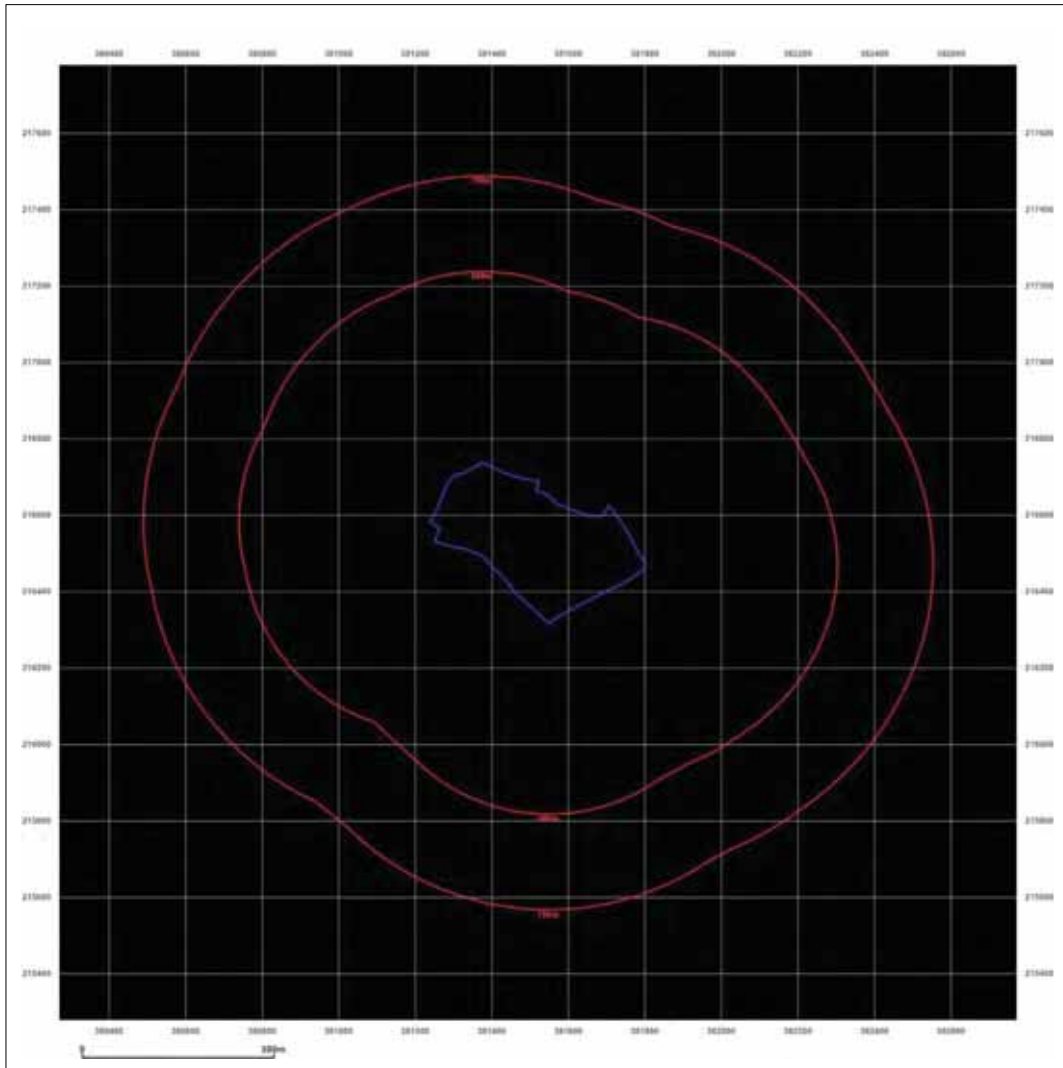
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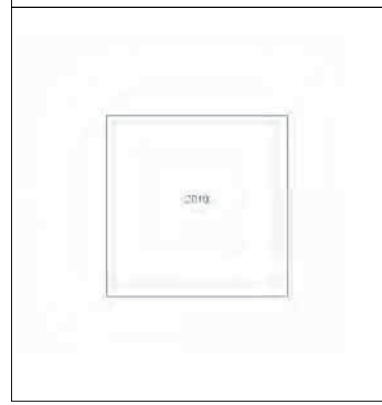
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Map Name: National Grid

Map date: 2010

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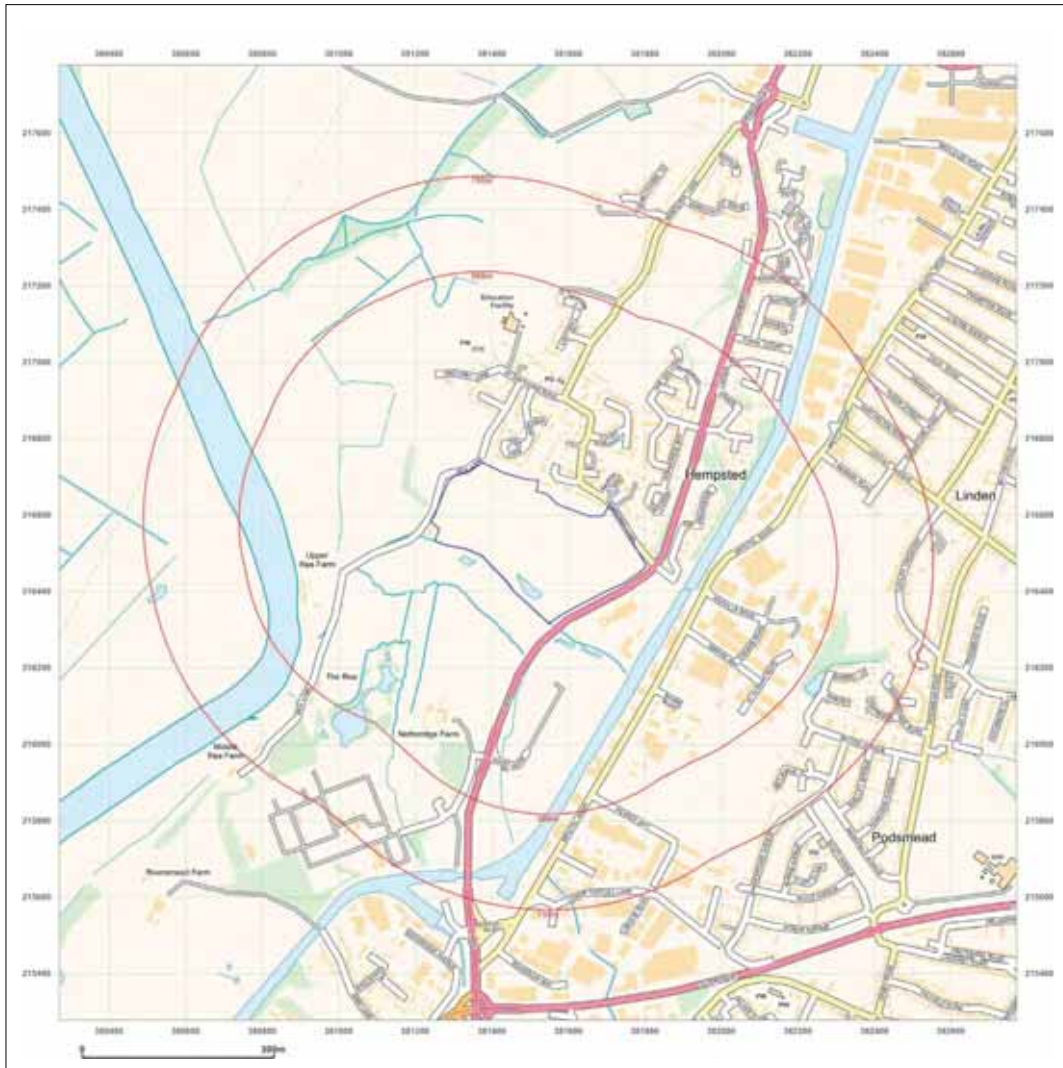
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Client Ref: EMS_553373_744045
Report Ref: EMS-553373_744045
Grid Ref: 381520, 216528

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

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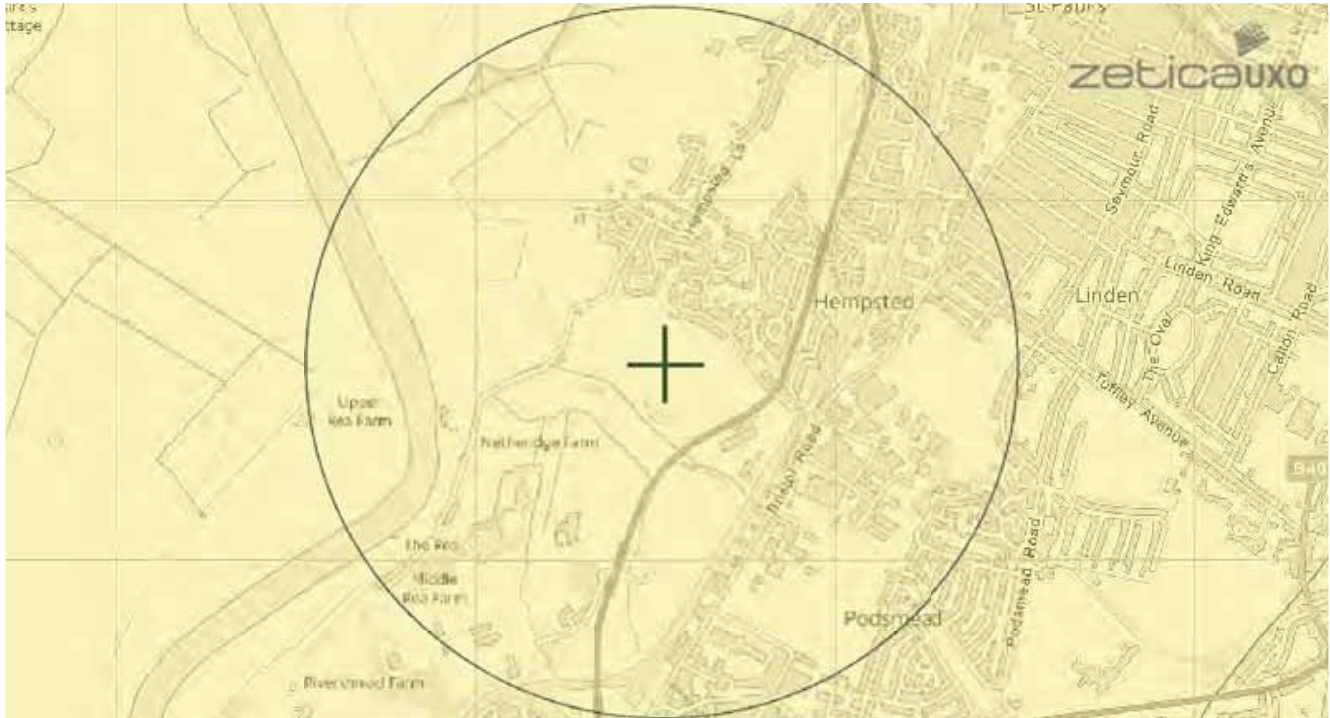
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

UNEXPLODED BOMB RISK MAP






SITE LOCATION

Map Centre: 381532,216552



LEGEND

-  **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
-  **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
-  **Low:** Areas indicated as having 15 bombs per 1000acre or less.

-  **military**
-  **industry**
-  **UXO find**
-  **transport**
-  **dock**
-  **Luftwaffe targets**
-  **utilities**
-  **other**

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

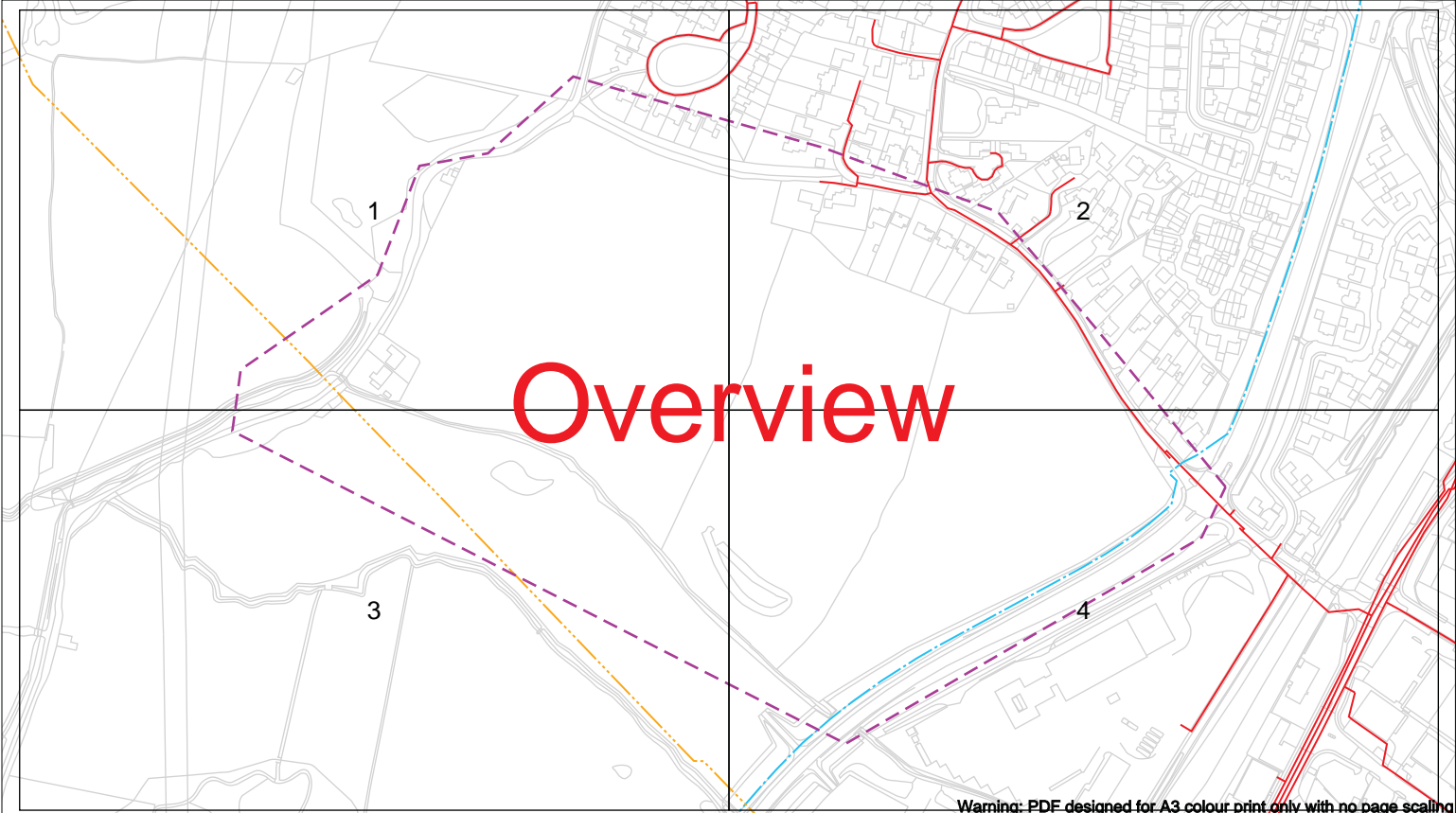
web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.



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Contact Us
 Mapping Enquiries: 02920 278 912
 General Enquiries: 0800 912 2999

Date Requested: 28/06/2019
 Job Reference: 15880546
 Site Location: 380979 216149

Requested by:
 Mrs Lisa Simmons
 Your Scheme/Reference:
 LKS/Gloucester 2019-56

Scale: 1:2563 (When plotted at A3)

EXTREME CAUTION. Major Accident Hazard Pipeline in Vicinity
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912

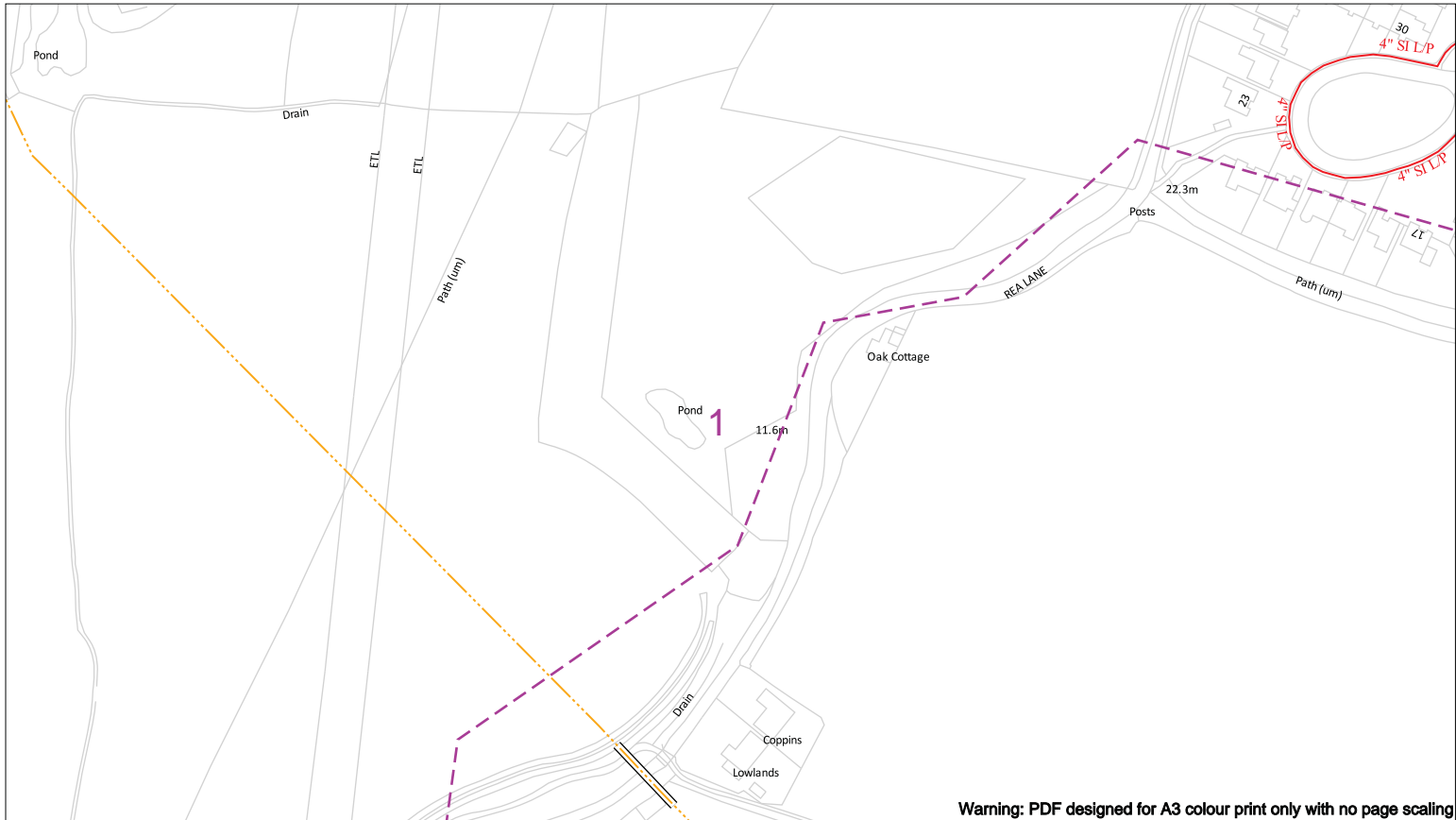
IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed
- The plan only shows those pipes owned by Wales & West Utilities (WU) as its role as a licensed Gas Transporter
- Service pipes, valves, syphons, stub connections etc. may not be shown but their presence should be anticipated
- You must use safe digging practices in accordance with H5(G)47 to establish the actual position of mains, services and other apparatus before any mechanical excavation is used
- It is your responsibility to ensure this information is provided to all persons working near our plant
- If in doubt call the WU dig team on 02920 278912

In case of an emergency call 0800 111 999

Dig Sites	Area: Line:		Line/Fire Valve
	Low Pressure (LP) 21mbar – 75mbar		Governor Station
	Medium Pressure (MP) 350mbar – 2bar		Change of Diameter
	Intermediate Pressure (IP) 2bar – 7bar		End Cap
	High Pressure (HP) >7bar		Depth of cover





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 Job Reference: 15880546
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Requested by:
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 Your Scheme/Reference:
 LKS/Gloucester 2019-56

Scale: 1:1250 (When plotted at A3)

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100m

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	Medium Pressure (MP) 350mbar – 2bar		Change of Diameter
	Intermediate Pressure (IP) 2bar – 7bar		End Cap
	High Pressure (HP) >7bar		Depth of cover

WALES & WEST UTILITIES

Dial before you dig

100% of diggers are trained to dial 111 999 before digging

111 999 is the national dig line

111 999 is available 24 hours a day, 7 days a week

111 999 is free to call

111 999 is available on mobile phones

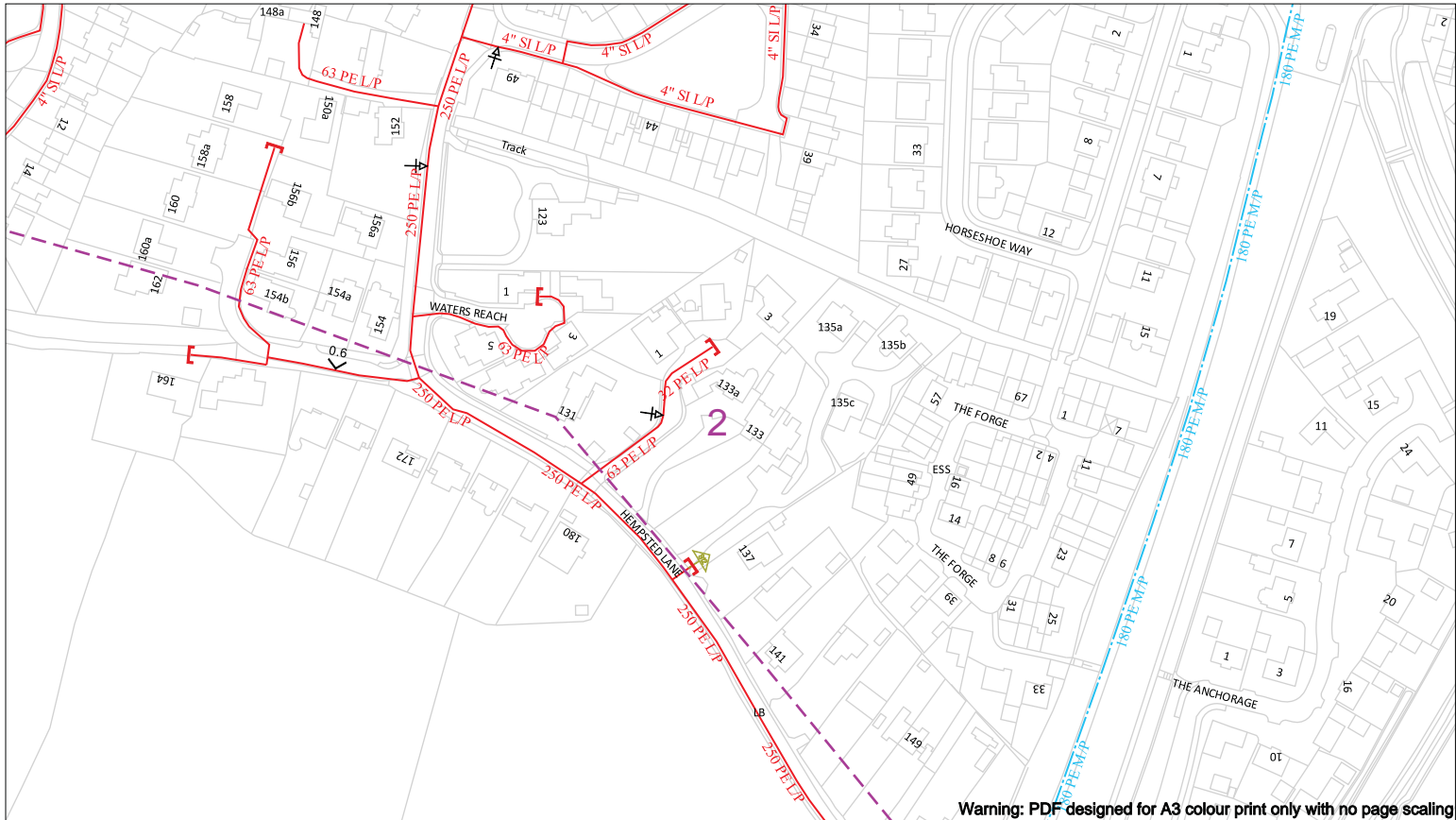
111 999 is available on landline phones

111 999 is available on payphones

111 999 is available on public payphones

111 999 is available on public payphones

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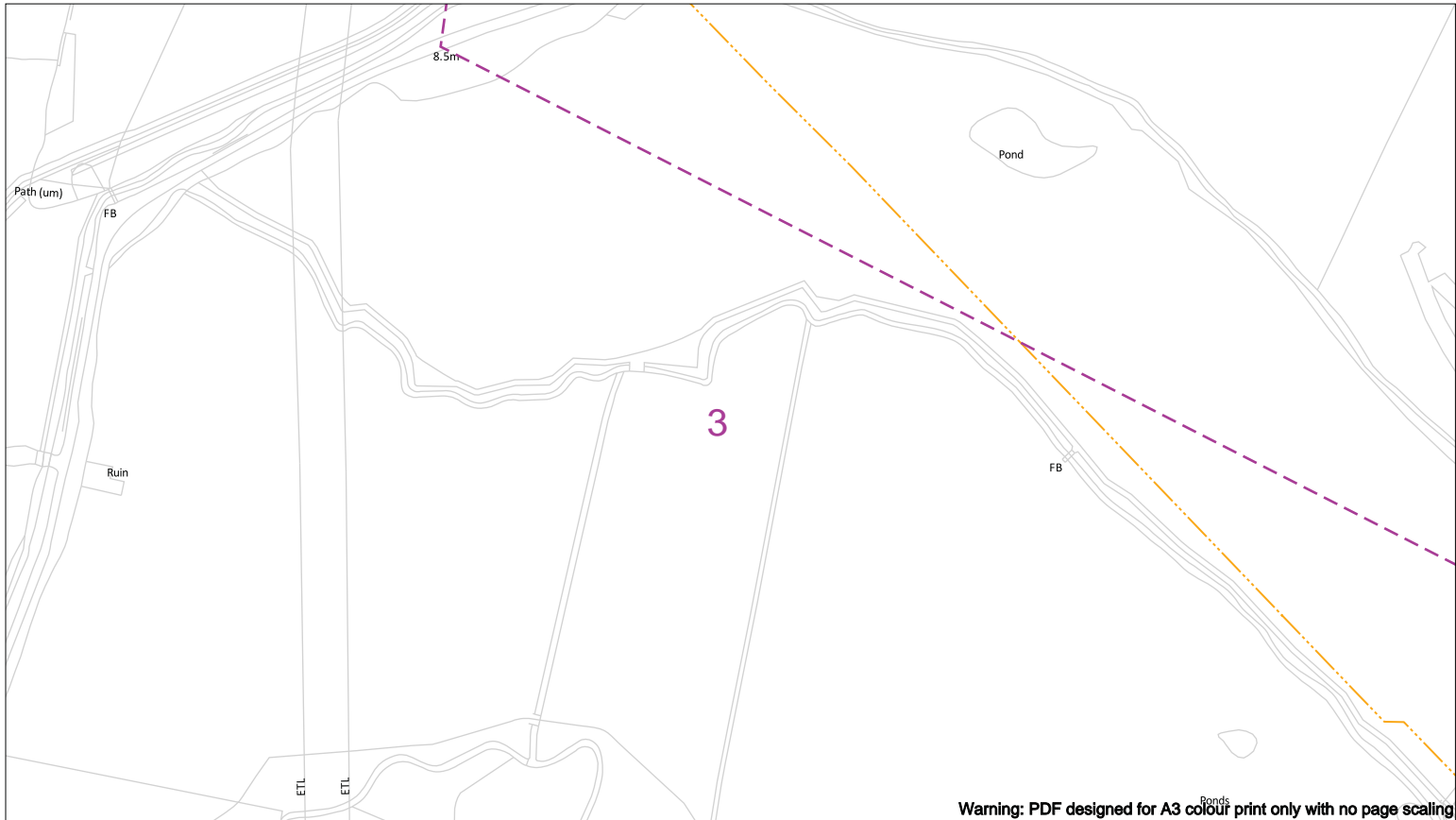
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100m

	Dig Sites		Area		Line
			Low Pressure (LP) 21mbar – 75mbar		Medium Pressure (MP) 350mbar – 2bar
			Intermediate Pressure (IP) 2bar – 7bar		High Pressure (HP) >7bar

	Line/Fire Valve
	Governor Station
	Change of Diameter
	End Cap
	Depth of cover





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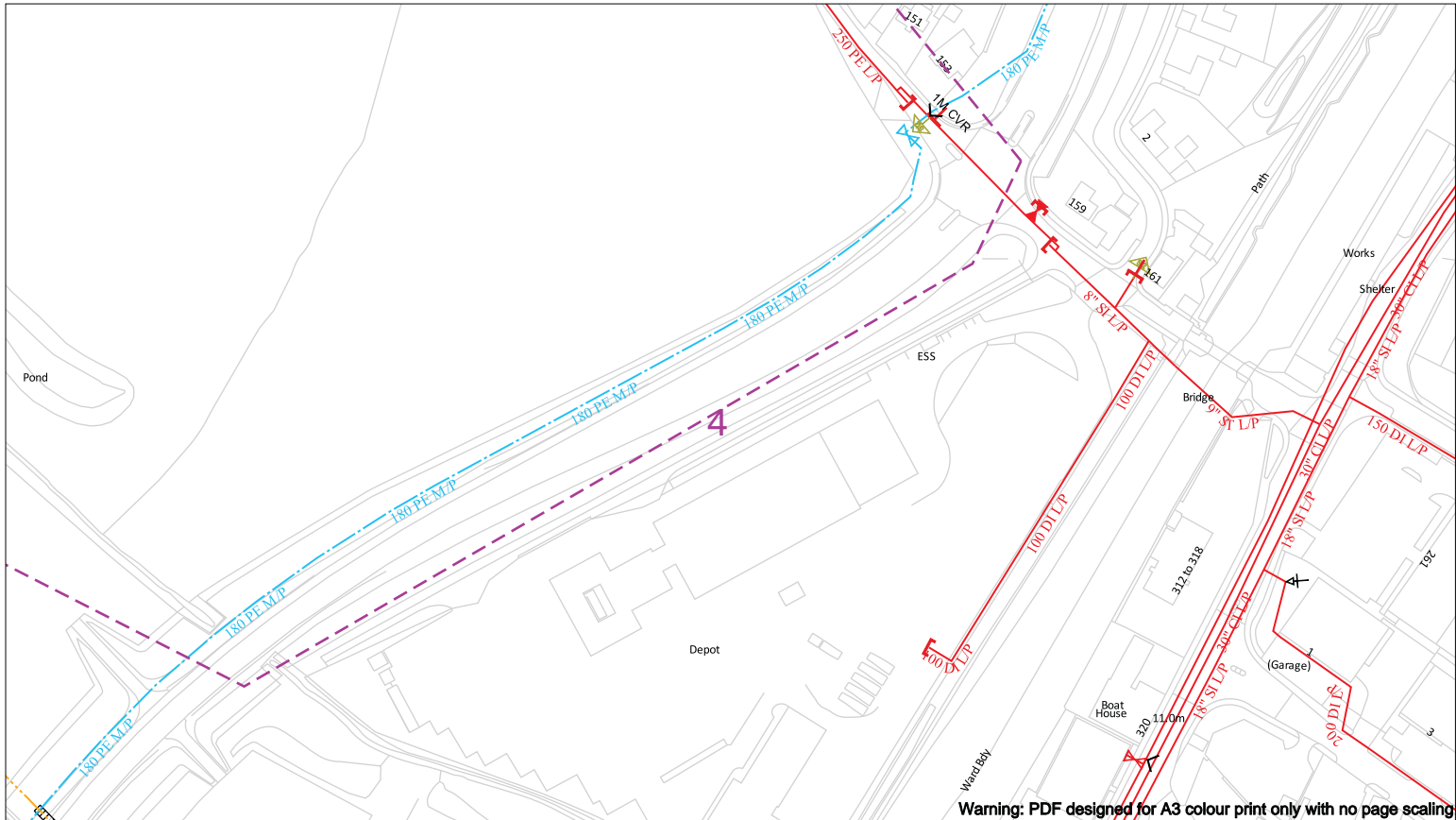
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100m

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100m

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