



Groundsure

LOCATION INTELLIGENCE

PSG

The complete SEARCH service

RESIDENTIAL

HOMEBUYERS

Search Report

Date

06-06-2018

Groundsure Reference

FBRI-GS4966514-10117833-60385

Address

REGAL HOUSE, SHRIPNEY ROAD,
BOGNOR REGIS, PO22 9NP

Grid Reference

493879 101968

Your Reference

4966514-KC/VANGO/V106/3

PROFESSIONAL OPINION

Contaminated Land



PASSED

Groundsure considers there is not a **High Potential Risk*** that the site will be identified as **Contaminated Land****. No further action is required in relation to Contaminated Land.

* "High Potential Risk" is the level of risk which results in 1% of reports being In Need of Further Assessment.
** within the meaning set out in Part 2A of the Environmental Protection Act 1990

River, coastal and surface water flooding



HIGH

The property or an area within 25m has been assessed to be at High risk of flooding. The JBA Insurability Index is Green for this property. **Please see the Overview and Guidance section for further information.**

Natural Ground Subsidence



IDENTIFIED

The property or an area within 25m has been assessed to have a **Low** potential for natural ground subsidence. **Please see Section 5.9 for further information.**

Energy



IDENTIFIED

The property has been identified to lie within 5km of one or more energy features. **Please see section 7 for further information.**



No significant issues identified



Issues have been identified. Further investigation is recommended.



Some issues have been identified which a prudent purchaser may wish to investigate further.

COPSO
EXECUTIVE MEMBER

LEGAL EYE
QUALITY
STANDARD

SearchCode

iema
corporate
member



Other Considerations

Potential Infilled Land

Groundsure have not identified any past activities that can cause structural problems on or in proximity to the property.

Coal Mining

The study site does not lie in an area which may be affected by coal mining.

BGS Non-Coal Mining

The British Geological Survey (BGS) have not identified a risk of non-coal mining at the property.

Development Constraints

The property has not been identified to lie within or in close proximity to any designated areas which may restrict development at the site. Please note this relates solely to the environmental and cultural designations listed in Section 4 of this report.

Groundwater flooding

The site or an area in close proximity is considered to have the potential for groundwater flooding of property situated below ground level. Please refer to the Detailed Findings and Section 5.8 for further guidance.

Radon

The study site is not in a radon affected area, as less than 1% of homes are above the action level. Please refer to the Detailed Findings and Section 5.10 and 5.11 for further guidance.

HS2 and Crossrail 1

The property does not lie within 5km of the proposed High Speed 2 (HS2) train route or within 500m of the proposed Crossrail 1 train route. No further recommendations are necessary. 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.

Please note that no physical inspection of the property has been carried out in the preparation of this report. If you need any further assistance, please do not hesitate to contact our helpline on 01903 854 728 quoting reference: FBRI-GS4966514-10117833-60385

Environmental Overview and Guidance

Recommendations - Flood

Groundsure consider that the area within 25m of the centre of the property has a **High** risk of flooding. Please note this rating is calculated using a weighted assessment of fluvial, coastal and pluvial risk and historic flood events only.

Recommendations

A **Low** risk of tidal/fluvial flooding and a **Low** risk of surface water (pluvial) flooding have been identified within 25m of the centre of the property. **Additionally an area within 25m of the property is recorded as having been subject to historic flooding.** Please refer to the individual flood assessment sections below for further specific guidance. Alternatively flood resistance measures may assist in reducing the flood risk to the property.

Please be aware that this is an automated assessment based upon the highest flood risk found within 25m of the centre of the property. Therefore a purchaser may wish to check the maps provided within this report to confirm whether the flood risk area lies on or in close proximity to the property. If you would like Groundsure to manually assess the property a £35 + VAT fee may be applicable. Please note this manual assessment does not include a site visit.

JBA Overall Insurability Index

Guidance

The property has been rated as **Green** within JBA's Insurability Index. **Green** indicates a level of flood hazard such that (subject to terms, applicant's status and individual insurers' approach to risk, exclusions to the Flood Re scheme and any other factors which may be relevant), insurance covering flood risk may be obtainable relatively easily as part of a standard household insurance contract. This rating is calculated by JBA and is based entirely on JBA's modelled river, coastal and pluvial flood risk data. This data is used by a large number of top insurance companies in order to assess flood risk, though individual insurers may also have recourse to further information not used in this assessment such as claim history, and is indicative rather than definitive.

On the 4th April 2016 the Flood Re scheme was implemented. The scheme is designed to provide affordable household insurance for residential properties within the UK, which are perceived to have a high flood risk. Insurance companies are able to cede residential properties they consider to have a flood risk into the Flood Re scheme. Annual premiums and excesses are then capped depending on the council tax band for individual properties.

There are some exclusions to the Flood Re scheme and these include; commercial properties (including buy to let), new homes built after 1st January 2009 and blocks of flats with three or more units. Flood Re is designed to run for 25 years, to allow time for the Government, local authorities, insurers and communities to become better prepared for flooding. After this period, the market is expected to return to risk reflective pricing, and properties with flood risks that have not been mitigated may face significantly increased premiums and/or difficulty in obtaining cover.

The JBA Insurability Index is categorised on a fivefold scale and also includes a statement of the possibility of insurance companies ceding the property into the Flood Re scheme (subject to terms, applicant's status and individual insurers' approach to risk, historical flooding events at the property, exclusions to the Flood Re scheme and any other factors which may be relevant):-

- **Green** indicates a level of flood hazard such that insurance covering flood risk may be obtainable relatively easily as part of a standard household insurance contract. Very low possibility of insurance companies ceding the property into the Flood Re scheme unless the property has flooded in the past.
- **Amber** indicates a level of flood hazard such that insurance covering flood risk may be available but may be subject to increased premiums and non-standard and/or additional terms. Low possibility of insurance companies ceding the property into the Flood Re scheme unless the property has flooded in the past.
- **Red** indicates a level of flood hazard such that standard priced insurance covering flood risk may be more difficult to obtain. Low to moderate possibility of insurance companies ceding the property into the Flood Re scheme unless the property has flooded in the past.
- **Black 1** indicates a level of flood hazard such that standard priced insurance covering flood risk may be significantly more difficult to obtain. Moderate to high possibility of insurance companies ceding the property into the Flood Re scheme, especially if the property has flooded in the past.



- **Black 2** indicates a level of flood hazard such that standard priced insurance covering flood risk may be extremely difficult to obtain. High possibility of insurance companies ceding the property into the Flood Re scheme, especially if the property has flooded in the past.

Please note that due to the methodology employed to produce the dataset, JBA insurability ratings are only suitable for individual residential properties and as such any rating given for commercial property should be considered invalid.

As this index is indicative we recommend a number of insurers are contacted in order to obtain a comparative quote.

Risk of Flooding from Rivers and the Sea (RoFRaS)

As the site lies within or in close proximity to an area with a **Low** risk rating in the RoFRaS database, it is considered by the Environment Agency/Natural Resources Wales to have a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%) in any given year.

Guidance

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 likelihood of flood defences overtopping or breaching by considering their location type condition and standard of protection.

A number of major insurance companies refer to this information within their risk model although they may also utilise additional information such as claims histories which may further influence their decision. Where a High risk of flooding is identified there is a much higher likelihood of increased insurance premiums or the flood risk part of the insurance premium being ceded to Flood Re. Property owners of sites within Low and Medium risk areas are still considered to be at risk of flooding and insurance premiums may be increased as a result. Owners of properties within Low, Medium and High risk areas are advised to sign up to the Environment Agency/Natural Resources Wales's Flood Warning scheme on 0345 988 1188 or at www.environment-agency.gov.uk. Please see Section 5.1 for further details. Additionally a prudent purchaser may wish to consider reducing the impact of flooding at the property by installing flood protection measures at the site if risks have been identified. Such measures may help reduce the effects of flooding at the property if flood defences are absent or are breached and may assist in obtaining insurance for the site. Further information on flood protection measures can be obtained by contacting Groundsure.

Surface Water Flooding

The study site or an area within 25m of the centre of the study site has been assessed to be at a **Low** risk of surface water (pluvial) flooding. This indicates that this area would be expected to be affected by surface water flooding in a 1 in 1000 year rainfall event to a depth of greater than 0.1m.

Guidance

Surface Water (pluvial) flooding is defined as flooding caused by rainfall-generated overland flow before the runoff enters a watercourse or sewer. In such events, sewerage and drainage systems and surface watercourses may be entirely overwhelmed.

Surface Water (pluvial) flooding will usually be a result of extreme rainfall events though may also occur when lesser amounts of rain falls on land which has low permeability and/or is already saturated, frozen or developed. In such cases overland flow and 'ponding' in topographical depressions may occur. This data is provided by JBA Risk Management. Please see Section 5.7 for further details.

Historic Flood Events

The property or an area within 25m of the centre of the property has been identified to have been subject to historic flooding by the Environment Agency/Natural Resources Wales. A prudent purchaser may wish to make further enquiries regarding the flood event(s). Further information could be obtained from the seller, the Environment Agency/Natural Resources Wales, or the lead local flood authority (the county council or unitary authority).

Guidance

Over 23,500 separate events are recorded within the Environment Agency/Natural Resources Wales's national database on historic flood events. This data is used to understand where flooding has occurred in the past and provides details as available. Absence of a historic flood event for an area does not mean that the area has never flooded but only that the national Environment Agency/Natural Resources Wales do not currently have records of flooding within the area. Local Environment Agency/Natural Resources Wales offices and Local Authorities may have records of smaller-scale flooding and homeowners are also advised to check their TA6 Property Information form for any records of flooding. A record of a flood footprint in previous years does not mean that an area will flood again and this information does not take account of flood management schemes and improved flood defences. Please see Section 5.6 for further details.

Areas Benefiting from Flood Defences

The property does not lie in or within 25m of an area the Environment Agency/Natural Resources Wales consider to benefit from flood defences. Property level defences and some older schemes may not be included in the Environment Agency/Natural Resources Wales database of areas considered to benefit from flood defences.

Guidance

These are areas that may benefit from the presence of major defences during a 1% fluvial (river) or 0.5% tidal-flood event. These areas would flood if the defence were not present but may not flood because the defence is present.

Proposed Flood Defences

The property does not lie in or within 25m of an area the Environment Agency/Natural Resources Wales consider to benefit from proposed flood defences.

Guidance

Flood defences seek to reduce the risk of flooding and to safeguard life, protect property, sustain economic activity and the natural environment. Flood defences are designed to protect against flood events of a particular magnitude expressed as risk in any one year.



Flooding from Groundwater

There is **potential** for groundwater flooding to occur below the surface of the study site. Where potential for groundwater flooding of property situated below ground level is indicated this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. 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. If there are records of previous incidences of groundwater flooding then is recommended that other information e.g. rainfall history property type and land drainage information in addition to previous records of flooding be investigated in order to establish relative but not absolute risk of groundwater flooding.

Guidance

The BGS Susceptibility to Groundwater Flooding hazard dataset identifies areas where geological conditions could enable groundwater flooding to occur and where groundwater may come close to the ground surface. The BGS Susceptibility to Groundwater Flooding hazard dataset identifies areas where geological conditions could enable groundwater flooding to occur and where groundwater may come close to the ground surface.

The susceptibility data is suitable for use for regional or national planning purposes where the groundwater flooding information will be used along with a range of other relevant information to inform land-use planning decisions. It might also be used in conjunction with a large number of other factors e.g. records of previous incidence of groundwater flooding rainfall property type and land drainage information to establish relative but not absolute risk of groundwater flooding at a resolution of greater than a few hundred metres. The susceptibility data should not be used on its own to make planning decisions at any scale and in particular should not be used to inform planning decisions at the site scale. The susceptibility data cannot be used on its own to indicate risk of groundwater flooding.

Flood Storage Areas

The property does not lie in or within 25m of a Flood Storage Area.

Guidance

Flood Storage Areas are considered part of the functional flood plain and are areas where water has to flow or be stored in times of flood.

Flood Risk Framework

The Flood Risk Assessment section is based on datasets covering a variety of different flooding types. No inspection of the property or of the surrounding area has been undertaken by Groundsure or the data providers. The modelling of flood hazards is extremely complex and in creating a national dataset certain assumptions have been made and all such datasets will have limitations. These datasets should be used to give an indication of relative flood risk rather than a definitive answer. Local actions and minor variations such as blocked drains or streams etc. can greatly alter the effect of flooding. A low or negligible modelled flood risk does not guarantee that flooding will not occur. Nor will a high risk mean that flooding definitely will occur. Groundsure's overall flood risk assessment takes account of the cumulative risk as assessed within the Environment Agency/Natural Resources Wales's RoFRaS database in addition to surface water (pluvial) flooding and historic flood events.

Contents

Other Considerations	2
Environmental Overview and Guidance	3
Overview of Findings	8
Aerial Photograph	10
Notes on Professional Assessments	11
1. Past Land Use	13
2. Landfill and Waste Sites	15
3. Industrial Sites and Processes	17
4. Designated Environmentally Sensitive Sites	21
5. Natural Hazards and Additional Factors	24
6. Mining	33
7. Energy	35
8. Additional Information	37
9. Guide to our Professional Assessment	38
Contact Details	40
Search Code	42
Standard Terms and Conditions	44

Overview of Findings

Factor	Assessment	Subsection
Potentially Contaminative Historical Land Uses		
1:10,000 & 1:10,560 scale Historical Data	Passed	1.1
Potentially Infilled Land (1:10,000 & 1:10,560 scale survey)	Passed	1.2
Additional Information 1:2,500 scale Historical Data		
Historical Tanks	Passed	1.3
Historical Energy Features	Passed	1.4
Historical Petrol Stations	Passed	1.5
Historical Garage/ Vehicle Repair	Passed	1.6
Historical Military / Ordnance Sites	Passed	1.7
Landfill and Waste Sites		
Landfill Sites	Passed	2.1
Landfills from Local Authority and Historical Mapping Records	Passed	2.2
Waste Treatment, Transfer or Disposal Sites	Passed	2.3
Environment Agency/Natural Resources Wales Licensed Waste Sites	Passed	2.4
Industrial Sites and Processes		
Potentially Contaminative Industrial Sites	Passed	3.1
Petrol & Fuel Sites	Passed	3.2
Historic IPC Authorisations	Passed	3.3
Part A(1) Authorised Processes	Passed	3.4
Part A(2) and Part B Authorised Processes and Enforcements	Passed	3.5
Red List Discharge Consents	Passed	3.6
Water Industry Referrals	Passed	3.7
List 1 Dangerous Substances	Passed	3.8
List 2 Dangerous Substances	Passed	3.9
Dangerous or Hazardous Sites	Passed	3.10
Sites Determined as Contaminated Land under Part 2A EPA 1990	Passed	3.11
Environment Agency/Natural Resources Wales Recorded Pollution Incidents	Passed	3.12
Hazardous Substance Consents and Enforcements	Passed	3.13
Environmental Setting		
Sites of Special Scientific Interest (SSSI)	No	4.1
Ramsar Sites	No	4.2
National Nature Reserves (NNR)	No	4.3
Special Areas of Conservation (SAC)	No	4.4
Special Protection Areas (SPA)	No	4.5
Local Nature Reserves (LNR)	Yes	4.6
World Heritage Sites	No	4.7
Areas of Outstanding Natural Beauty (AONB)	No	4.8
National Parks (NP)	No	4.9
Green Belt	No	4.10
Designated Ancient Woodland	No	4.11

Factor	Assessment	Subsection
Natural Hazards & Additional Factors		
What is the maximum Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating within 25m of the centre of the property?	Low	5.1
Are there any Areas Benefiting from Flood Defences within 250m?	No	5.2
Are there any flood defences within 250m of the study site?	No	5.3
Are there any Proposed Flood Defences within 250m of the study site?	No	5.4
Are there any Areas Used for Flood Storage within 250m?	No	5.5
Has the site or an area within 25m been subject to past flooding as recorded by the Environment Agency/Natural Resources Wales?	Yes	5.6
What is the maximum Surface Water flood risk identified within 25m of the centre of the property?	Low	5.7
What is the maximum susceptibility to Groundwater Flooding in proximity to the study site?	Potential below ground level	5.8
Natural Ground Subsidence	Low	5.9
Radon	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level	5.10
Radon Protective Measures	No radon protective measures are necessary	5.11
Mining		
Coal Mining	No	6.1
BGS Non-Coal Mining	Unclassified	6.2
Mining Cavities	No	6.3
Natural Cavities	No	6.4
Historical Mining	No	6.5
Historical Underground Workings	No	6.6
Energy		
Existing oil, gas, shale gas or coalbed methane wells	No	7.1
Proposed oil, gas, shale gas or coalbed methane wells	Yes	7.2
Existing wind farms	No	7.3
Proposed wind power projects	Yes	7.4
Existing solar farms	Yes	7.5
Proposed solar farms	Yes	7.6
Existing power stations	No	7.7
Existing Nuclear Establishments	No	7.8
Proposed Energy and other large Infrastructure Projects	No	7.9
Additional Information		
Ofcom Sitefinder Mobile Phone Mast Records	No	8.1
Mobile Phone Mast Planning Records	No	8.2
Overhead Electricity Transmission Lines and Pylons	Yes	8.3



Aerial Photograph



Site Address: REGAL HOUSE, SHRIPNEY ROAD, BOGNOR REGIS, PO22 9NP
Grid Reference: 493879 101968
Date of aerial image capture: 20-05-2015

Aerial photography supplied by Getmapping PLC.
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Notes on Professional Assessments

Professional Assessment of Contaminated Land

Please note that this assessment takes account of the following data: historical land use, landfill and waste transfer/treatment or disposal sites, scrap yards, current industrial uses (as defined by PointX data), Part A(1), A(2) and B Processes, COMAH and NIHHS sites, Dangerous Substances releases, RAS consents, Discharge and Red List Discharge consents, EPA 1990 sites, Pollution Incidents and Hazardous Substance Consents and Enforcements. This information is listed in this report. The Professional Assessment of Contaminated Land does not include assessment of the risk presented by natural hazards such as radon, subsidence or flooding or for past or present coal mining activity. No physical inspection of the property has been carried out.

Our risk assessments assume that the Site will be used for residential accommodation. The report is not suitable for non-domestic properties or for identifying risks for developments at the planning stage in accordance with National Planning Policy Framework (NPPF).

Professional Assessment of Flood Risk

Please note this assessment is based entirely on information provided by the Environment Agency/Natural Resources Wales (river/coastal flooding) and JBA Risk Management (pluvial/surface water flooding).

JBA Insurability

Please note that this assessment is produced by JBA Risk Management and is based entirely on their own modelled data for river flooding, coastal flooding and surface water flooding. As JBA have modelled this data in-house, there may be times when JBA's assessment of river and coastal flood risk will differ from that modelled by the Environment Agency/Natural Resources Wales. If you require further explanation of the insurability data, please contact Groundsure.

Introduction to Detailed Findings

All mapped features within this report are given an identification number. This number identifies the feature on the maps which precede the following data sections. All distances provided are in metres and directions are given as compass headings.

Section 1.1 - Historical maps are a widely recognised source of information for investigating site history. Nevertheless, analysis of mapping at 1:10,560 and 1:10,000 scale will not always provide a complete site history. If you are concerned about the former uses of a site, we would advise additional analysis of planning records and/or more detailed historical mapping.

Please note that the number of records identified relates to areas subject to potentially contaminative former activities and these do not necessarily correspond to the number of sites found within these areas.

Section 1.2 - Systematic analysis of historical maps can highlight areas which, over time, have the potential to have been infilled with various materials. Such areas can relate to such features as ditches, ponds, clay pits, brickfields and quarries. Areas of Infill do not always refer to landfill sites, although they may sometimes indicate the presence of such sites. Such areas are normally infilled with inert materials, although in some cases contaminative materials may have been used.

Sections 1.3 to 1.6 - Selected highly contaminative land uses have been extracted from 1:2,500 and 1:1,250 scale historical mapping. This database covers the majority of the UK from the first available map, but where areas of the UK are not covered it is indicated in the report as "No Data Available". This indicates that no assessment of the risk from these features is included in the report. In this instance if you are still concerned about the former uses of a site, we would advise additional analysis of planning records and/or more detailed historical mapping.

Section 1.7 - 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.

Section 2 - This information is gathered from a wide range of sources including the Environment Agency/Natural Resources Wales (Agency) and the British Geological Survey (BGS). Data supplied by Environment Agency/Natural Resources Wales refers to waste management licences required by anyone involved in waste disposal under the Environmental Protection Act 1990. A survey by the BGS undertaken in 1972/3 provides data on some older landfill sites, which were not subject to this legislation.

Section 3.1 - The answer to this question is based on searches of current industrial data provided by PointX



Section 3.2 – The answer to this question is based on searches of current and recent petrol stations provided by Catalist.

Sections 3.3, 3.4, 3.6-3.11 and 3.14 – This information is supplied by the Environment Agency/Natural Resources Wales.

Section 3.5, 3.13 and 3.15 – This information is supplied by Local Authorities.

Section 3.12 – This information is supplied by the Health and Safety Executive.

Section 5.1 – The answer to this question is based upon a 50m search radius from the centre of the search location. This information is supplied by the Environment Agency/Natural Resources Wales.

Sections 5.2 to 5.6 – The answers to these questions are based upon a 250m search radius from the centre of the search location. This information is supplied by the Environment Agency/Natural Resources Wales.

Sections 5.8-5.9 – The answer to this question is based upon a 50m search radius from the centre of the search location.

Section 6.1 – The answer to this question is based upon information found within 50m of the search centre.

Sections 6.2 and 6.4 – These databases provide an indication of “non-coal” mining and natural ground cavities. They are used to provide an indication that activities that have the potential to cause ground instability issues are present in the general vicinity of the property. However the accuracy of the data is not sufficient to confirm if the property will be directly affected.

Sections 6.5 and 6.6 - Systematic analysis of historical maps can highlight areas where either mining or underground workings have occurred in the past. The information is taken from features presented on historical maps which do not indicate the distance or direction which underground or mining workings extend beneath the surface. e.g features such as mine shafts only indicate the entrance to a mine, and by inference indicate the potential for underground features to extend outward from this point. Some features within this database may also relate to non-mining underground activities e.g.air shafts for underground railways.

Section 8.1 and Section 8.2 - Provides information on records of Ofcom-registered mobile phone masts and mobile mast planning records up to 250m.

Section 8.3 – Please be aware that the findings contained within the overhead power transmission lines section is based upon information found within Ordnance Survey OpenData.

1. Past Land Use

1.1 Potentially Contaminative Uses

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

Are there any potentially contaminative past land uses within 250m of the search centre?	Yes
Risk Assessment	Passed

Guidance: These findings are not of concern. No further action is recommended.

Distance (m)	Direction	Use	Date
71	W	Nursery	1993
71	W	Nursery	1977

1.2 Potentially Infilled Land

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

Are there areas of potentially infilled land within 250m of the search centre?	No
--	----

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

1.3 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.

Are there any historical tanks within 100m of the search centre?	Yes
Risk Assessment	Passed

Guidance: These findings are not of concern. No further action is recommended.

Distance (m)	Direction	Use	Date
38	S	Unspecified Tank	1912

1.4 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.

Are there any historical energy features within 100m of the search centre?	No
Risk Assessment	Passed

Guidance: Database searched and no data found. No further action is recommended.

1.5 Additional Information – Historical Petrol Station Database

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

Are there any historical petrol stations within 100m of the search centre?	No
Risk Assessment	Passed



Guidance: Database searched and no data found. No further action is recommended.

1.6 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.

Are there any historical garage and motor vehicle repair sites within 100m of the search centre?	No
Risk Assessment	Passed

Guidance: Database searched and no data found. No further action is recommended.

1.7 Historical Military/Ordnance Sites

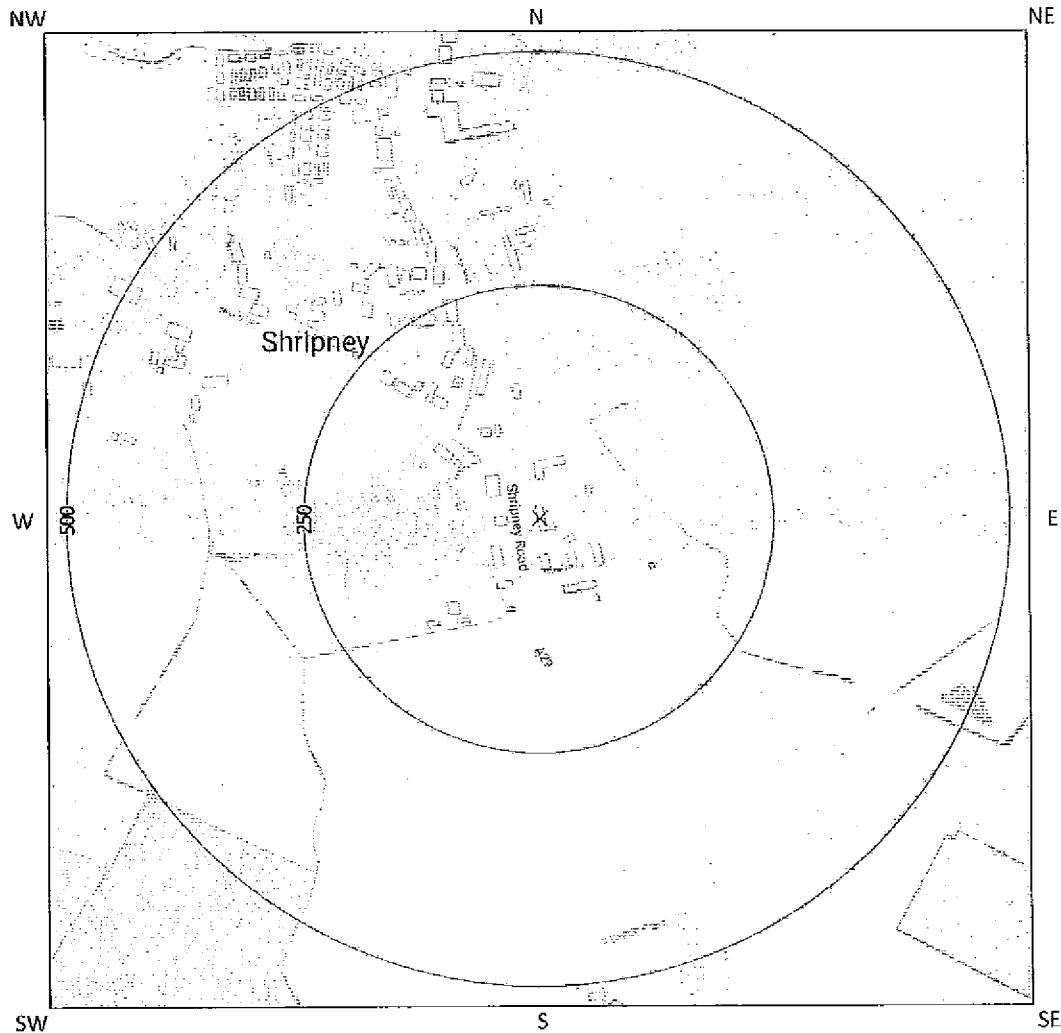
Analysis of historic military records has identified the following information.

Are there any historical military industrial sites known to Groundsure within 100m of the search centre?	No
Risk Assessment	Passed

Guidance: Database searched and no data found. No further action is recommended.

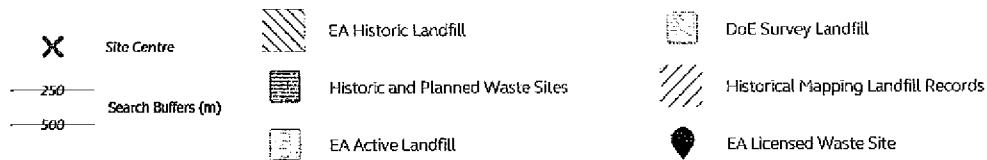
2. Landfill and Waste Sites

Landfill and Waste Sites Map



Landfill and Waste Sites Map

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Ordnance Survey licence 100035207



2.1 Landfill Sites

Are there any operational or non-operational landfill sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended

2.1.1 Environment Agency/Natural Resources Wales Active Landfill Sites

Database searched and no data found.

2.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites

Database searched and no data found.

2.1.3 British Geological Survey / DoE Landfill Site Survey

Database searched and no data found.

2.2 Records of Landfills in Local Authority and Historical Mapping Records

Are there any additional Landfills in Local Authority and Historical Mapping records within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

2.3 Waste Sites

Are there any operational or non-operational waste treatment, transfer or disposal sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

2.4 Environment Agency/Natural Resources Wales Licensed Waste Sites

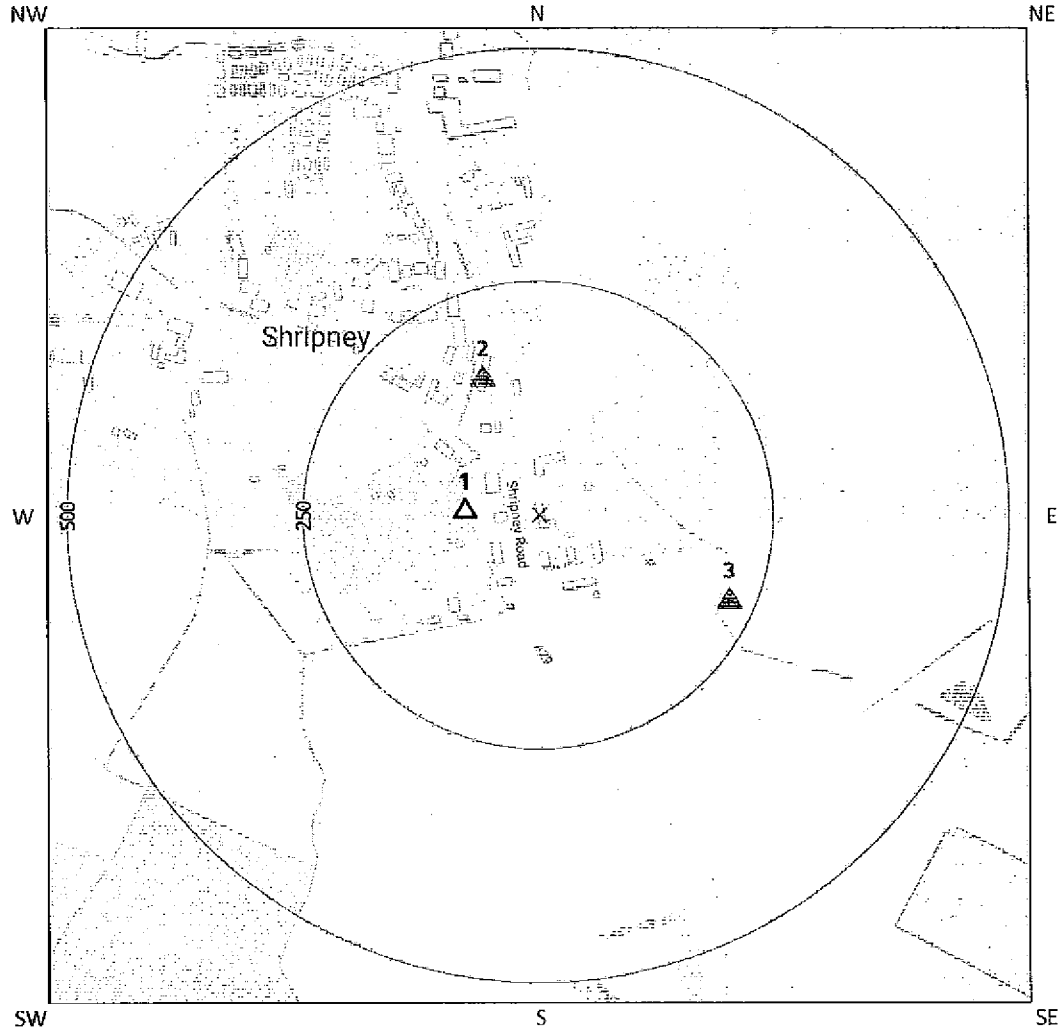
Are there any Environment Agency/Natural Resources Wales Licensed Waste Sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.



3. Industrial Sites and Processes

Industrial Sites and Processes Map



Industrial Sites and Processes Map

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Ordnance Survey licence 100035207

- | | | |
|-----------------------------|--|------------------------------|
| Site Centre | Petrol & Fuel Sites | EPA1990 |
| 250 | List 1 Dangerous Substance | COMAH/NIIHS Sites |
| 500 | List 2 Dangerous Substance | Hazardous Substance Consents |
| Search Buffers (m) | Potentially Contaminative Industrial Sites | Recorded Pollution Incidents |
| Red List Discharge Consents | Part A(2) & Part B Authorisations | Historic IPC Authorisations |
| Water Industry Referrals | Part A(1) and IPPC Authorisations | |

3.1 Potentially Contaminative Industrial Sites

Are there any potentially contaminative industrial sites within 250m of the search centre?	Yes
Risk Assessment	Passed

Guidance: These findings are not of concern. No further action is recommended.

The following records are represented as points on the Industrial Sites and Processes map.

ID	Distance (m)	Direction	Company	Address	Activity	Category
2	160	N	Westside Supplies Ltd	Westside, Shripney Road, Bognor Regis, PO22 9NX	Electrical Components	Industrial Products
3	221	SE	Electricity Poles	PO22	Electrical Features	Infrastructure and Facilities

3.2 Petrol and Fuel Sites

Are there any petrol and fuel sites within 250m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.3 Historic IPC Authorisations

Records of historic IPC Authorisations within 500m of the study site:	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.4 Part A(1) Authorised Processes

Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.5 Part A(2) and Part B Authorised Processes and Enforcements

Are there any Part A(2) and Part B Authorised Processes and Enforcements within 250m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.6 Red List Discharge Consents

Are there any Red List Discharge Consents within 250m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.7 Water Industry Referrals



Are there any Water Industry Referrals within 250m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.8 List 1 Dangerous Substances

Are there any List 1 dangerous substance inventory sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.9 List 2 Dangerous Substances

Are there any List 2 dangerous substance inventory sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.10 Dangerous or Hazardous Sites

Are there any COMAH & NIHHS sites within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

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

Does the Local Authority hold information under Section 78R of the Environmental Protection Act 1990 for any sites within 250m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

3.12 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

Are there any Environment Agency/Natural Resources Wales recorded pollution incidents within 250m of the search centre?	Yes
Risk Assessment	Passed

Guidance: These findings are not of concern. No further action is recommended.

The following records are represented as points on the Industrial Sites and Processes map.

ID	Distance (m)	Direction	Incident Date	Land Impact	Water Impact	Air Impact	Pollutant
1	79	W	16/04/2002	Category 4 (No Impact)	Category 4 (No Impact)	Category 4 (No Impact)	Microbiological

3.13 Hazardous Substance Consents and Enforcements

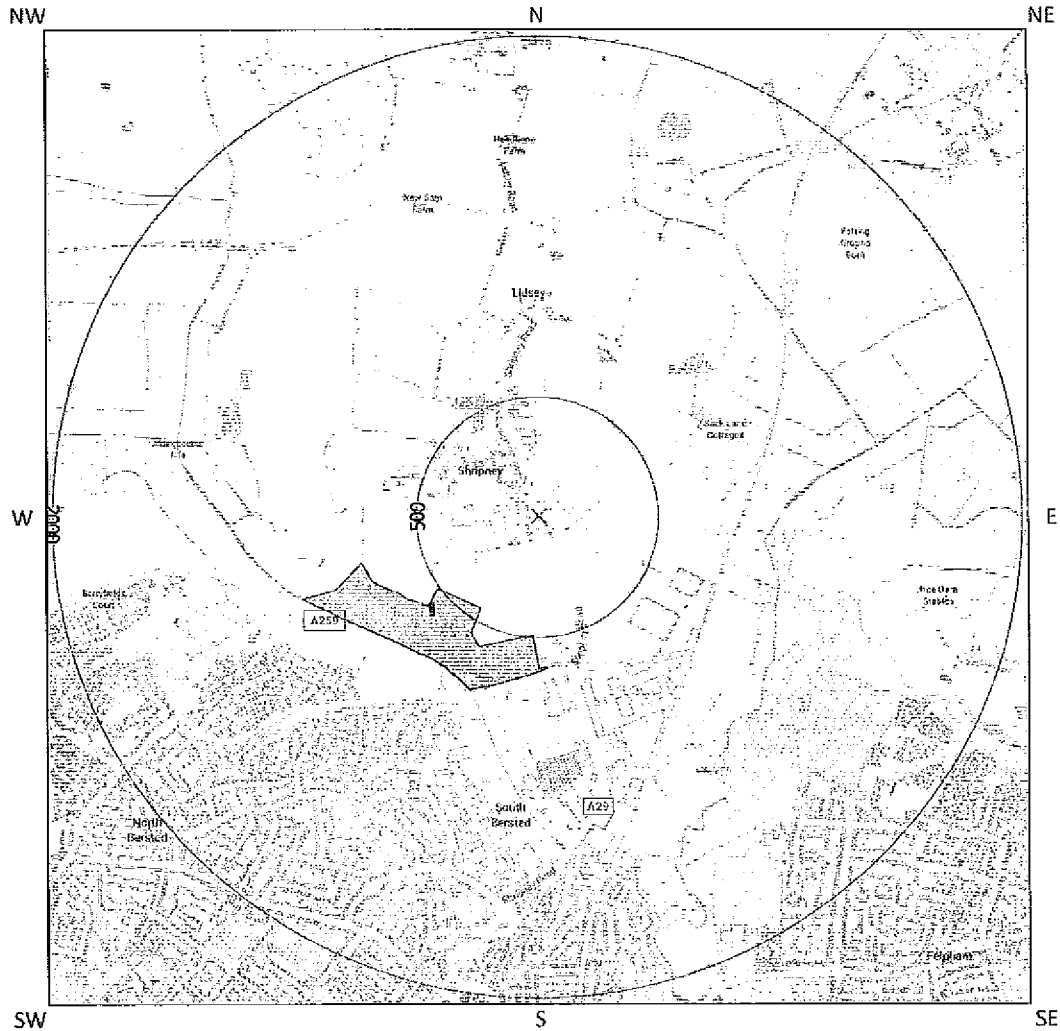


Are there any Hazardous Substance Consents or Enforcement within 500m of the search centre?	No
Risk Assessment	Passed

Guidance: Groundsure has searched this database and no data was found. No further action is recommended.

4. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites Map



Designated Environmentally Sensitive Sites Map

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- | | | |
|-------------------------|--------------------------------------|------------------------------|
| Site Centre | Greenbelt | Ancient Woodland |
| 500 Search Buffers (m) | Ramsar Site | Special Area Of Conservation |
| 2000 Search Buffers (m) | Area of Outstanding Natural Beauty | Local Nature Reserve |
| | Sites of Special Scientific Interest | National Nature Reserve |
| | National Park | Special Protection Area |
| | | World Heritage Site |

Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?	Yes
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4.1 Sites of Special Scientific Interest (SSSI)

Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:	0
--	---

Database searched and no data found.

4.2 Ramsar sites

Records of Ramsar sites within 2000m of the study site:	0
---	---

Database searched and no data found.

4.3 National Nature Reserves

Records of National Nature Reserves (NNR) within 2000m of the study site:	0
---	---

Database searched and no data found.

4.4 Special Areas of Conservations (SAC)

Records of Special Areas of Conservation (SAC) within 2000m of the study site:	0
--	---

Database searched and no data found.

4.5 Special Protection Areas (SPA)

Records of Special Protection Areas (SPA) within 2000m of the study site:	0
---	---

Database searched and no data found.

4.6 Local Nature Reserves (LNR)

Records of Local Nature Reserves (LNR) within 2000m of the study site:	1
--	---

The following Local Nature Reserves (LNR) records are provided by Natural England/Natural Resources Wales:

ID	Distance (m)	Direction	LNR Name	Data Source
1	446	SW	The Brooks	Natural England

4.7 World Heritage Sites

Records of World Heritage Sites within 2000m of the study site:	0
---	---

Database searched and no data found.

4.8 Areas of Outstanding Natural Beauty

Records of Areas of Outstanding Natural Beauty (AONB)/National Scenic Areas within 2000m of the study site:	0
---	---

Database searched and no data found.

4.9 National Parks

Records of National Parks within 2000m of the study site:	0
---	---



Database searched and no data found.

4.10 Green Belt

Records of Green Belt land within 2000m of the study site:	0
--	---

Database searched and no data found.

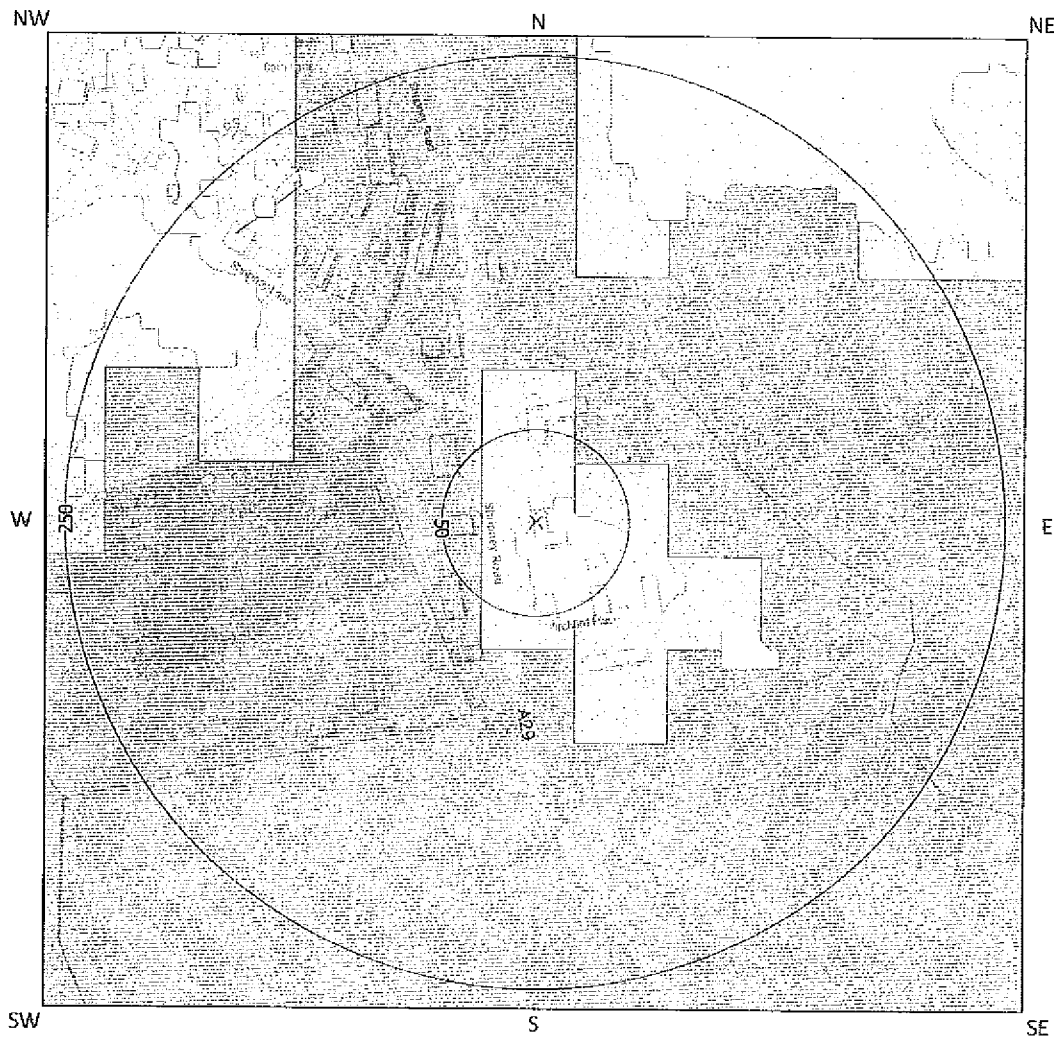
4.11 Designated Ancient Woodland

Records of Ancient Woodland within 2000m of the study site:	0
---	---

Database searched and no data found.

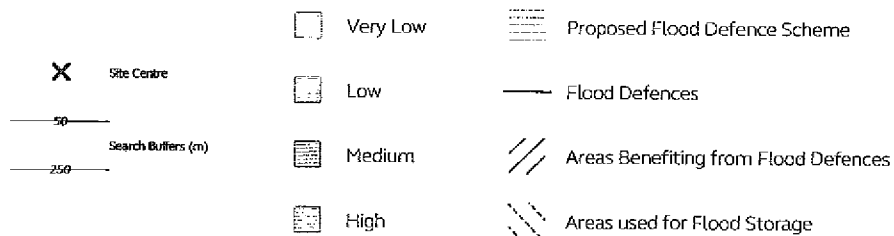
5. Natural Hazards and Additional Factors

Environment Agency/Natural Resources Wales River and Coastal Flood Map



Environment Agency/Natural Resources Wales River and Coastal Flood Map

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Environment Agency/Natural Resources Wales Recorded Historic Flood Events Map



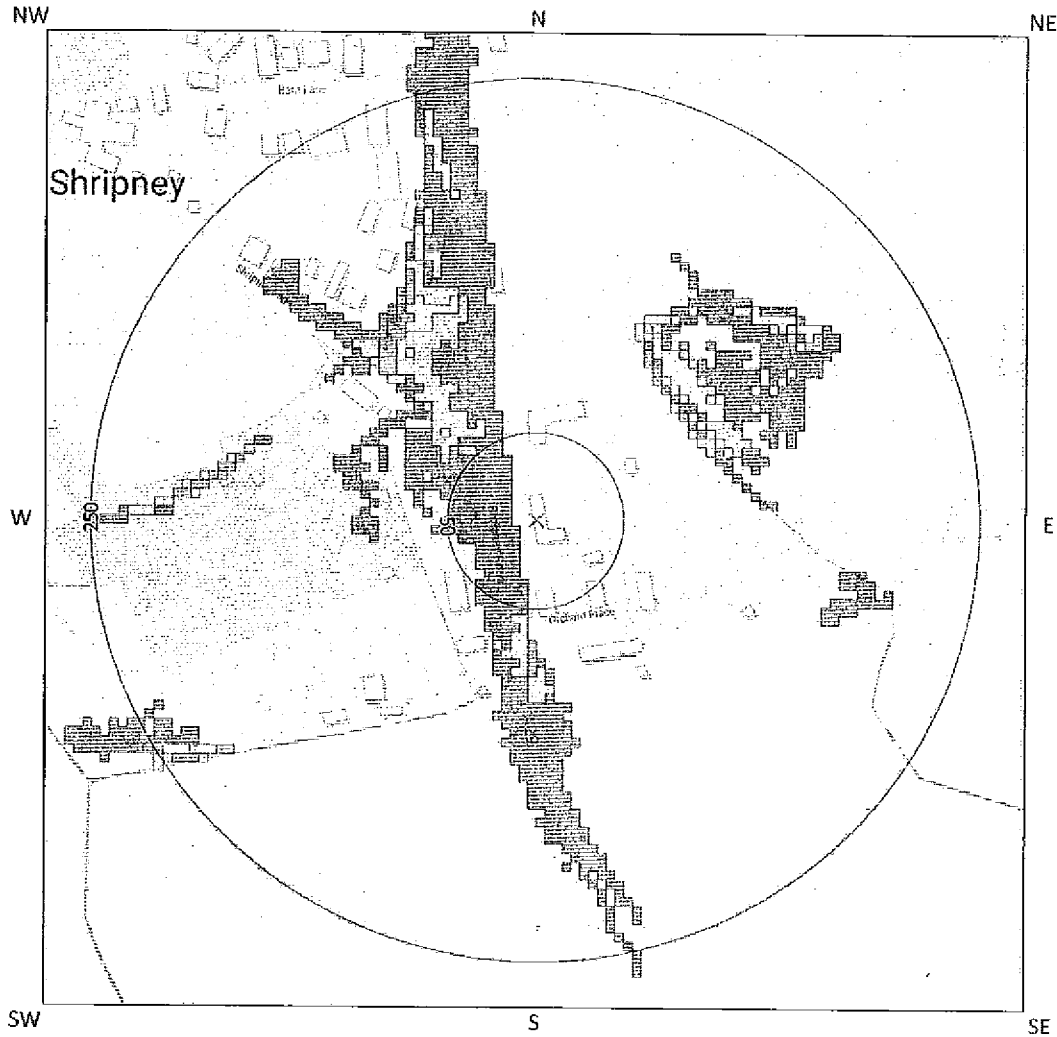
Environment Agency/Natural Resources Wales Recorded Historic Flood Events Map

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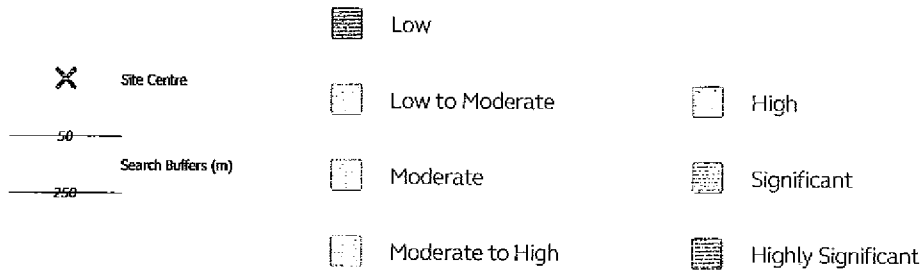


JBA Surface Water (Pluvial) Flood Map



JBA Surface Water (Pluvial) Flood Map

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5.1 Risk of Flooding from Rivers and the Sea (RoFRaS)

What is the risk of flooding at the centre of the study site?	Very Low
What is the highest risk of flooding within 25m of the centre of the study site?	Low

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 as used by many of the insurance companies. RoFRaS data is based on a 50m grid system, with the flood rating at the centre of the grid calculated and given below. The data considers the probability that the flood defences will overtop or breach, and the distance from the river or the sea.

RoFRaS data for the study site indicates the property or an area within 25m has a Low (greater than 1 in 1000 but less than 1 in 100) chance of flooding in any given year.

The following table shows all RoFRaS data found within 50 metres of the centre of the study site.

Distance (m)	Direction	RoFRaS Flood Risk
3	NW	Low
22	E	Low
29	W	High

5.2 Areas Benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?	No
---	----

Guidance: These are areas that may benefit from the presence of major defences during a 1% river (fluvial) or 0.5% coastal flood event. These areas would flood if the defence were not present, but may not flood because the defence is present. Details of flood defences and any areas benefiting from these defences can be seen on the Risk of Flooding from Rivers and the Sea Map.

5.3 Flood Defences

Are there any flood defences within 250m of the study site?	No
---	----

Guidance: This search consists only of flood defences present in the dataset provided by the Environment Agency/Natural Resources Wales.

5.4 Proposed Flood Defences

Are there any Proposed Flood Defences within 250m of the study site?	No
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Guidance: This search consists only of proposed flood defences present in the dataset provided by the Environment Agency/Natural Resources Wales. Please note that proposed flood defence schemes will not influence the current RoFRaS ratings for the site until they have been constructed.

5.5 Areas Used for Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?	No
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Database searched and no data found

Flood Storage Areas are considered part of the functional floodplain, and are areas where water has to flow or be stored in times of flood. Technical Guidance to the National Planning Policy Framework states that only water-compatible development and essential infrastructure should be permitted within flood storage areas, and existing development within this area should be relocated to an area with a lower risk of flooding. Any relevant data is represented on the Risk of Flooding from Rivers and the Sea Map.



Notes on RoFRaS data

RoFRaS is an assessment of flood risk for England and Wales produced using local data and expertise. It shows the chance of flooding from rivers or the sea presented in categories taking account of flood defences and the condition those defences are in. The RoFRaS model uses local water level and flood defence data to model flood risk. It has divided England and Wales into 50m X 50m impact cells. Each cell has been assigned a flood risk likelihood from the categories below:

- Less than **1 in 1000 (0.1%)** chance in any given year: **Very Low**
- Less than **1 in 100 (1%)** but greater than or equal to **1 in 1000 (0.1%)** chance in any given year: **Low**
- Less than **1 in 30 (3.3%)** but greater than or equal to **1 in 100 (1%)** chance in any given year: **Medium**
- Greater than or equal to **1 in 30 (3.3%)** chance in any given year: **High**

Notes on Existing Flood Defences

Flood defences seek to reduce the risk of flooding and to safeguard life, protect property, sustain economic activity and the natural environment. Flood defences are designed to protect against flood events of a particular magnitude, expressed as risk in any one year.

Notes on Proposed Flood Defences

'Number of Households to Benefit' illustrates the number of households that move from 'very significant' or 'significant' to 'moderate' or 'low' probability of flood risk bands if the proposed flood scheme is to be implemented

This information is taken from the Environment Agency/Natural Resources Wales's database of Areas to Benefit from New and Reconditioned Flood Defences under the Medium Term Plan (MTP). The dataset contains funding allocation for the first financial year (from April). Funding for the following four financial years is not guaranteed, being only indicative, and will be reviewed annually.

Projects within the Medium Term Plan qualify for inclusion in this dataset if:

- the investment leads to a change in the current standard of protection (change projects);
- the investment is a replacement or refurbishment in order to sustain the current standard of protection (sustain projects);
- the project has an initial construction budget of £100,000 or more; and
- the project is included within the first five years of the MTP.

The data includes all the Environment Agency/Natural Resources Wales's projects over £100K that will change or sustain the standards of flood defence in England and Wales over the next 5 years. It also includes the equivalent schemes for all Local Authority and Internal Drainage Boards. The number of households and areas of land contributing to DEFRA's Outcome Measures (OM) are also attributed i.e. could benefit from major work on flood defences.

These data also contain Intermittence Flood Maintenance Programmes that show the annual maintenance programme of work scheduled to be carried out by the Environment Agency/Natural Resources Wales, Local Authority or Internal Drainage Board on flood defences. Data details routine maintenance as well as intermittent work that has been funded for the coming year. The data contains a start and end coordinate defining the relevant river section where work is planned.

Information Warning

Please note that the maps show the areas where investment is being made to reduce the flood and coastal erosion risk and are not detailed enough to account for individual addresses. Individual properties may not always face the same risk of flooding as the areas that surround them. Also, note that funding figures are indicative and any use or interpretation should account for future updates where annual values may change.

Every possible care is taken to ensure that the maps reflect all the data possessed by the Environment Agency/Natural Resources Wales and that they have applied their expert knowledge to create conclusions that are as reliable as possible. The Environment Agency/Natural Resources Wales consider that they have created the maps as well as they can and so should not be liable if the maps by their nature are not as accurate as might be desired or are misused or misunderstood, despite their warnings. For this reason, they are not able to promise that the maps will always be accurate or completely up to date.

This site includes mapping data licensed from Ordnance Survey used for setting the Environment Agency/Natural Resources Wales's data in its geographical context. Ordnance Survey retains the copyright of this material and it can not be used for any other purpose.

Flood Storage Areas

Flood Storage Areas may also act as flood defences. A flood storage area may also be referred to as a balancing reservoir, storage basin or balancing pond. Its purpose is to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel. It may also delay the timing of a flood peak so that its volume is discharged over a longer time interval.

A flood storage area may take the form of a wet or dry reservoir. A wet reservoir is a water storage facility in which storage can be effected by allowing water levels to rise during flood times. A dry reservoir is typically adjacent to a river and comprises an enclosed area that accepts water only at peak times. These areas are also referred to as Zone 3b or 'the functional floodplain' and has a 5% or greater chance of flooding in any given year, or is designed to flood in the event of an extreme (0.1%) flood or another probability which may be agreed between the Local Planning Authority and the Environment Agency/Natural Resources Wales, including water conveyance routes. Development within Flood Storage Areas is severely restricted.

5.6 Historic Flooding Events

Has the site or any area within 250m of the site been subject to historic flooding as recorded by the Environment Agency/Natural Resources Wales?	Yes
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This database shows the individual footprint of every flood event recorded in the Environment Agency/Natural Resources Wales's national database on historic flood events. Please note this doesn't include records held by individual local offices. This data is used to understand where larger-scale flooding has occurred in the past and provides details as available. Absence of a historic flood event for an area does not mean that the area has never flooded, but only that it doesn't appear in the Environment Agency/Natural Resources Wales national dataset. Equally, a record of a flood footprint in previous years does not mean that an area will flood again, and this information does not take account of flood management schemes and improved flood defences.

The following records are displayed on the Historic Flood Outlines Map above:

ID	Distance (m)	Direction	Event Name	Date of flood	Flood Source	Flood Cause
1	13	W	BERSTED 1960	01-11-1960 01-11-1960	drainage	other
2	13	W	BERSTED 1974	23-11-1974 23-11-1974	drainage	other
3	75	NW	BERSTED 1974	23-11-1974 23-11-1974	other	unknown
4	80	NW	BERSTED 1960	01-11-1960 01-11-1960	drainage	other

5.7 JBA Surface (Pluvial) Water Flooding

What is the risk of pluvial flooding at the centre of the study site?	Negligible
What is the highest risk of pluvial flooding within 25m of the centre of the study site?	Low

Guidance: The site or an area in close proximity has been assessed to be at Low risk of surface water (pluvial) flooding. This indicates that this area would be expected to be affected by surface water flooding in a 1 in 1000 year rainfall event to a depth of greater than 0.1m.

Distance (m)	Direction	Risk
9	W	Low
50	NW	Low to Moderate

Notes on Surface water (Pluvial) Flooding data:



JBA Risk Management surface water flood map identifies areas likely to flood following extreme rainfall events, i.e. land naturally vulnerable to surface water or "pluvial" flooding. This data set was produced by simulating 1 in 75 year, 1 in 200 year and 1 in 1000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though older ones may even flood in a 1 in 5 year rainstorm event.

The model provides the maximum depth of flooding in each 5m "cell" of topographical mapping coverage. The maps include 7 bands indicating areas of increasing natural vulnerability to surface water flooding. These are:

- Less than 0.1m in a 1 in 1000 year rainfall event: **Negligible**
- Greater than 0.1m in a 1 in 1000 year rainfall event: **Low**
- Between 0.1m and 0.3m in a 1 in 200 year rainfall event: **Low to Moderate**
- Between 0.3m and 1m in a 1 in 200 year rainfall event: **Moderate**
- Greater than 1m in a 1 in 200 year rainfall event: **Moderate to High**
- Between 0.1m and 0.3m in a 1 in 75 year rainfall event: **High**
- Between 0.3m to 1m in a 1 in 75 year rainfall event: **Significant**
- Greater than 1m in a 1 in 75 year rainfall event: **Highly Significant**

5.8 Groundwater Flooding Susceptibility

What is the susceptibility to Groundwater Flooding in the search area based on the underlying geological conditions?	Potential for groundwater flooding of property below ground level
Does this relate to Clearwater Flooding or Superficial Deposits Flooding?	Clearwater Flooding

Guidance: Where potential for groundwater flooding of property situated below ground level is indicated, this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. 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. If there are records of previous incidences of groundwater flooding, then it is recommended that other information e.g. rainfall history, property type, and land drainage information in addition to previous records of flooding be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

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 BGS Susceptibility to Groundwater Flooding hazard dataset identifies areas where geological conditions could enable groundwater flooding to occur and where groundwater may come close to the ground surface. The susceptibility data is suitable for use for regional or national planning purposes where the groundwater flooding information will be used along with a range of other relevant information to inform land-use planning decisions. It might also be used in conjunction with a large number of other factors, e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information, to establish relative, but not absolute, risk of groundwater flooding at a resolution of greater than a few hundred metres. The susceptibility data should not be used on its own to make planning decisions at any scale, and, in particular, should not be used to inform planning decisions at the site scale. The susceptibility data cannot be used on its own to indicate risk of groundwater flooding.

Notes on Groundwater Flooding

The BGS Susceptibility to Groundwater Flooding hazard dataset identifies areas where geological conditions could enable groundwater flooding to occur and where groundwater may come close to the ground surface.

Groundwater flooding is assessed on a fourfold scale:

- The area is not considered to be prone to groundwater flooding based on rock type.
- There is limited potential for groundwater flooding to occur and further relevant information should be considered to determine this assessment.
- There is potential for groundwater flooding of property situated below the surface such as basements and other below surface infrastructure. Further relevant information should be considered to determine whether groundwater flooding has previously occurred.
- There is potential for groundwater flooding to occur at the surface and groundwater flooding hazard should be considered in all land use planning decisions. Other relevant information should be considered to establish the risk of groundwater flooding to property.

5.9 Natural Ground Subsidence

What is the potential for natural ground subsidence* within the search area?	Low
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Guidance: The natural ground subsidence rating is obtained through the evaluation of six natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS). These datasets indicate the hazard posed by the occurrence of: Swell-Shrink Clay, Landslide, Compressible Ground, Collapsible Ground, Dissolution of Soluble Rocks and Running Sand. Many factors may contribute to ground subsidence problems. For instance, significant problems can arise in conurbations underlain by clay rich bedrock, such as over clay strata in the South East of England, or South Wales. Whilst surveyors are normally aware of local problem areas, data provided by the BGS can highlight areas where a significant potential for natural ground subsidence exists and which may need particular consideration.

Where low potential is indicated, this means that there is some potential for natural ground movement to occur but that it is only likely to be of concern if significant changes are made to the ground or use of it. For example, this could include planting trees, changing drainage or building work - before doing anything like this we recommend that you seek professional advice.

*The term "Subsidence" refers to ground movement that could cause damage to foundations in domestic or other properties.

5.10 Radon Affected Areas

Is the property in a radon Affected Area as defined by Public Health England (PHE) 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
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Guidance: Public Health England (PHE) recommends a radon 'Action Level' of 200 becquerels per cubic metre for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to exceed the Action Level (i.e. are in an Intermediate or Higher probability radon area) the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

PHE advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels above the Action Level (200 Bq m-3) should be remediated, and when achievable to below the Target Level of 100 Bq m-3. Householders with levels between the Target Level and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. PHE provides a radon testing service which can be accessed at www.ukradon.org.

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as CON29 Standard Enquiry of Local Authority (part 1); 3.13 Radon Gas: Location of the Property in a Radon Affected Area.

If you are buying a currently occupied property in a Radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the Radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from PHE or www.ukradon.org

5.11 Radon Protective Measures

Is the property in an area where radon protection measures 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
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Combined Radon Guidance: Radon is a colourless, odourless radioactive gas which is present in all areas of the United Kingdom, usually at levels that pose a negligible risk to homebuyers. However, in some areas levels of radon are much higher than in others, and in these cases it can pose a health risk. The data supplied by Public Health England (PHE) and the British Geological Survey (BGS) is not able to determine exact Radon levels, as this information can only be obtained through site-specific, in-situ testing. As less than 1% of properties in the area may be radon affected, PHE do not consider that further action is necessary.



Notes on Radon

RISKS OF RADON

Radon is a radioactive gas which occurs naturally. It has no taste, smell or colour. Special devices are needed to measure it. Radon comes out of the ground. Outdoors, it is diluted to very low levels. However, in some cases the radon level indoors can build up to high concentrations. In such cases, it does pose a serious risk to health.

ACTION LEVEL FOR RADON

Public Health England (PHE) recommends that radon levels should be reduced in homes where the average is more than 200 becquerels per cubic metre of air (Bq m⁻³). This recommendation has been endorsed by the Government. This Action Level refers to the annual average concentration in a home, so radon measurements are carried out with two detectors (in a bedroom and living room) over three months, to average out short-term fluctuations.

RADON AFFECTED AREAS

PHE defines radon Affected Areas as those with a 1% probability or more of a home having radon above the Action Level. PHE recommends that people in Affected Areas should test their homes for radon.

HOW TO REDUCE RADON LEVELS

PHE advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels above the Action Level (200 Bq m⁻³) should be remediated, preferably to below the Target Level of 100 Bq m⁻³. Householders with levels between the Target Level and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers.

Indoor radon levels can usually be substantially reduced at a cost comparable to many home improvements, such as replacing carpets. Details of methods of reducing radon levels are given on the Building Research Establishment Website.

6. Mining

6.1 Coal Authority Coal Mining Records

Is the property within an area which may be affected by past, present or proposed underground coal mining?	No
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Guidance: None required.

6.2 BGS Non-Coal Mining Hazards

What is the potential for undermining as a result of underground mineral extraction, excluding coal and minerals extracted as a consequence of coal mining?	Unclassified
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Guidance: The study site lies in an area which is unclassified in relation to non-coal mining. This means that there is no known hazard from underground mine workings because the rock types present are such that no commodities or metal ores have been worked by underground mining methods. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset.

The mining hazard data (not including coal) layer draws together a diverse range of material derived from geology, which constrains distribution, supplemented by literature searches for historic locations and expert knowledge to assemble, interpret, and organise this information. Mining of coal is specifically excluded from this data set and information on Coal Mining areas can be found in the Coal Authority Coal Mining Records section above.

The data provides an assessment of the likelihood that past underground mining may have occurred in the area. It does not consider the depth of the extraction nor whether any remediation has previously been undertaken. Where extraction of such minerals has taken place in workings close to the surface (meaning to approximately 50m depth) the workings can pose a subsidence risk because they sometimes cause surface collapse. Old mine shafts and other mine openings in such areas can also lead to unexpected surface collapse.

The data provided by the British Geological Survey (BGS) are rated on a five point scale ranging from Rare, through Highly unlikely, Unlikely and Likely to Highly Likely that indicate how likely it is that past underground mining activities may have occurred.

6.3 Mining Cavities

Is the site located in an area of mining cavities?	No
--	----

Guidance: This information is obtained from the mining cavities dataset, which is supplied and digitally combined by Peter Brett Associates. There are no records within 250m of the site.

6.4 Natural Cavities

Is the site located in an area of natural cavities?	No
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Guidance: This risk rating is obtained from the natural cavities dataset, which is supplied and digitally combined by Peter Brett Associates. There are no records within 250m of the site.

6.5 Historical Mining Features from Detailed Mapping

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

Are there any Mining features within 500m of the centre of the study site?	No
--	----

Guidance: No further action required.



6.6 Historical Underground Workings Features from Detailed Mapping

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

Are there any Historical Underground Working Features within 500m of the centre of the study site?	No
--	----

Guidance: No further action required.



7. Energy

7.1 Existing oil, gas, shale gas or coalbed methane wells

Count of records of existing oil, gas, shale gas or coalbed methane wells within 5km of the property	0
--	---

Guidance: No records of oil, gas, shale gas or coalbed methane wells have been identified within 5km of the property. The dataset is taken from the Oil and Gas Authority (OGA) register of onshore wells and is updated monthly. No further action is recommended in regard to this aspect of the report.

7.2 Proposed oil, gas, shale gas or coalbed methane wells

Count of Proposed oil, gas, shale gas or coalbed methane wells within 5km of the property	3
---	---

Guidance: This dataset identifies one or more planning applications relating to oil, gas, shale gas or coalbed methane exploratory or extraction wells that have been submitted to the planning authority since 2009. The dataset is unique to Groundsure and is derived from local authority planning records. The data is updated weekly. Further details of the application(s) identified can be found in a full Groundsure Energy report.

7.3 Existing wind farms

Count of existing wind farms	0
------------------------------	---

Guidance: No records of wind projects registered with the UK Wind Energy Database (UKWED) have been identified within 5km of the property. The dataset is taken from Renewables UK and is provided for information only, with no guarantee given as to its completeness or accuracy. Renewables UK are excluded from any liability for any such inaccuracies or errors. Groundsure would advise further independent research of any sites of interest to determine exact locations and details of projects. No further action is recommended in regard to this aspect of the report.

7.4 Proposed wind power projects

Count of proposed wind power projects within 5km of the property	1
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Guidance: This dataset identifies one or more planning applications relating to wind turbine developments (with two turbines or more) within 5km of the property. The dataset is unique to Groundsure and is derived from local authority planning records, updated quarterly. Further details of the application(s) identified can be found in a full Groundsure Energy report.

7.5 Existing solar farms

Count of existing solar farms	9
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Guidance: This dataset identifies one or more operational solar farms and those under development within 5km of the property. The dataset is taken from the Department of Energy and Climate Change (DECC) and is updated on a monthly basis. Further details of the project(s) identified can be found in a full Groundsure Energy report.

7.6 Proposed solar farms

Count of proposed solar farms within 5km of the property	16
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Guidance: This dataset identifies one or more planning application relating to solar farm developments within 5km of the property. The dataset is unique to Groundsure and is derived from local authority planning records. The data is updated weekly. Further details of the project(s) identified can be found in a full Groundsure Energy report.

7.7 Existing power stations

Count of existing power stations within 5km of the property	0
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Guidance: No existing power stations have been identified within 5km of the property. These datasets show power generating establishments with a generation capacity of 1MW or greater. The data is derived from records within the Digest of United Kingdom Energy Statistics (DUKES). No further action is recommended in regard to this aspect of the report.

7.8 Existing Nuclear Establishments

Count of existing nuclear establishments within 5km of the property	0
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Guidance: No nuclear establishments have been identified within 5km of the property. This dataset shows nuclear establishments and is derived from records within the Health and Safety Executive, the Nuclear Decommissioning Authority, the National Infrastructure Planning Programme and the Nuclear Advanced Manufacturing Centre. No further action is recommended in regard to this aspect of the report.

7.9 Proposed Energy and other large Infrastructure Projects

Count of proposed Energy and other large Infrastructure Projects within 5km of the property	0
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Guidance: No major infrastructure projects have been identified within 5km of the property. This dataset is derived from information provided by the Planning Inspectorate and shows major national infrastructure projects only. No further action is recommended in regard to this aspect of the report.

8. Additional Information

8.1 Ofcom Sitefinder Mobile Phone Mast Records

Have any mobile phone transmitters registered with Ofcom been identified within 250m of the study site?	No
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Database searched and no data found

This database is taken from Ofcom's Sitefinder database, the Government's database of mobile phone base stations. The last update to this database was applied in May 2012, although some operators ceased providing updates some years before then. Neither Ofcom nor Groundsure can accept any liability for any inaccuracies or omissions in the data provided within Sitefinder.

The most recent update is based on the following datasets received at the specified times by Ofcom: O2 (May 2012), Network Rail (April 2012), Hutchison (February 2012), Vodafone (October 2011), Airwave (February 2010), Orange (February 2010) and T-Mobile (August 2005). Sites added since these dates will not appear in the database.

8.2 Mobile Phone Mast Planning Records

Have any planning records relating to telecommunication masts been identified within 250m of the study site?	No
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Database searched and no data found

This database is taken from Glenigan's collection of planning records dating back to 2006 and relates to sites which have applied for planning permission involving mobile phone masts. The database is normally updated quarterly.

8.3 Pylons and Electricity Transmission Lines

Have any overhead transmission lines been identified within 500m of the study site?	Yes
---	-----

The following records within 500m have been found within this search:

Distance (m)	Direction
143	S

Guidance: Overhead power transmission lines and/or pylons have been identified in proximity to the study site. Overhead power transmission lines are known to emit electromagnetic fields (EMF). For further information on issues associated with transmission lines you may wish to contact the EMF Unit Public Information Line on 0845 7023270 or visit www.emfs.info. Guidance on electromagnetic fields resulting from transmission and distribution lines can also be found on the Public Health England (PHE) website. Groundsure provide the data for information only and do not make any judgment on the risks or otherwise of EMFs. The database is searched up to 500m.



9. Guide to our Professional Assessment

Introduction

This report is designed for residential conveyancers and their clients and satisfies standard environmental due diligence enquiries, recommended by the Law Society. This information is not always covered by Standard Con 29 Enquiries made to Local Authorities.

Purpose of this Assessment

As part of this report Groundsure provide a professional assessment of the risks posed by key environmental information which could lead to the property being designated as 'Contaminated Land' as defined under Part 2A of the Environmental Protection Act 1990. This assessment is based on the following data:

- 1 Historical land use (compiled from 1:10,000 1:10,560 maps)
- 2 Additional Information Historical land use (compiled from 1:1,250 1:2,500 maps) – for selected areas.
- 3 Landfill and waste transfer/treatment or disposal sites (including scrap yards)
- 4 Current industrial uses (as defined by PointX data)
- 5 Catalyst Petrol Station
- 6 Part A(1), Part A(2) and Part B Authorisations
- 7 Control of Major Accident Hazards Sites (COMAH) and Notification of Installations Handling Hazardous Substances (NIHHS)
- 8 Dangerous Substances Inventory Releases (DSI)
- 9 Radioactive Substance Authorisations (RAS)
- 10 Discharge and Red List Discharge Consent
- 11 Sites Determined as Contaminated Land under Part 2A EPA 1990
- 12 Environment Agency/Natural Resources Wales Recorded Pollution Incidents
- 13 Historic Military / Ordnance Sites
- 14 Planning Hazardous Substance Consents

From this information Groundsure provide a statement regarding the likely designation of the property under Part 2A of EPA 1990 and the level of risk associated with the property is either Passed or In Need of Further Assessment. If the site is In Need of Further Assessment it does not necessarily mean that the site is unsuitable for purchase, but only that further assessment of the risk associated with the site is required. When a site is In Need of Further Assessment then the practitioner may, if required, discuss the case with one of the Groundsure consultants. Where a site is 'In Need of Further Assessment' Groundsure will, on request, attempt to arrange appropriate environmental insurance.

Method Statement

In assessing specific site risk, Groundsure follows principles used extensively throughout the environmental consultancy sector. Our system looks at the potential for specific industries to have generated residual contamination and for this contamination to remain at a site, or to have migrated to neighbouring sites. Sites are scored based on this system and if a site scores highly it indicates a high level of risk.

Limitations of the Study

This screening process reviews historical mapping and a range of current databases. The historical land use database reviewed for this study does NOT include 1:2,500 or 1:1,250 scale maps except for Groundsure's additional information database of selected features namely tanks, energy features, petrol filling stations and garages. This additional information database covers the majority of the UK, but not all. Where no assessment has been made "No Data Available" is presented in the report. Where 1:2,500 or 1:1,250 scale maps are utilised all relevant and available map epochs to Groundsure are used. Additionally, this review does NOT include specific enquiries to the Local Authority who may hold additional information and it does NOT include a site visit/inspection. Your attention is drawn to the Terms and Conditions of Groundsure Limited under which this service is provided.

Remediation

This report is covered by Groundsure's remediation contribution. For the purpose of this condition, 'Claimant' shall mean one of: (a) the Beneficiary, (b) the purchaser of the site from the Beneficiary or (c) the funder of (a) or (b) as applicable.

This condition shall apply solely to Groundsure Homebuyers, Homescreen, Enviroplus, Enviro Full Flood & Planning, Enviro All-in-one and Home Environmental reports with "Passed" rather than "In Need of Further Assessment" statuses.



Groundsure may, at its sole discretion without any admission of liability, make a contribution to the Claimant towards the costs of any clean up works required to be carried out under a notice served on a Claimant in respect of a site under Part II (A) Environmental Protection Act 1990 ("Remediation Notice") on the terms of this condition ("Clean up Award").

The Clean up Award: (a) is only available once in respect of a site and to one Claimant only; (b) shall only apply where the site is a single residential dwelling house or a single residential flat within a block of flats. For the avoidance of doubt, a Clean up Award will not be considered in respect of commercial property or to any site being developed or redeveloped whether for residential purposes or otherwise; and (c) shall only apply to contamination or a pollution occurring as at or prior to the date of Groundsure Homebuyers.

The Clean up Award will not be paid in respect of any of the following, including without limitation: (a) asbestos; (b) radioactive contamination arising directly or indirectly from or in connection with ionising radiations or contamination by radioactivity from any nuclear waste or fuel; from the combustion of nuclear fuel or the radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof; (c) naturally occurring materials or their removal except where such materials are present in excess of their natural concentration; (d) any condition caused by acts of war or an act of terrorism; (e) any condition which is known or ought reasonably to have been known to the Claimant prior to the purchase of Groundsure Homebuyers; (f) non-compliance by the Claimant or any other person with respect to the site with any statute, regulation, byelaws complaint, or notice from any regulatory authority; (g) any property belonging to or in the custody or control of the Claimant which does not form a fixed part of the site or the structure; (h) any losses incurred following a material change in use of, alteration or development of the site; or (i) financial loss in respect of loss of rental, profit, revenue, savings, business or any consequential, indirect or economic loss, damages or expenses, including the cost of temporary accommodation or business interruption.

In the event the Claimant wishes to apply for a Clean up Award, it shall notify Groundsure in writing within 3 months of the date of the Remediation Notice. The Claimant shall comply with all reasonable requirements of Groundsure with regard to the commission and conduct of the clean up works to be carried out under the Remediation Notice. In the event that the Claimant breaches this provision including, without limitation, failing to obtain Groundsure's prior written consent in respect of estimates for such works Groundsure shall not be required to pay a Clean up Award.

Groundsure shall only pay a Clean up Award where a Remediation Notice is served within 36 months of the date of Groundsure Homebuyers. The maximum sum of any Clean up Award shall be £60,000 and shall be paid subject to the Claimant having paid to Groundsure an excess in respect of its claim of £5,000. Groundsure reserves the right at any time to withdraw the offer of payment of a Clean up Award. The Claimant shall take all reasonable steps to appeal such Remediation Notice and mitigate any costs incurred in connection with the remediation works required under the terms of any Remediation Notice. Groundsure reserves the right to withhold or reduce the amount of its Clean up Award in the event of a breach of this condition or an appeal is still active.

The Claimant shall take all reasonable steps to appeal such Remediation Notice and mitigate any costs incurred in connection with the remediation works required under the terms of any Remediation Notice. Groundsure reserves the right to withhold or reduce the amount of its Clean up Award in the event of a breach of this condition or an appeal is still active.



Contact Details

The Property Search Group

[Redacted]



Environment Agency

[Redacted]



JBA Risk Management

South Barn, Broughton Hall, Skipton, BD23 3AE



Local Authority

Arun District Council. Address: Maltavers Road, Littlehampton, West Sussex, BN17 5LF. Web: <http://www.arun.gov.uk/>. Tel: 01903 737 500

British Geological Survey Enquiries

Kingsley Dunham Centre, Keyworth, Nottingham

[Redacted]

www.bgs.ac.uk



British Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL

The Coal Authority Property Search Services

200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG, DX 716176 MANSFIELD 5

[Redacted]

web: www.groundstability.com



The Coal Authority

Public Health England

Public information access office, Public Health England, Wellington House, 133-155 Waterloo Road, London, SE1 8UG

[Redacted]

www.gov.uk/phe



Public Health England



Groundsure

LOCATION INTELLIGENCE

PSG
The complete SEARCH service

Ordnance Survey

Adanac Drive, Southampton, SO16 0AS



Getmapping PLC

Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW



CoPSO

The Old Rectory, Church Lane, Thornby, Northants NN6 8SN

www.copso.org.uk



COUNCIL OF PROPERTY SEARCH ORGANISATIONS

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Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

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The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
 - sets out minimum standards which firms compiling and selling search reports have to meet
 - promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals
 - enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

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Firms which subscribe to the Search Code will:

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- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with Industry registration rules and standards and relevant laws
- monitor their compliance with the Code

COMPLAINTS

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details:

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Website: www.tpos.co.uk
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk.

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE

COMPLAINTS PROCEDURE

If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

Complaints should be sent to: Operations Director, Groundsure Ltd, Sovereign House, Church Street, Brighton, BN1 1UJ. Tel: 08444 159 000. Email: info@groundsure.com

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk.

We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:
<https://www.groundsure.com/terms-and-conditions-may25-2018>