

NANT Y CAFN INDUSTRIAL UNITS, SEVEN SISTERS

DESK STUDY AND FIELD RECONNAISSANCE

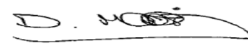
Report No H3091-23/N1

April 2024

Issue No 1

Carried out for:
Neath Port Talbot County Borough Council
Civic Centre
Port Talbot
Neath Port Talbot
SA13 1PJ

Report No H3091-23/N1

ISSUE No	DATE	STATUS	PREPARED BY	CHECKED BY	APPROVED BY
1	Mar 2024	Draft report	Charlie Payton BSc (Hons) FGS  Amelia Jones BSc (Hons) FGS 	M Wareing BSc FGS CGeol RoGEP  Darren Makin BSc (Hons) CSci MEnvSc 	M Wareing BSc FGS CGeol RoGEP 
1	Apr 2024	Final report	Amelia Jones BSc (Hons) FGS 	M Wareing BSc FGS CGeol RoGEP 	M Wareing BSc FGS CGeol RoGEP 

This Report has been prepared by SOCOTEC UK Limited ("SOCOTEC") with all reasonable skill and care, within the terms and conditions of the contract between SOCOTEC and the Client ("Contract") and within the limitations of the resources devoted to it by agreement with the Client.

This Report shall not be used for engineering or contractual purposes unless the Report status is 'Final' and signed by the author, checker and the approver for and on behalf of SOCOTEC.

Whilst every effort has been made to ensure the accuracy of the data supplied and any analysis or interpretation derived from it, the possibility exists of variations in the ground and groundwater conditions around and between the exploratory positions. No liability can be accepted for any such variations in these conditions.

SOCOTEC shall not be liable for any use of the Report for any purpose other than that for which it was originally prepared. Furthermore, any recommendations are specific to the development as detailed in this Report and no liability will be accepted should they be used for the design of alternative schemes without prior consultation with SOCOTEC.

This Report is confidential between the Client and SOCOTEC. Any reliance upon the Report is subject to the Contract terms and conditions.

SOCOTEC accepts no responsibility whatsoever to third parties to whom this document, or any part thereof, is made known. Any such party relies upon the Report at their own risk. The Contracts (Rights of Third Parties) Act 1999 does not apply to this Report nor the Contract and the provisions of the said Act are hereby excluded.

Unless specifically assigned or transferred within the terms and conditions of the Contract, SOCOTEC asserts and retains all Copyright and other Intellectual Property Rights in and over the Report and its contents. The Report may not be copied or reproduced, in whole or in part, without written authorisation from SOCOTEC.

SOCOTEC UK Limited was formerly known as Environmental Scientifics Group Limited. The Certificate of Incorporation on Change of Name was filed on 16 October 2017.



SOCOTEC

2023 SOCOTEC UK Limited

Report No H3091-23/N1

REPORT STRUCTURE

TITLE	VOLUME No
DESK STUDY AND FIELD RECONNAISSANCE	H3091-23/N1
GROUND INVESTIGATION REPORT (FACTUAL AND INTERPRETATIVE REPORT)	H3091-23/N2

**C O N T E N T S**

Page

SUMMARY OF FINDINGS	1
1 INTRODUCTION.....	2
2 SOURCES OF INFORMATION	2
3 SITE LOCATION AND DESCRIPTION	3
4 FIELD RECONNAISSANCE (SITE WALKOVER)	4
5 DEVELOPMENT HISTORY OF THE SITE AND SURROUNDING AREA.....	4
6 PROPOSED DEVELOPMENT	6
7 GEOTECHNICAL SETTING.....	7
7.1 Published Geological Information.....	7
7.2 Shallow Ground Workings (<30 m)	7
7.3 Deep Ground Workings (>30 m)	8
8 GEOTECHNICAL RISK REGISTER	8
9 ENVIRONMENTAL SETTING	9
9.1 Hydrogeology and Groundwater Abstraction	9
9.2 Hydrology, Flooding and Surface Water Abstraction	9
9.3 Environmental Authorisations.....	10
9.4 Landfill and Other Waste Sites.....	11
9.5 Current Land Uses	11
9.6 Designated Environmentally Sensitive Sites	12
10 GEOENVIRONMENTAL ASSESSMENT	12
10.1 General.....	12
10.2 Preliminary Conceptual Site Model	13
10.3 Preliminary Risk Assessment.....	14
11 SUMMARY AND CONCLUSIONS	14
11.1 Geotechnical Considerations	14
11.2 Geoenvironmental Considerations	15
12 FURTHER INVESTIGATION	15
13 LIMITATIONS AND EXCLUSIONS	16
14 REFERENCES.....	17
APPENDIX A FIGURES AND DRAWINGS	
APPENDIX B FIELD RECONNAISSANCE AND PHOTOGRAPHS	
APPENDIX C GEOTECHNICAL RISK REGISTER	
APPENDIX D CONCEPTUAL SITE MODEL AND PRELIMINARY RISK ASSESSMENT	
APPENDIX E GROUNDSURE ENVIRO+GEO INSIGHT	
APPENDIX F HISTORICAL ORDNANCE SURVEY MAP EXTRACTS	
APPENDIX G OTHER REPORTS / INFORMATION	



SUMMARY OF FINDINGS

A summary of the findings of the Desk Study is presented below.

SUMMARY OF DESK STUDY

SECTION	DETAILS
Site location	800 m southwest of Seven Sisters. National Grid Reference SN 810078
Field Reconnaissance	Undertaken on 4 December 2023. Identified access constraints due to overgrown vegetation and existing hardstanding beneath grass. Ground surface waterlogged and potential culvert beneath the site from stream originating in the east.
Development History	Rural with nearby coal mining to 1961; nearby residential development to present day with associated business and amenities.
Proposed Development	Six new industrial units with associated parking and soft landscaping.
Engineering Geological Model	Superficial deposits anticipated to be Glacial Till. Bedrock indicated to be South Wales Middle Coal Measures Formation dipping 10 degrees to the south. Small thickness of Made Ground anticipated at surface. Onsite geohazards all negligible to very low.
Environmental Setting	Existing Made Ground on site – rolled hardcore. Potential for shallow mines with worked seams associated with the Red Vein.
Geoenvironmental Risk Assessment Preliminary	Low to moderate risk presented to human health and controlled waters from potential contaminants in Made Ground and from potential shallow coal seam gases.
Summary and Conclusions	Conduct a combined Tier 2 geoenvironmental and geotechnical investigation and assessment to test the Preliminary Conceptual Site Model and engineering geological model. Confirm presence and thickness of Made Ground via intrusive investigation and composition of underlying superficial deposits, presence and extent of coal seam via intrusive investigation and understand groundwater and gas regime.
Further Investigation	Proposed GI to include one cable percussion borehole to refusal (anticipated shallow), four dynamic sampler boreholes with gas and groundwater standpipe installations for post-fieldwork monitoring and six DCP tests. Geoenvironmental and geotechnical testing.

1 INTRODUCTION

SOCOTEC UK Limited (SOCOTEC) was commissioned in December 2023 by Neath Port Talbot County Borough Council (NPTCBC), to carry out a ground investigation, desk study and field reconnaissance to provide geoenvironmental and geotechnical parameters for the design and construction of an industrial estate at Nant Y Cafn. This report presents the findings of the desk study and field reconnaissance, other aspects of the project are reported as shown on the Report Structure page.

This desk study has been prepared in accordance with British Standards BS 5930 (2020) and BS 10175:2011+A2 (2017) and all normative references, including the Environment Agency (2020) online guidance Land contamination: risk management (LCRM) and BS EN ISO 21365 (2020).

The desk study presents and discusses the available data obtained for the site and surrounding area regarding its physical, historical and environmental setting. It identifies the potential hazards at the site, develops an initial conceptual site model (CSM) and engineering geological model (EGM) for geoenvironmental and geotechnical considerations and other pertinent ground hazards that could affect the development.

The principal objective of this investigation and the context of the CSM / EGM developed within this report is to provide an assessment of potential risks in order to:

- assess the potential requirements for mitigation or further investigation of land contamination risks to determine if the proposed development will involve any ‘unacceptable risks’ (as defined in LCRM).
- give an account of the anticipated ground conditions at the site based upon published geological and hydrogeological information.
- provide an account of any historic activities on or near the site which may pose a risk to the proposed development.
- provide information for scoping of further investigation.

2 SOURCES OF INFORMATION

The following sources of information have been used in preparation of this report:



- A Groundsure Geo+Enviro Insight (Groundsure) report (ref: GS-F4N-QSP-EP6-2DM, dated 29 Nov 2023) for an area up to 1 km from the centre of the site which is reproduced in Appendix E. The Groundsure report is compiled from the database of information maintained by various statutory bodies. It includes a series of maps showing the approximate position of the listed data together with details on geology, ground workings, mining and extraction, borehole records and estimated background soil chemistry. Distances referenced within this report are from the demarcated site boundary.
- Extracts of available historical Ordnance Survey (OS) maps covering the period from 1876 to 2023 which are presented in Appendix F.
- The British Geological Survey (BGS) website (as viewed during December 2023).
- A Field Reconnaissance (Site Walkover Survey) undertaken on 4 December 2023.
- A Groundsure CON29M Official Coal Mining Search (report reference: GS-31H-7GE-T9P-57C, dated 29 Nov 2023), which is provided in Appendix G.

3 SITE LOCATION AND DESCRIPTION

The site of the proposed Nant-Y-Cafn workshops is located near to Seven Sisters, approximately 12 km northeast of Neath Railway Station, at National Grid Reference SN 810078, see Site Location Plan in Appendix A.

The site is irregular in shape, measuring approximately 55 by 90 m at its widest points. The ground surface comprises overgrown hummocky and waterlogged scrubland, bisected by a rolled hardcore track from the site entrance in the west to the southeastern corner. The site is generally level, increasing in elevation towards to eastern boundary.

The site is bound to the north by further hummocky scrubland, to the east by a field sloping upwards to the east and used for agricultural purposes, to the south by car parking facilities for MW Phillips Chemist and associated surgery, and to the west by Dulais Road, beyond which the land use is primary residential. To the southeast, the hardcore track navigates to a privately owned area of land which includes a pond, located 50 m south of the site boundary. Concrete blocks obstruct further access along Dulais Road at the northernmost corner of the site.



The River Dulais is roughly 180 m west of the site flowing from north to south. An unnamed tributary approximately 115 m south of the site, at the nearest point, flows from east to west into the Dulais river.

4 FIELD RECONNAISSANCE (SITE WALKOVER)

In accordance with the requirements of both BS 10175 and BS EN 1997-2, a field reconnaissance was undertaken on 4 December 2023. The notes made during the field reconnaissance together with photographs taken are presented in Appendix B.

Access to the site is off the A4109 and by travelling to the northernmost end of Nant Y Cafn Business Park where a chemist and car park is located; here the asphalt road ends and becomes a track composed of rolled hardcore (Photo 3). This access track, beginning at the west side of the site, continues south-eastwards and ends with a gate at the southeastern corner (Photo 11). A narrow footpath (Photo 17) branches from the track and exits the site at the northeast corner where the site begins to slope gently upwards. The whole site area is densely vegetated with hummocky areas of grass and shrubs (Photo 29 and 30). Both immature and mature trees located throughout (Photo 7).

A stormwater drain located off-site at the southeastern end suggests that a culvert continues beneath the site (Photo 21); similarly a manhole cover located north of the site indicates potential services beneath part of the site (Photo 24).

Adjacent to the site at the north is hummocky grassland, appearing waterlogged with reeds and soft ground underfoot (Photo 26). The land adjacent to the site at the southern end is composed of hardstanding and is an operational carpark associated with the nearby pharmacy (Photo 9 and 34).

5 DEVELOPMENT HISTORY OF THE SITE AND SURROUNDING AREA

The development of the site and surrounding area is summarised in Table 1. In this review the site is defined by the red-line boundary within the Groundsure report. Locations 'outside' the site are those beyond the boundary line. Reported distances 'from the site' relate to distances from the boundary line, which will therefore be at greater distance from the centre of the site.



TABLE 1 SUMMARY OF DEVELOPMENT HISTORY

DATE AND SCALE	ON SITE DEVELOPMENT	NEARBY DEVELOPMENT
1876 1:2,500	Site is undeveloped and comprises fields with occasional trees on the field boundaries. Field boundaries cross the southern and eastern sections of the site and may also comprise minor streams or issues. A small woodland area overlaps the southeastern boundary.	The site area is surrounded by fields with small areas of trees. The small woodland extends eastwards.
1876-1877 1:10,560		The wider surrounding area rural comprising fields with the nearest settlement Nant Y Cafn Uchaf shown approximately 260 m southeast. A small track trends southeast-northwest, towards Nant Y Cafn Uchaf, approx. 50 m southwest, at its closest point. The River Dulais is shown 180 m west flowing north to south, with a tributary flowing east to west 115 m south of the site. Small watercourses channel through and around the site. Neath and Brecon railway and associated cutting run north south approx. 300 m east.
1877 1:10,560	No mapping coverage of site	No significant changes evident (partial map)
1899 1:2,500	No significant changes evident	A small unspecified building is shown in an open field approx. 220 m southwest.
1901 1:10,560	No mapping coverage of site	No significant changes evident (partial maps)
1903 1:10,560		
1913-1914 1:10,560	No significant changes evident	Residential properties 200 m south (Bryn-teg cottages and Nant Y Cafn); Residential buildings along unnamed road 150 m north. Bryn-têg Colliery approx. 450 m southeast Dillwyn Colliery approx. 450 m south 'Old Coal Levels' approx. 400 m south 'Old Brick Works' approx. 500 m southeast
1919 1:2,500	No significant changes evident	No significant changes evident
1921 1:10,560		
1948 1:10,560	No significant changes evident	Small building approx. 50 m west. Residential properties along road extended closer to site, approx. 90 m north. Railway now noted as a tramway.
1961-1962 1:2,500	The surface water course which flowed through the site is no longer shown but it enters and leaves the site boundary, labelled as a drain (presumed culverted).	The water course which channelled through the site from the north has been diverted around the eastern boundary of the site leading into the drain. The area north of the site previously rough pasture is now an open field. Dulais Road along with a linear development of residential housing and gardens are now approx. 50 m northwest and extending from 50 m southwest. Expansion of properties at Bryn-teg and Brynteg road now present running east west 200 m south. Tramway now a mineral railway. School approx. 80 m south. Garage and substation 206 m northwest.
1964-1965 1:10,560	No significant changes evident	Hoard of Bronze Age objects found c1875 500 m southeast. Dillwyn Colliery now noted as Mine.
1983-1988 1:10,000	No significant changes evident	Unspecified tank noted 425 m south. Residential properties along Dulais Road to west (partial map)



DATE AND SCALE	ON SITE DEVELOPMENT	NEARBY DEVELOPMENT
1990 1:2,500	No significant changes evident	Tennis courts 60m south (<i>partial map</i>)
1987-1993 1:2,500	No significant changes evident	No significant changes evident
1988-1993 1:2,500		
1993 1:2,500		
2001 1:10,000	No significant changes evident	School and tennis courts no longer showing on map. Café and golf range 80 m west. Area south of Brynteg Road labelled as Tip.
2003 1:1,250	No significant changes evident	Roadway added along west boundary. (present on 2000 aerial photograph but not shown on earlier map) Building 110 m south noted as Works.
2010 1:10,000	No significant changes evident	Small pond 50 m to southeast (shown on aerial photographs from 2013)
2023 1:10,000	No significant changes evident	Chemist and carpark adjoining on south side of site (M W Phillips) (shown on aerial photographs from 2013)

The earliest mapping notes an undeveloped rural site. This remains the case on site with minor changes.

Mine workings are shown to be present in the surrounding area from the earliest maps (1913) and these are chiefly concerned with extracting coal from the South Wales Middle Coal Measures (specifically from the Red Vein). Other works at this time include brickworks, located ~500 m southeast of the site.

Infrastructure associated with the mining works is present in the wider surrounding area from 1913 (Neath and Brecon Railway, road links and buildings), however between 1948 and 1961 the appearance of residential properties and local amenities including a school and garage (between 50 to 80 m from site) saw the immediate surrounding area's biggest development and has remained largely unchanged since.

6 PROPOSED DEVELOPMENT

From information provided by NPTCBC it is understood that the proposed development will comprise the construction of a new industrial estate (as per drawing reference A1280-100). This will include but is not limited to the following:



- Six new industrial units (in line with specification drawing reference A1279-101)
- Associated parking facilities.
- Soft landscaping
- Suitable drainage eg. swale

7 GEOTECHNICAL SETTING

7.1 Published Geological Information

The published geological map for the area, (BGS Sheet 231, 1979), and the BGS GeoIndex Onshore online viewer (2023) show the site located on superficial deposits comprising recent Devensian Till, including clay, silt, sand and gravel. Alluvium is shown to be present approximately 80 m to the west of the site and follows the northeast southwest trend of the Dulais river.

The Till is underlain by the South Wales Middle Coal Measures Formation composed of coal-bearing siltstones and sandstones. The bedrock is indicated to dip approximately 10 degrees to the south.

The nearest observed coal seam, which appears to be the Red Vein, is located approximately 67 m west southwest of the site. The coal seam is indicated to be offset approximately 64 m south by an inferred north south trending fault, the downthrow for which is unknown. The offset Red Vein coal seam is inferred to continue towards the east and northeast (located approximately 48 m south of the site) and is again offset by further inferred faulting, located approximately 45 m southeast and 60 m east of the site. There are no mine entries recorded within 20 m of the site, however, the site is located within the boundary of an underground site for which a license to remove coal by underground methods has been granted. There are currently no planned future underground workings proposed nor does the site lie within the likely zone of physical influence for any planned future workings.

Artificial Ground is shown to be located approximately 30 m south of the site.

7.2 Shallow Ground Workings (<30 m)

The Groundsure report indicates no historical surface ground working features on site. However, the available data indicates that there has been past mining and quarrying activity within 1 km of the site.



According to the Groundsure report the site is located 457 m northwest of Bryn-teg brick works. No other past or current surface mining or quarrying activities are noted within 500 m of the site.

7.3 Deep Ground Workings (>30 m)

The available data indicates that there has been mining and quarrying within 1 km of the site. According to the Groundsure Insight and CON29M reports:

- There are sixty-eight records of underground workings within 1 km of the site (nearest Dillwyn Colliery located 285 m south).
- The site is not within the likely zone of influence from past underground workings.
- There are no mine entries (shafts or adits) recorded within 20 m of the site.
- There have been no recorded subsidence claims for properties within 50 m of the site since 31 October 1994.
- The site is located within the boundary of an underground site for which a license to remove coal by underground methods has been granted, however there are currently no planned future underground workings proposed nor does the site lie within the likely zone of physical influence for any planned future workings.

8 GEOTECHNICAL RISK REGISTER

The results of the risk evaluations stage are an estimate of the current level of risk associated with the geotechnical asset and an understanding of the environmental / geological material variability. The information reported on the Geotechnical Risk Register (GRR) shows the likelihood and consequences of uncertain upcoming/future events and provide an important support to understand, communicate and evaluate the risks during the design/asset/quality management process. The GRR includes items such as the various geological hazards contained within the Groundsure report, along with other elements of the geological model which may impact the specified development proposal.

The GRR is compiled in accordance with CD 622 and is presented within Appendix C. No risks above a rating of 9 (medium to high risk), were identified relating to the current development.

9 ENVIRONMENTAL SETTING

9.1 Hydrogeology and Groundwater Abstraction

The hydrogeological characteristics of the site are summarised in Table 2.

TABLE 2 SUMMARY OF HYDROGEOLOGICAL CHARACTERISTICS

HAZARD	REMARKS
Aquifer Classification within Superficial Geology	Secondary Undifferentiated – assigned where it is not possible to attribute either Category A or B to a rock type due to variable characteristics of the deposit
Aquifer Classification within Bedrock	Secondary A – permeable layers capable of supporting water supplies at a local level. Formerly classified as ‘minor aquifers’
Groundwater/ Potable Water Licence Abstraction	There are no abstractions identified
Source Protection Zones	There are no source protection zones identified

9.2 Hydrology, Flooding and Surface Water Abstraction

Information on the hydrological characteristics of the site is summarised in Table 3:

TABLE 3 SUMMARY OF HYDROLOGICAL CHARACTERISTICS

HAZARD	REMARKS
Surface Water Features / River Network	15 records identified within 250 m of the site, nearest Water Network features include: - On site underground stream (culverted) - Inland rivers located 11 m southeast, 100 m west and 114 m southeast - River Dulais located 180 m west
Surface Water Abstractions	Two <i>historical</i> surface water abstraction records within 2 km of the site, including: - Licence No: 21/58/73/0019 (857 m east, exp: 30 Nov 2007) - Licence No: 21/58/73/0019 (1111 m southeast, exp: 30 Nov 2007)
Flood Plain Risk	No flood plain risk recorded
Flood Defences / Groundwater Flooding / Susceptibility and Confidence Areas	There are no flood defences indicated on or near to the site



HAZARD	REMARKS
--------	---------

9.3 Environmental Authorisations

Records of Environmental Permits, Incidents or Registers within 1 km of the site are summarised in Table 4.

TABLE 4 SUMMARY OF ENVIRONMENTAL AUTHORISATIONS, INCIDENTS AND REGISTERS

SITE	LOCATION	TYPE	DETAILS
Petrol station	51 m north	Pollutant: Oils and Fuel (Petrol)	Status: Obsolete
Garage	159 m north	Pollutant: Oils and Fuel (Petrol)	1987
Garage	166 m north	Pollutant: Oils and Fuel (Petrol)	1962-1993
Licensed Water Discharges – Nant-Y-Cafn CSO	283 m southwest	Sewage discharges – storm overflow	Receiving water: River Dulais Status: Effective
Licensed Water Discharges – Nant Y Cafn SWO	319 m southwest	Sewage discharges – storm overflow	Receiving water: River Dulais Status: Effective
Licensed Water Discharges – Nany-Y-Cafn CSO	319 m southwest	Sewage discharges – storm overflow	Receiving water: River Dulais Status: Effective
Licensed Water Discharges – Brynteg Farm OCCS	445 m southeast	Mine water	Receiving water: Nant-Y-Cafn Status: Revoked (2006)
Licensed Water Discharges – Neath Gwauniarll Farm	446 m north	Unspecified	Receiving water: Dispersed to land Status: Expired
Licensed Pollutant Release – Newscheme Limited	450 m north	Coal & coke	Permit Type: B Status: Historical permit

9.4 Landfill and Other Waste Sites

9.4.1 Landfill Sites

According to the information provided in the Groundsure report there are no landfills within 1 km of the site.

9.4.2 Other Waste Sites

In addition to the landfills listed in Section 9.4.1, the Groundsure report indicates that there are no licensed waste management facilities and registered waste transfer sites within 1 km of the site. There are twelve records of waste exemptions within 500 m of the site, the closest of which is associated with MW Chemists (21 m south of the site) for the disposal of controlled drugs. All other waste exemptions are greater than 400 m distance from the site.

9.5 Current Land Uses

The Groundsure report covers other potential contamination sources close to the site including:

- Current Industrial Data
- Petrol and Fuel Stations
- Underground High Pressure Oil and Gas Pipelines

According to the Groundsure report, the proposed development site is within 250 m to three potential contamination source sources, details of which are listed in Table 5.

TABLE 5 SUMMARY OF CURRENT OR RECENT NEARBY LAND USES

LAND USE	LOCATION	DETAILS
Electricity substation	100 m southwest	
Electricity substation	206 m north	
Garden City Garage	211 m north	Vehicle repair, testing and servicing

According to the Groundsure report there are no current petrol stations, high voltage electricity cables or high pressure underground gas transmission pipelines on or within 500 m of the site.



9.6 Designated Environmentally Sensitive Sites

Sensitive land usages within 500 m of the site, covered by the Groundsure report are listed in Table 6.

TABLE 6 SENSITIVE LAND USES

TYPE	NAME	DISTANCE (M)	DIRECTION
Ancient Semi Natural Woodland	Unknown	62	Southeast
Plantation on Ancient Woodland Site	Unknown	379	Southeast

10 GEOENVIRONMENTAL ASSESSMENT

10.1 General

In line with existing legislation and the current regime for the management of contaminated land provided in the Environment Agency's Land Contamination Risk Management (LCRM) framework, assessments are undertaken using a risk-based approach. It is necessary to develop a Conceptual Site Model (CSM) for the site which identifies the potential sources of contamination, the receptors and the pathways that can connect them. In order for there to be a risk from contamination a contaminant linkage must be active. This is where one or more relevant contaminant linkages connect a contamination source, a receptor (an entity which might be affected by the contamination) and a pathway (or mechanism) by which the receptor can be exposed to the contaminant (including ground gases or vapours).

A discussion of potential sources, pathways and receptors and a tabulated summary of the CSM indicating potential contaminant linkages is provided in Appendix D and discussion follows in this section.

The CSM developed in this desk study has been based on the future land use and the relevant receptors associated with its use that may be potentially exposed to potential contaminants, ground gas and vapours. Although the site has been partially developed this has been limited to the construction of an aggregate access road but there is a possibility that fill materials have been



imported to create the development platform. No buildings or structures have been constructed to-date.

10.2 Preliminary Conceptual Site Model

Potential sources of contamination are usually associated with current and former land use of the site but may include offsite sources and the historical and current land use in the wider surrounding area. In addition, agricultural land use and phases of demolition and construction work as part of the development / and or redevelopment of the site may give rise to potential sources of contaminants, ground gases and vapours.

Natural processes and degradation of organic material including peat and alluvial soils may give rise to hazardous ground gases such as radon, methane, carbon dioxide and hydrogen sulphide.

Based on the search information about the site collated and presented above, potential sources of contamination from current and historical site uses, and from potentially significant off-site sources have been assessed. These are listed in Table D1, in Appendix D.

This table also lists the potential pathways that have been assessed as applicable to the site, along with possible receptors (human, controlled waters and environmental, as relevant).

These potential sources, pathways and receptors are also presented in a tabulated summary of the Conceptual Site Model, CSM (Table D2), indicating potential contaminant linkages. The criteria used for assessing the relevance of identified potential contaminant linkages are based on the objectives stated in the key to the table, also presented in Appendix D.

There are currently a series of uncertainties and assumptions in the CSM is based on desk study information only:

- Ground conditions have been conceptualised based on BGS geological maps and other primarily desk based information.
- The presence and extent of any suspected contamination is unknown in the absence of site investigation data.
- The presence and depth of any groundwater bodies at the site is currently unknown.

- The ground gas regime within the site has not been characterised.

10.3 Preliminary Risk Assessment

A preliminary assessment of the possible risks associated with the various potential contaminant linkages identified in the CSM is also presented in Table D2.

The risk score given in Table D2 is the product of the assessed severity and likelihood of the individual hazard. Guidance to the severity and likelihood ratings, and to the risk categories associated with the risk score, is provided in the key at the front of Appendix D.

For the plausible contaminant linkages, where the preliminary risk classification indicates a low/moderate to high risk, it is considered that these present potentially unacceptable risks and further information from the next Tier of investigation is likely to be required to confirm whether or not some form of risk management is required.

These preliminary risk categories should be re-assessed if further information becomes available, such as test data, or if the environmental setting of the site changes, for example through a proposed change in the development plans or end use.

11 SUMMARY AND CONCLUSIONS

It should be appreciated that the desk study can only give only give indications of the likely geotechnical and geoenvironmental conditions.

11.1 Geotechnical Considerations

The proposed development includes construction of a lightly loaded single storey structure (industrial units) with associated parking facilities, soft landscaping and flood mitigation measures (eg. swale). The findings of the Geotechnical Risk Register, presented in Appendix C, indicate there are no geotechnical hazards present on site which pose a medium or high risk.



11.2 Geoenvironmental Considerations

The findings of the CSM and PRA in Appendix D indicate that there is one potential risk (potentially active contaminant linkage) presented to the various identified receptors from potential sources of contamination and ground gases. Those falling into the moderate or low-moderate categories (ie. those that need to be considered further and evaluated in the next tier of investigation and assessment) are listed below:

- Potential contaminants and ground gases associated with Made Ground (fill materials) that has been imported on to the site to construct the access road.
- Potential low to moderate human health risk associated with the migration and inhalation of coal mine gas emissions.

Where the PRA indicates that there are potentially unacceptable risks, further information is required to refine the conceptual model and it should be considered to move onto the next stage of investigation. The LCRM requires the degree of risk to be assessed at Tier 2 that is likely to apply to these potential linkages. This can be assessed further by undertaking a site investigation to determine the concentrations of the types of contaminants indicated within the soil and groundwater, and to assess the possible presence of ground gases (gas regime of the site).

12 FURTHER INVESTIGATION

Taking into account the proposed development it is recommended that the ground investigation to be undertaken should comprise the following:

- 1 cable percussion borehole
- 4 dynamic sampler boreholes
- 6 dynamic cone penetrometer (DCP) tests (using TRL probe) for calculation of CBR
- Geoenvironmental testing for the potential sources of contamination identified in the PCSM
- Geotechnical testing
- Gas and groundwater installation standpipes with six fortnightly monitoring visits
- Geoenvironmental testing of groundwater samples from the installations



13 LIMITATIONS AND EXCLUSIONS

No archaeological, ecological or Unexploded Ordnance (UXO) risk assessment has been carried out within the scope of this report.



14 REFERENCES

- BGS England and Wales Sheet 231: 1979: Merthyr Tydfil. 1:50000 geological map (solid). British Geological Survey.
- BGS England and Wales Sheet 231: 1979: Merthyr Tydfil. 1:50000 geological map (drift). British Geological Survey.
- BGS GeoIndex Onshore: 2023. www.bgs.ac.uk. British Geological Survey.
- BS 10175:2011+A2:2017: Investigation of potentially contaminated sites – Code of practice.
- BS 5930:2015+A1: 2020: Code of practice for ground investigations. British Standards Institution.
- BS EN 1997-2: 2007: Eurocode 7 - Geotechnical design - Part 2 Ground investigation and testing. British Standards Institution.
- B EN ISO 21365: 2020: Soil Quality – Conceptual Site Models for potentially contaminated sites.
- Environment Agency: 2020: Land contamination: risk management:
<https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>
- BS ISO 18300-202:2018: Soil Quality – Sampling. Part 202: Preliminary Investigations.
- CIRIA 552: 2001: Contaminated Land Risk Assessment. A guide to good practice.
- CD 622: 2022: Managing Geotechnical Risk.



SOCOTEC

APPENDIX A

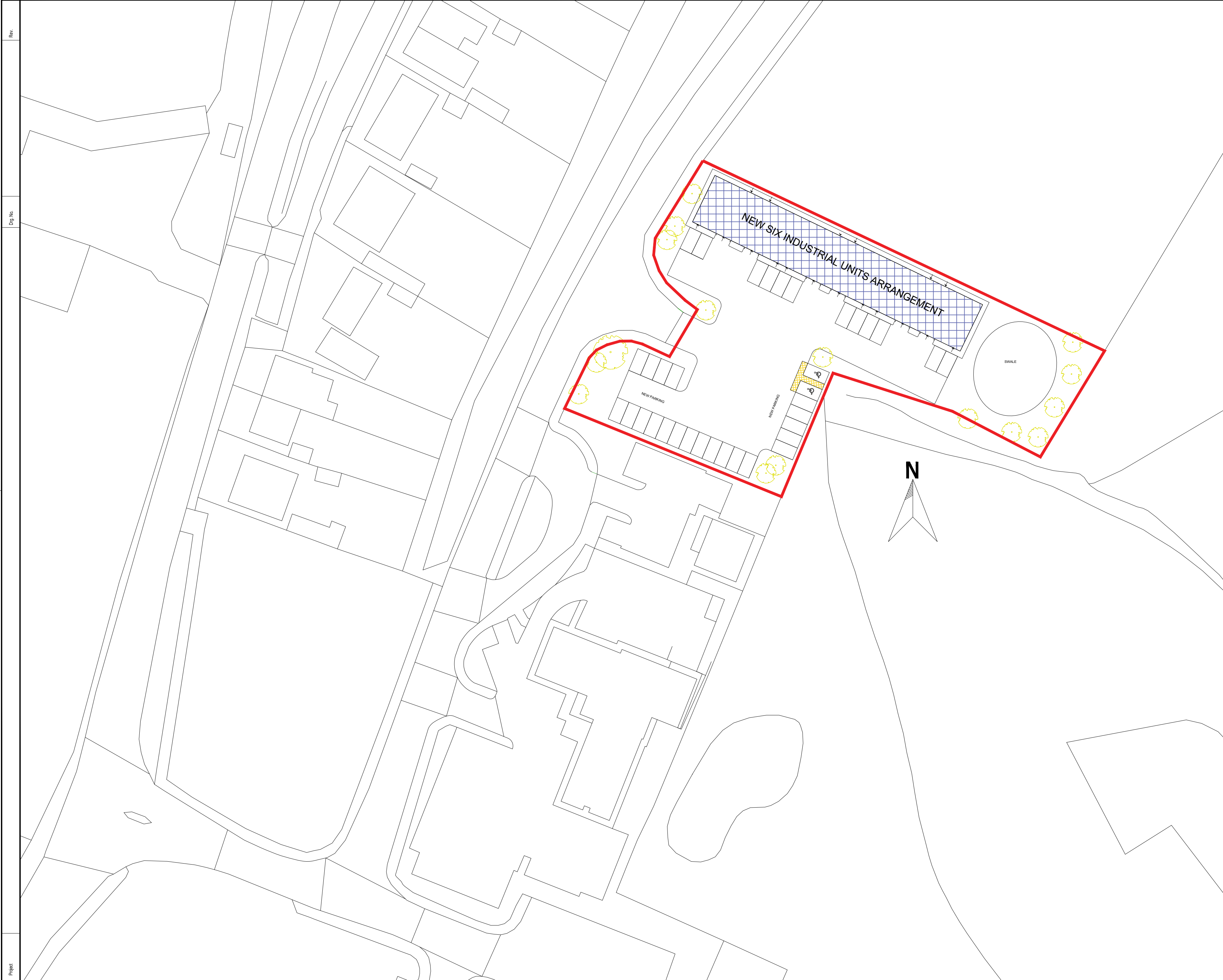
FIGURES AND DRAWINGS

Site Location Plan	A1
Client Provided Proposed Development:	
Site Location Plan	A1280-100
Proposed Exploratory Hole Location Plan	

SOCOTEC



A1



NOTES

1. All dimensions in millimetres unless otherwise stated.

Rev	Details	Dr	Ch	Apr	Date
-----	---------	----	----	-----	------



Neath Port Talbot
Castell-nedd Port Talbot
County Borough Council Cyngor Bwrdeistref Sirol
Making a difference Gwahaniaeth er gwell

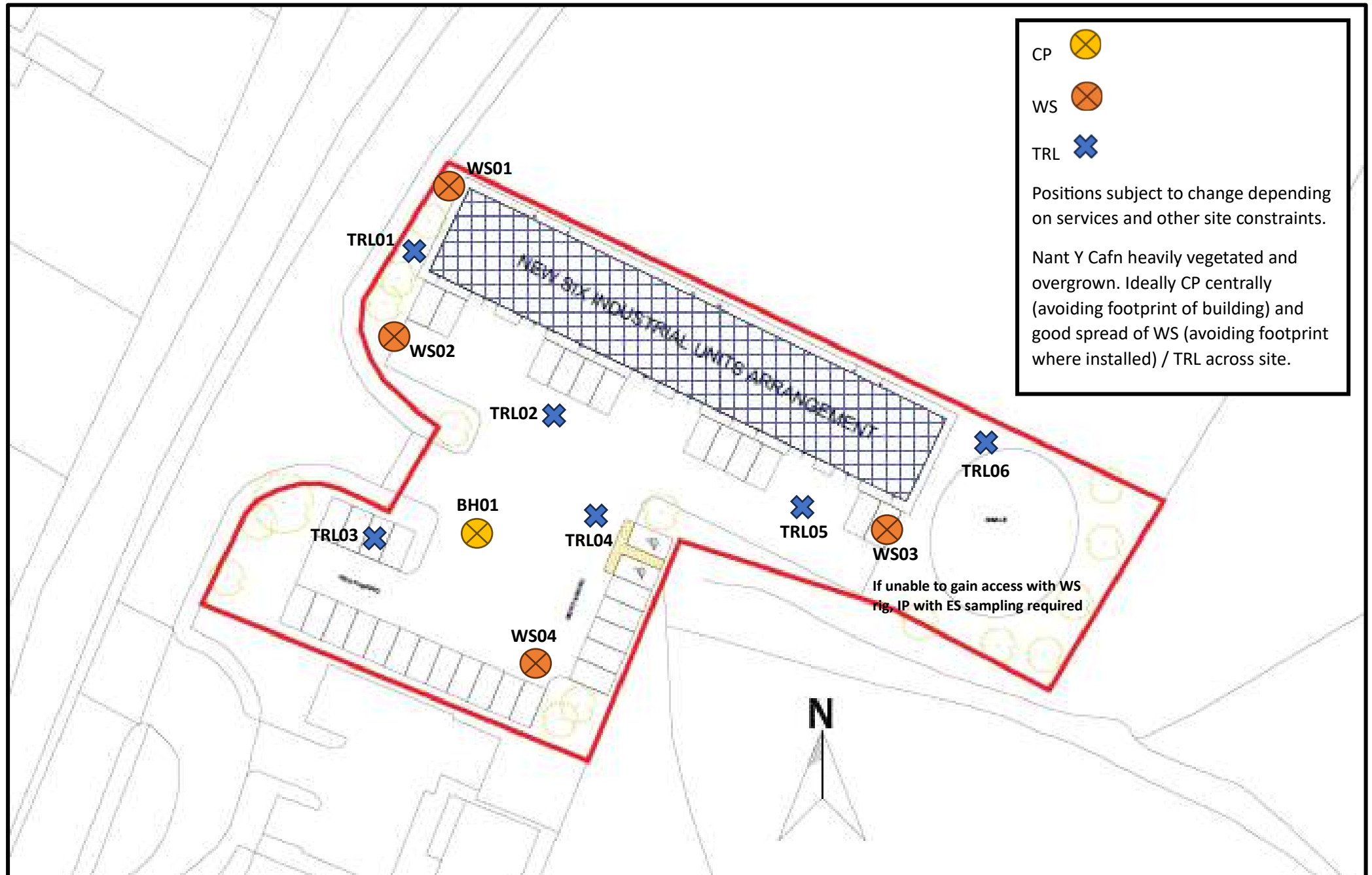
PROPERTY & REGENERATION
Nicola Pearce BSc(Hons) DipTP MRTPI
DIRECTOR OF ENVIRONMENT AND REGENERATION
THE QUAYS, BRUNEL WAY
BAGLAN ENERGY PARK SA11 2GG
www.npt.gov.uk

Project
NEW INDUSTRIAL UNITS
NANT Y CAFN
SEVEN SISTERS

Drawing Title
SITE LOCATION PLAN

File No.		Property Ref. No.			
Drawn	WGH	Checked		Approved	
Date	APR 2023	Date		Date	
Scales	1:500@A2				
Drawing No. A1280 -100					Rev.

H3091-23/N Nant Y Cafn Industrial Units – Proposed Exploratory Hole Location Plan





SOCOTEC

APPENDIX B

FIELD RECONNAISSANCE AND PHOTOGRAPHS

Field Reconnaissance Record	B1
Site Walkover Photographs	Sheet 1 to 26
Annotated Field Reconnaissance Plan	A2

Field Reconnaissance (Site Walkover) Checklist

Project No.	H3091-23/N	Figure	B1
Project name	Nant Y Cafn Industrial Units		
Site address	Unoccupied Land next to MW Phillips Chemist, Dulais Rd, Seven Sisters, Neath		
Post code	SA10 9EY		
National grid reference / What3words	SN810078	///expiring.slides.parked	
Date of visit	04/12/2023		
Checklist prepared by	Amelia Jones		
Has Desk Study been consulted prior to the field reconnaissance visit?	Yes ☒	No ☐	

SITE – GENERAL	
Plan of site (Annotated site plan, sketch, photos)	See annotated site plan reference A1280-100
Site dimensions / area	Irregular shape. 50 x 90 m at widest points.
Topography – flat / undulating, sloping / level, abrupt changes. Include natural and artificial features.	Generally flat, but undulating and hummocky in places. Slopes upwards to the south east near proposed swale.
Slope / face instability: eg. cracks in ground, bulges, leaning trees, walls or poles, rotational slip scars, rock fall (loss from face, debris at base).	None. Site is heavily vegetated.
Trees: effects on buildings, condition, species, and height	Densely vegetated and overgrown. Maximum tree height is approximately 8-10m. Mixture of young and mature trees. More mature trees present in area of proposed building. Immature trees in centre of the site. 

Field Reconnaissance (Site Walkover) Checklist

		
Content: % buildings, % hardstanding, % open space (and type) / other, water bodies / courses	40% densely vegetated (inc. trees and shrubs) / 50% grass (inc. reeds) – hummocky uneven ground / 10% rolled hardcore track. Narrow footpath hard underfoot – possible hardcore beneath grass in sections of the site.	
Current use (Occupants and operations)	None – access to gate in southeast corner only. 	

SITE – BUILDINGS	
Age of building(s)	No buildings on site.
Building construction: materials, no. of storeys, basement, roofing type, chimneys / stacks, car park, service areas	N/A
Evidence of building damage / distress: eg. cracking, settlement, loss of verticality, collapse	N/A
Tanks: location (internal / external, above/below ground), age, condition, size/capacity, type, bunding (incl. condition), refuelling points, evidence of stains / spills	N/A
Heating: electric / gas / oil	N/A

Field Reconnaissance (Site Walkover) Checklist

Chemical storage: drums, other chemical stores	N/A
Gas control measures (eg. vents, cowls, monitoring / alarms)	N/A
Other evidence of industrial activity	N/A
Asbestos / deleterious materials	N/A
Electrical equipment / transformers. Backup power supplies (generators)	N/A

ON / ADJACENT TO SITE: EXTERNAL FEATURES

Site surfacing: type (asphalt / concrete / grass etc.), staining, weathering, subsidence, repairs. Landscaped areas.

Primarily grass, though some sections of the site may be underlain by rolled hardcore that has since been overgrown. Areas of vegetation are boggy underfoot – presence of reeds indicated ground is waterlogged.



Field Reconnaissance (Site Walkover) Checklist

Drainage: interceptors, disposal of storm water / wastewater, mains water supply	Stormwater drain present off site, in the southeast corner. Direction of flow suggest it continues beneath the site.  Manhole present in the location of the proposed swale. 
Vehicle maintenance: washdown areas, workshops, refuelling points	None
Waste: skips / compounds, any hazardous waste, burning grounds or incinerators	None – small amount of fly tipped waste on site.
Sub-stations: age, condition, transformers, operator, servicing?	None

Field Reconnaissance (Site Walkover) Checklist

Water bodies and water courses, and signs of bank erosion, undercutting, oversteepening etc.	None onsite – streams present just beyond site boundary to the southeast (see photo above). Site is waterlogged in places.
Ecological features of note: burrows, bats, nest sites, designated preservation areas	None
Other potentially contaminative features of note.	None

ON / ADJACENT TO SITE: GEOHAZARDS AND GEOTECHNICAL ASPECTS

Underlying geology: surface soil, outcrops, exposures, stream beds, etc	No exposures on site.
Artificial ground: infilling / raised ground, engineered fill, made ground	Rolled hardcore beneath walkable areas of the site (track and narrow footpath). Remainder of the site is densely vegetated – unable to access. Site opens up to the east along narrow footpath towards location of proposed swale. 
Embankments, cuttings and retaining structures etc	None
Ground openings: cracking, voids, surface settlement, evidence of highway repair, service settlement.	None

Field Reconnaissance (Site Walkover) Checklist

Groundwater: seepage / springs, areas of boggy ground	Grassed area of site are waterlogged or boggy underfoot. 
Mining: mine working structures, shafts / adits, waste heaps, possible coloured discharges to drainage trenches or waterways	None
Quarrying: surface features or backfilled pits	None
Sources of vibrations; railways or heavy machinery	None
Adjacent geotechnical features of note: major excavations, deep basements	None

OFF SITE: SURROUNDING LAND USES < 500 m	
General site context: industrial, commercial, urban, agricultural etc.	Access only – no current site use.
Land use: north (give distances)	Hummocky scrubland continues to north/northeast for approximately 200m 

Field Reconnaissance (Site Walkover) Checklist

Land use: south (give distances)	Pharmacy (10m southwest) Doctors surgery (40m southwest) Associated parking (immediately beyond site boundary) 
Land use: east (give distances)	Private land (grass and storage) to southeast.   Grassland (sloping upwards to the east) to the east / northeast.
Land use: west (give distances)	Beyond the unnamed road, the land to the west is residential.

Field Reconnaissance (Site Walkover) Checklist

Nearby sources of pollution: landfills, filling stations, industrial activity.	None
Nearby river / surface water features: culverted, banks, flood plain. If visible, condition of watercourse	Stream present along southwest boundary of the southeast of the site (off site) flowing northwest (see photos above). Pond located 50m south.
Other features of note adjacent to site.	Unnamed road adjacent to site obstructed by concrete blocks. 



1 Overgrown vegetation (facing E)



2 Overgrown vegetation (facing E)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet
1



3 Track through site (facing SE)



4 Overgrown (facing NE)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet



5 Overgrown vegetation (facing N)



6 Track through site (facing SE)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet



7 Centre of site (facing E)



8 Track through site to SE corner

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet



9 Neighbours (Chemist) (Facing S)



10 Track through site (facing NW)



11 Gate in SE corner

Notes: Undertaken 4 December 2023

Project	A1280 Nant Y Cafn Industrial Units
Project No.	H3091-23/N
Carried out for	Neath Port Talbot County Borough Council

Sheet

6



12 Adjacent site use SE



13 Site boundary (facing NE)



14 Site boundary (facing NW)



15 Track composition

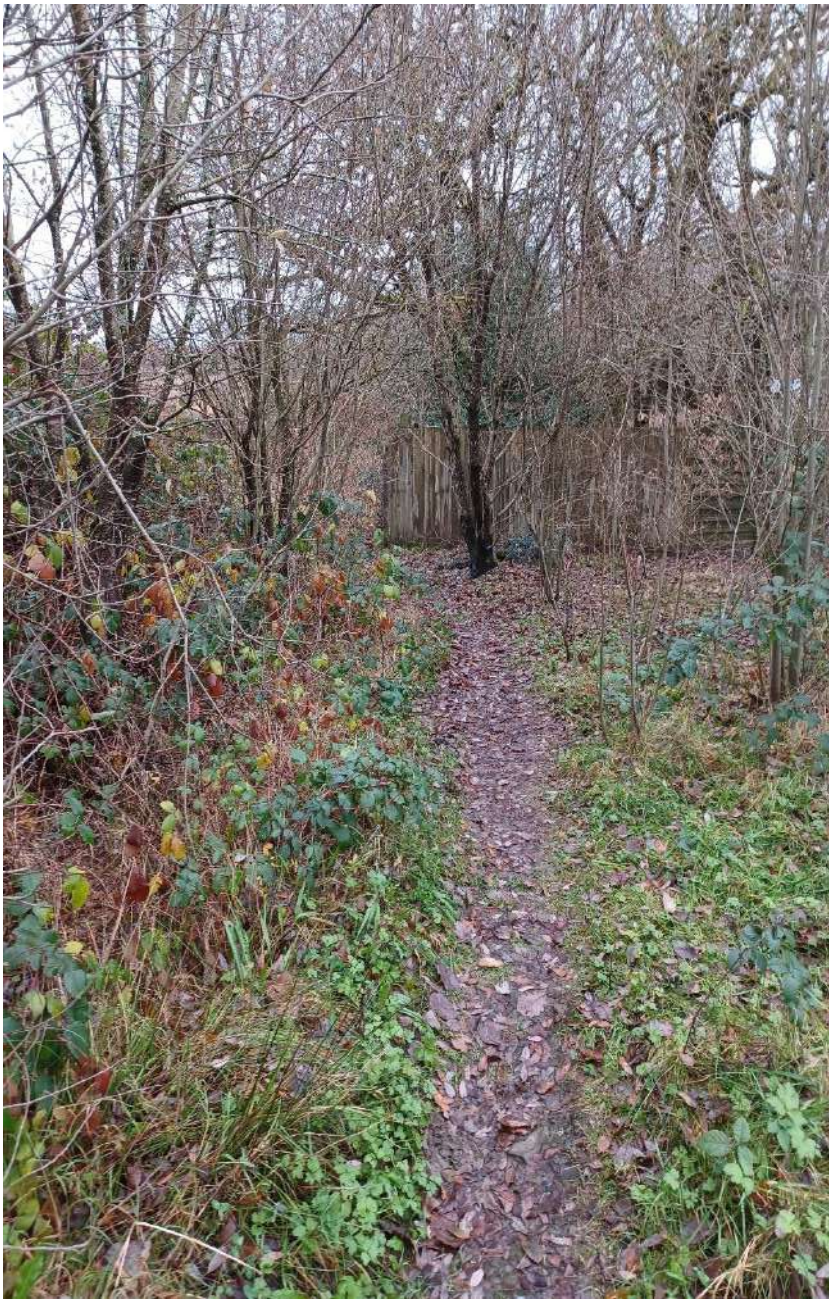
Notes: Undertaken 4 December 2023

Project	A1280 Nant Y Cafn Industrial Units
Project No.	H3091-23/N
Carried out for	Neath Port Talbot County Borough Council

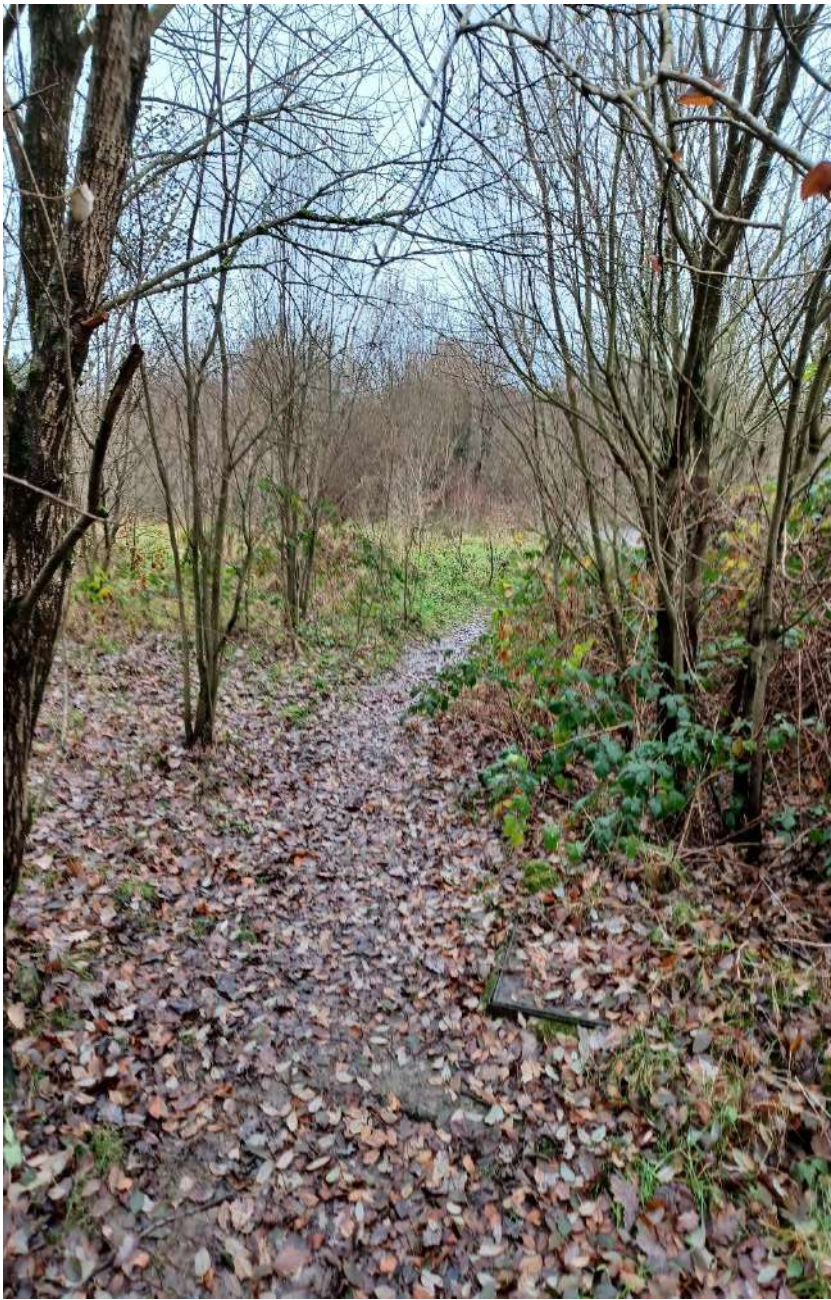
Sheet	9
-------	---



16 Footpath through site (facing E)



17 Foot access (facing E)



18 Foot access to back of site (facing NE)



19 Open space behind dense veg (facing NE)



20 Adjacent site user (facing S)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet

13



21 Offsite stream and drain - poss. beneath site



22 Off site stream and drain

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet



23 Proposed swale location (facing SW)



24 Manhole along footpath (facing NE)

Notes: Undertaken 4 December 2023

Project	A1280 Nant Y Cafn Industrial Units
Project No.	H3091-23/N
Carried out for	Neath Port Talbot County Borough Council

Sheet



25 Open space - adjacent site use (facing W)



26 Open space - adjacent site use (facing W)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet

16



27 Blocked off road (facing NE)



28 Adjacent site use (facing NE)

Notes: Undertaken 4 December 2023

Project	A1280 Nant Y Cafn Industrial Units
Project No.	H3091-23/N
Carried out for	Neath Port Talbot County Borough Council

Sheet

17



29 Overgrown site (facing SE)



30 Overgrown site (facing SE)

Notes: Undertaken 4 December 2023

Project A1280 Nant Y Cafn Industrial Units
Project No. H3091-23/N
Carried out for Neath Port Talbot County Borough Council

Sheet



31 Block obstructions in road and site (facing SE)



32 Overgrown site (facing E)



33 Adjacent site users (facing SE)



34 Adjacent site users (facing SE)



35 Facing NE towards site



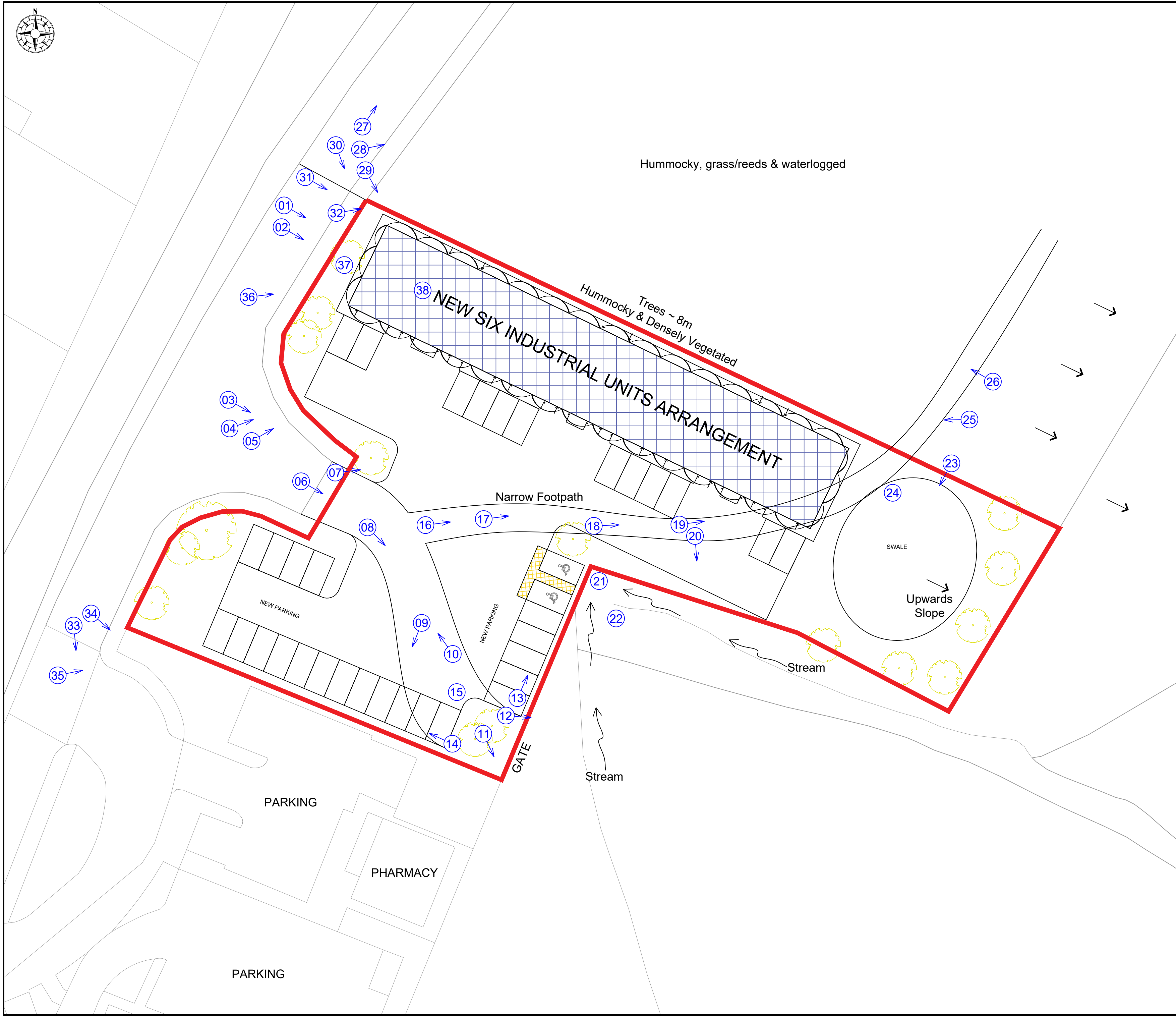
36 Overgrown site (facing SE)



37 Boggy underfoot (near blocks)



38 Dense vegetation (facing E)



GENERAL NOTES

1.Reproduced from Neath Port Talbot's Drawing No. A1279 -100.

LEGEND TO SYMBOLS



x	x	x	x	x	x
Rev	Drawn	Date	Approv.	Date	Modification Details

AMENDMENTS

Title

SITE PLAN

Project

NANT Y CAFN INDUSTRIAL UNITS

Client

NEATH & PORT TALBOT
COUNTY BOROUGH COUNCIL



Date	Drawn By	Approv. By
07/03/2024	BS	AJ
Sheet Size	Scale	Project No
A2	1:300	H3091-23/N
Drawing No	Rev	
-	0	



SOCOTEC

APPENDIX C

GEOTECHNICAL RISK REGISTER

Key

Geotechnical Risk Register

Table C1

KEY TO GEOTECHNICAL RISK REGISTER

CLASSIFICATION OF SEVERITY		
No	CATEGORY	DESCRIPTION
1	Minor	Minor damage or loss (No human injury)
2	Moderate	Moderate damage or loss (Slight human injury or illness)
3	Serious	Substantial damage or loss (Serious injury or illness)
4	Major	Major damage or loss (Fatal injury)
5	Catastrophic	Catastrophic damage or loss (Multiple fatalities)

CLASSIFICATION OF LIKELIHOOD	
No	CATEGORY
1	Extremely unlikely
2	Unlikely
3	Likely
4	Extremely likely
5	Almost certain

Definition of Terms:

1. SEVERITY: The potential consequence of a risk, should it occur.
2. LIKLIHOOD: The probability of the risk occurring
3. RISK RATING: An expression of the combination of severity and likelihood. (assessed by multiplying severity and likelihood expressed numerically)

RISK RATING MATRIX							
LIKELIHOOD	5	Almost certain	5	10	15	20	25
	4	Extremely likely	4	8	12	16	20
	3	Likely	3	6	9	12	15
	2	Unlikely	2	4	6	8	10
	1	Extremely unlikely	1	2	3	4	5
			Minor	Mod.	Serious	Major	Catast.
			1	2	3	4	5
SEVERITY							

RISK CLASSIFICATION	
Risk Scoring	Risk level and recommended action
1 to 8	LOW RISK: Ensure control measures are maintained and adhered to and activity may not alter.
8 to 16	MODERATE RISK: Additional control measures needed to reduce risk rating.
20 to 25	HIGH RISK: Activity not permitted. Hazard to be avoided or risk to be reduced to tolerable level.

Note: Severity, likelihood and risk classifications based on Design Manual for Roads and Bridges, CD 622, Managing geotechnical risk.

PRELIMINARY GEOTECHNICAL RISK REGISTER											
Risk ID	Element of works	Hazard	Potential Consequence	Initial Likelihood	Initial Severity	Initial Risk Rating	Mitigation / Control	Residual Likelihood	Residual Severity	Residual Risk Rating	Notes
1	Variation in the distribution of the geological units	Different engineering properties of soil and rock	Differential settlement, instability	2	2	4	Carry out site survey				
2	Groundwater flow	Water flow through mine workings	Destabilisation of workings	2	1	2	Carry out site survey				
3	Water table fluctuation	Change in effective stress	Ground settlement	2	2	4	Carry out site survey				
4	Soakaways	Discharge of water into ground	Destabilisation of workings, differential settlement	2	1	2	Carry out site survey				
5	Surface water sewers	Leaking pipes with discharge of water into ground & mine workings	Destabilisation of workings, differential settlement	1	1	1	Carry out site survey				
6	Foul water sewers	Leaking pipes with discharge of water into ground & mine workings	Destabilisation of workings, differential settlement	1	1	1	Carry out site survey				
7	Trees	Shrinkage and swelling of the soil	Differential settlement, instability	2	2	4	Carry out site survey				



APPENDIX D

CONCEPTUAL SITE MODEL AND PRELIMINARY RISK ASSESSMENT

Key

Source-Pathway-Receptors

Table D1

Conceptual Site Model (CSM) and Preliminary Risk
Assessment (PRA)

Table D2

CSM Graphic

Figure D3

Site Name:

A1280 Nant Y Cafn Industrial Units

Job No:

H3091-23/N

Carried out For:

**Neath Port Talbot County Borough
Council**



KEY TO CONCEPTUAL SITE MODEL AND PRELIMINARY RISK ASSESSMENT

CLASSIFICATION OF SEVERITY	
SEVERITY	DEFINITION AND EXAMPLES
Severe	Acute risk to human health, resulting in significant harm, or short-term pollution risk; eg high concentration of contaminants, major spillage to controlled water, explosion.
Medium	Chronic (long-term) risk to human health, or pollution of controlled waters; eg Contamination exceeding assessment criteria, leaching of contaminant to aquifer.
Mild	Damage to non-sensitive species or ecosystems, buildings or services; eg. pollution of non-classified groundwater, or damage to building making it unsafe.
Minor	Non-permanent health effects, or repairable damage to buildings; eg. Contamination at levels requiring PPE, the loss of plants in landscaping, or discolouration of concrete.

CLASSIFICATION OF LIKELIHOOD	
LIKELIHOOD	TYPICAL EXAMPLES
High Likelihood	Pollutant linkage may be present, and risk is almost certain to occur in the long term, or there is evidence of existing harm to the receptor.
Likely	Pollutant linkage is present, and it is probable that the risk will occur over the long term.
Low Likelihood	Pollutant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Unlikely	Pollutant linkage may be present but the circumstances under which harm would occur are improbable , even in the very long term.

Definition of Terms:

1. SEVERITY: The potential consequence of a risk, should it occur.
2. LIKELIHOOD: The probability of the risk occurring
3. RISK RATING: An expression of the combination of severity and likelihood.
(here assessed by multiplying severity and likelihood expressed numerically)

Note:

Severity, likelihood and risk classifications based on CIRIA C552.

RISK RATING MATRIX						
LIKELIHOOD	4	High likelihood	4	8	12	16
	3	Likely	3	6	9	12
	2	Low likelihood	2	4	6	8
	1	Unlikely	1	2	3	4
			Minor	Mild	Medium	Severe
			1	2	3	4
SEVERITY						

RISK CLASSIFICATION	
Risk Scoring	Risk level and recommended action
1 / 2	VERY LOW RISK: There is a low possibility of harm to a receptor which, if it occurs, would not be severe.
3	LOW RISK: There is a possibility of harm to the receptor, but such harm would be mild.
4 / 6	LOW / MODERATE RISK: Should harm arise it is most likely to be mild. Investigation would be beneficial.
8 / 9	MODERATE RISK: Severe harm is possible but is unlikely. Investigation normally required to confirm the risk.
12	HIGH RISK: Harm to the receptor is likely. Urgent investigation is required, and probable remediation.
16	VERY HIGH RISK: A high probability of severe harm arising (or evidence of existing severe harm). Urgent investigation and remediation is required.

Site Name: A1280 Nant Y Cafn Industrial Units

Job No:

H3091-23/N

Carried out For:

Neath Port Talbot County Borough Council

Table

D1



POTENTIAL SOURCES OF CONTAMINATION							
REF	LOC	DIRECTION	DISTANCE (m)	YEARS	SITE USE / ACTIVITY	CONTAMINATION MECHANISM	POSSIBLE CONTAMINANTS
1	On site	-	-	-	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide
2	Off site	-	-	-	Shallow mine workings and coal seams (potentially impacted by historical off site mine workings)	Generation and migration of coal mine gas emissions from historical offsite workings through permable sandstone strata, faulted bedrock, deep drainage systems and foundations (where piled solution required) and ingress through floor slab, service entry and / or into excavations during construction	Heavy metals, polycyclic aromatic hydrocarbons (PAH), methane, carbon dioxide and monoxide and hydrogen sulphide gas

POTENTIAL MIGRATION PATHWAYS
INGESTION (Soil, soil dust and/or water)
INHALATION (Soil dust, soil vapour and/or water vapour)
DERMAL CONTACT (Soil, soil dust and/or water)
LEACHING AND MIGRATION (Soil contaminants into groundwater)
MIGRATION AND INHALATION (Gases and/or vapours in permeable strata)

POTENTIAL RECEPTORS	
RECEPTOR	DETAIL
HUMAN HEALTH:	
Future site users	Industrial units (commercial land use). Future site users: Employees
Construction workers	
Neighbouring site users	
CONTROLLED WATERS:	
Groundwater (GW)	Secondary A Undifferentiated aquifer (superficials), Secondary A aquifer (bedrock)
Surface water (SW)	River Dulais (181 m west)
ENVIRONMENTAL:	None within 50 m of site

CONCEPTUAL SITE MODEL (CSM)					PRELIMINARY RISK ASSESSMENT (PRA)						
POTENTIAL SOURCES OF CONTAMINATION					POTENTIAL MIGRATION PATHWAYS	POTENTIAL RECEPTORS	SEVERITY OF RISK	LIKELIHOOD OF RISK	RISK SCORE & CATEGORY		REMARKS
REF	LOC	SITE USE / ACTIVITY	CONTAMINATION MECHANISM	POSSIBLE CONTAMINANTS							
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	INGESTION (Soil, soil dust and/or water).	Future site users	3 (Medium)	2 (Low likelihood)	6	Low/Mod	Limited on site development and potentially contaminative land uses since the earliest historical records. Potential sources of contamination restricted to the importation of materials from an unknown source and operation of construction plant (possible plant storage / lay down area).
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	INHALATION (Soil dust, soil vapour and/or water vapour)	Future site users	3 (Medium)	2 (Low likelihood)	6	Low/Mod	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	DERMAL CONTACT (Soil, soil dust and/or water)	Future site users	3 (Medium)	2 (Low likelihood)	6	Low/Mod	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	INGESTION (Soil, soil dust and/or water)	Construction workers	3 (Medium)	2 (Low likelihood)	6	Low/Mod	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	INHALATION (Soil dust, soil vapour and/or water vapour)	Construction workers	3 (Medium)	2 (Low likelihood)	6	Low/Mod	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	DERMAL CONTACT (Soil, soil dust and/or water)	Construction workers	3 (Medium)	2 (Low likelihood)	6	Low/Mod	Limited on site development and potentially contaminating land uses since the earliest historical records. Potential sources of contamination restricted to the importation of materials from an unknown source and operation of construction plant (possible plant storage / lay down area). Construction of hardstanding covers as part of the proposed development is likley to sever the pathway and reduce leaching of Made Ground though potentially may occur in soft landscaped areas. The drift deposists beneath the site are mapped as Till which is likely to comprise low permeability cohesive materials that may act as an aquitard and restrict the downward migration of souble contaminants into groundwater.
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	INHALATION (Soil dust, soil vapour and/or water vapour).	Neighbouring site users	3 (Medium)	1 (Unlikely)	3	Low	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	LEACHING AND MIGRATION (Soil contaminants into groundwater)	Groundwater (GW)	3 (Medium)	1 (Unlikely)	3	Low	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	LEACHING AND MIGRATION (Soil contaminants into groundwater)	Surface water (SW)	3 (Medium)	1 (Unlikely)	3	Low	
1	On site	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant	Source and contaminant status of imported materials is unknown. Possible reclaimed aggregates	Heavy metals, PAHs. Asbestos, cyanide, aliphatic and aromatic hydrocarbons and phenols. Low grade source of ground gases inc. methane and carbon dioxide	SURFACE FLOW (Contaminated runoff)	Surface water (SW)	3 (Medium)	1 (Unlikely)	3	Low	

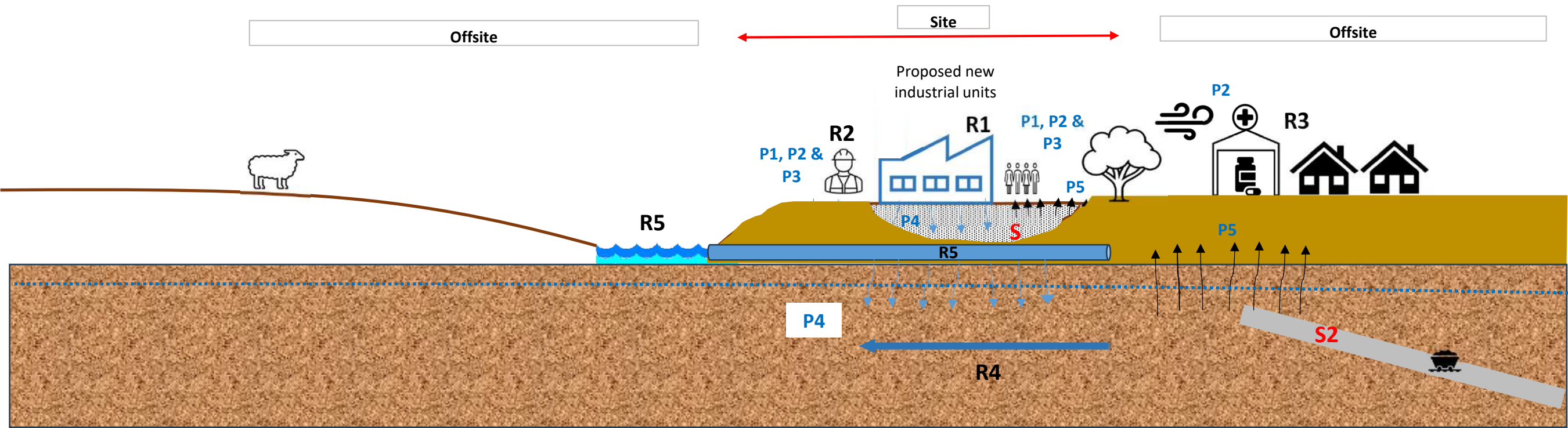
CONCEPTUAL SITE MODEL (CSM)							PRELIMINARY RISK ASSESSMENT (PRA)				
POTENTIAL SOURCES OF CONTAMINATION					POTENTIAL MIGRATION PATHWAYS	POTENTIAL RECEPTORS	SEVERITY OF RISK	LIKELIHOOD OF RISK	RISK SCORE & CATEGORY		REMARKS
REF	LOC	SITE USE / ACTIVITY	CONTAMINATION MECHANISM	POSSIBLE CONTAMINANTS							
2	Off site	Shallow mine workings and coal seams (potentially impacted by historical off site mine workings)	Generation and migration of coal mine gas emissions from historical offsite workings through permable sandstone strata, faulted bedrock, deep drainage systems and foundations (where piled solution required) and ingress through floor slab, service entry and / or into excavations during construction	Heavy metals, polycyclic aromatic hydrocarbons (PAH), methane, carbon dioxide and monoxide and hydrogen sulphide gas	MIGRATION AND INHALATION (Gases and/or vapours in permeable strata)	Future site users	4 (Severe)	1 (Unlikely)	4	Low/Mod	The site is outside the zone of influence of historic coal mines and no mine entries are recorded on the site (or within 50m from the boundary). However, there may be shallow seams under the site is also potential for worked shallow seams and faults which may enable gases to migrate through permable sandstones of the South Wales Middle Coal Measures. Nearest historic underground workings located 285 m south of the site. Red Vein shown to the south of the site and indicated to dip 10 degrees to the south, therefore not underlying the site.
2	Off site	Shallow mine workings and coal seams (potentially impacted by historical off site mine workings)	Generation and migration of coal mine gas emissions from historical offsite workings through permable sandstone strata, faulted bedrock, deep drainage systems and foundations (where piled solution required) and ingress through floor slab, service entry and / or into excavations during construction	Heavy metals, polycyclic aromatic hydrocarbons (PAH), methane, carbon dioxide and monoxide and hydrogen sulphide gas	MIGRATION AND INHALATION (Gases and/or vapours in permeable strata)	Construction workers	4 (Severe)	1 (Unlikely)	4	Low/Mod	

CONCEPTUAL SITE MODEL (CSM)

SOURCES	
S1	Aggregate access road construction and site activities such as emplacement of fill materials and operation / storage of site plant
S2	Shallow mine workings and coal seams (potentially impacted by historical off site mine workings)

PATHWAYS	
P1	INGESTION (Soil, soil dust and/or water)
P2	INHALATION (Soil dust, soil vapour and/or water vapour)
P3	DERMAL CONTACT (Soil, soil dust and/or water)
P4	LEACHING AND MIGRATION (Soil contaminants into groundwater)
P5	MIGRATION AND INHALATION (Gases and/or vapours in permeable strata)

RECEPTORS	
R1	Future site users
R2	Construction workers
R3	Neighbouring site users
R4	Groundwater (GW)
R5	Surface water (SW)



KEY:

Potential Made Ground

Coal seam (Red Vein)

Possible shallow mine workings

South Wales Middle Coal Formation

Drift Deposits (Devensian Till)



Vertical migration of contamination / leachate



Lateral groundwater flow



Surface water (culvert)



Vertical gas / vapour migration



Surface water body



Water table

Figure

D3



SOCOTEC

APPENDIX E
GROUNDSURE ENVIRO+GEO INSIGHT

Groundsure Report

GS-F4N-QSP-EP6-2DM

M W PHILLIPS CHEMISTS, DULAIS PHARMACY, NANT Y CAFN BUSINESS PARK, SEVEN SISTERS, SA10 9EY

Order Details

Date: 29/11/2023
Your ref: H5810
Our Ref: GS-F4N-QSP-EP6-2DM

Site Details

Location: 281095 207827
Area: 0.38 ha
Authority: [Castell-nedd Port Talbot - Neath Port Talbot County Borough](#) ↗



© Crown copyright and database rights 2023. Ordnance Survey licence 100035207

Summary of findings

[p. 2 >](#)

Aerial image

[p. 9 >](#)

OS MasterMap site plan

[p.14 >](#)

groundsure.com/insightuserguide ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	1	50	-
17 >	1.2 >	Historical tanks >	0	0	0	3	-
18	1.3	Historical energy features	0	0	0	0	-
18	1.4	Historical petrol stations	0	0	0	0	-
18 >	1.5 >	Historical garages >	0	0	2	0	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
20 >	2.1 >	Historical industrial land uses >	0	0	2	67	-
23 >	2.2 >	Historical tanks >	0	0	0	4	-
24	2.3	Historical energy features	0	0	0	0	-
24	2.4	Historical petrol stations	0	0	0	0	-
24 >	2.5 >	Historical garages >	0	0	3	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
25	3.1	Active or recent landfill	0	0	0	0	-
25	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
26	3.5	Historical waste sites	0	0	0	0	-
26	3.6	Licensed waste sites	0	0	0	0	-
26 >	3.7 >	Waste exemptions >	0	1	0	11	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
28 >	4.1 >	Recent industrial land uses >	0	0	3	-	-
29 >	4.2 >	Current or recent petrol stations >	0	0	1	0	-
29	4.3	Electricity cables	0	0	0	0	-
29	4.4	Gas pipelines	0	0	0	0	-
29	4.5	Sites determined as Contaminated Land	0	0	0	0	-



29	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.7	Regulated explosive sites	0	0	0	0	-
30	4.8	Hazardous substance storage/usage	0	0	0	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
30 >	4.11 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	1	-
31	4.12	Radioactive Substance Authorisations	0	0	0	0	-
31 >	4.13 >	<u>Licensed Discharges to controlled waters ></u>	0	0	0	7	-
32	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
32	4.15	Pollutant release to public sewer	0	0	0	0	-
33	4.16	List 1 Dangerous Substances	0	0	0	0	-
33	4.17	List 2 Dangerous Substances	0	0	0	0	-
33	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
33	4.19	Pollution inventory substances	0	0	0	0	-
33	4.20	Pollution inventory waste transfers	0	0	0	0	-
34	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
35 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
37 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
38 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
39	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
39	5.5	Groundwater vulnerability- local information	None (within 0m)				
40	5.6	Groundwater abstractions	0	0	0	0	0
41 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	2
41	5.8	Potable abstractions	0	0	0	0	0
42	5.9	Source Protection Zones	0	0	0	0	-
42	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
43 >	6.1 >	<u>Water Network (OS MasterMap) ></u>	2	3	21	-	-



46 >	6.2 >	Surface water features >	0	2	13	-	-
46 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
46 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
47 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
48	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
48	7.2	Historical Flood Events	0	0	0	-	-
48	7.3	Flood Defences	0	0	0	-	-
49	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
49	7.5	Flood Storage Areas	0	0	0	-	-
50	7.6	Flood Zone 2	None (within 50m)				
50	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
51 >	8.1 >	Surface water flooding >	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
53 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
54 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	1
55	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
55	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
55	10.4	Special Protection Areas (SPA)	0	0	0	0	0
55	10.5	National Nature Reserves (NNR)	0	0	0	0	0
56	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
56 >	10.7 >	Designated Ancient Woodland >	0	0	1	1	13
57	10.8	Biosphere Reserves	0	0	0	0	0
57	10.9	Forest Parks	0	0	0	0	0
57	10.10	Marine Conservation Zones	0	0	0	0	0
57	10.11	Green Belt	0	0	0	0	0
57	10.12	Proposed Ramsar sites	0	0	0	0	0



58	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
58	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
58	10.15	Nitrate Sensitive Areas	0	0	0	0	0
58	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
59	10.17	SSSI Impact Risk Zones	0	-	-	-	-
59	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
60	11.1	World Heritage Sites	0	0	0	-	-
60	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
60	11.3	National Parks	0	0	0	-	-
60	11.4	Listed Buildings	0	0	0	-	-
61	11.5	Conservation Areas	0	0	0	-	-
61	11.6	Scheduled Ancient Monuments	0	0	0	-	-
61	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
63	12.2	Open Access Land	0	0	0	-	-
63	12.3	Tree Felling Licences	0	0	0	-	-
63	12.4	Environmental Stewardship Schemes	0	0	0	-	-
64	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
65	13.1	Priority Habitat Inventory	0	0	0	-	-
65	13.2	Habitat Networks	0	0	0	-	-
65	13.3	Open Mosaic Habitat	0	0	0	-	-
65	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	14.1 >	10k Availability >	Identified (within 500m)				
67	14.2	Artificial and made ground (10k)	0	0	0	0	-
68	14.3	Superficial geology (10k)	0	0	0	0	-



68	14.4	Landslip (10k)	0	0	0	0	-
69	14.5	Bedrock geology (10k)	0	0	0	0	-
69	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
70 >	15.1 >	50k Availability >	Identified (within 500m)				
71 >	15.2 >	Artificial and made ground (50k) >	0	0	0	1	-
72	15.3	Artificial ground permeability (50k)	0	0	-	-	-
73 >	15.4 >	Superficial geology (50k) >	1	0	2	0	-
74 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
74	15.6	Landslip (50k)	0	0	0	0	-
74	15.7	Landslip permeability (50k)	None (within 50m)				
75 >	15.8 >	Bedrock geology (50k) >	1	0	0	1	-
76 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
76 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	0	3	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
77 >	16.1 >	BGS Boreholes >	0	0	8	-	-
Page	Section	Natural ground subsidence >					
79 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
80 >	17.2 >	Running sands >	Very low (within 50m)				
81 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
82 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
83 >	17.5 >	Landslides >	Low (within 50m)				
85 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
87 >	18.1 >	BritPits >	0	0	0	3	-
88	18.2	Surface ground workings	0	0	0	-	-
88 >	18.3 >	Underground workings >	0	0	0	9	59
91	18.4	Underground mining extents	0	0	0	0	-
91	18.5	Historical Mineral Planning Areas	0	0	0	0	-



92 >	18.6 >	Non-coal mining >	0	0	0	0	1
92	18.7	JPB mining areas	None (within 0m)				
92	18.8	The Coal Authority non-coal mining	0	0	0	0	-
93	18.9	Researched mining	0	0	0	0	-
93	18.10	Mining record office plans	0	0	0	0	-
93 >	18.11 >	BGS mine plans >	1	0	0	2	-
93 >	18.12 >	Coal mining >	Identified (within 0m)				
94	18.13	Brine areas	None (within 0m)				
94	18.14	Gypsum areas	None (within 0m)				
94	18.15	Tin mining	None (within 0m)				
94	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
95	19.1	Natural cavities	0	0	0	0	-
95	19.2	Mining cavities	0	0	0	0	0
95	19.3	Reported recent incidents	0	0	0	0	-
95	19.4	Historical incidents	0	0	0	0	-
96	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
97 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
99 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
99	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
99	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
100	22.1	Underground railways (London)	0	0	0	-	-
100	22.2	Underground railways (Non-London)	0	0	0	-	-
101	22.3	Railway tunnels	0	0	0	-	-
101 >	22.4 >	Historical railway and tunnel features >	0	0	2	-	-
101	22.5	Royal Mail tunnels	0	0	0	-	-



101	22.6	Historical railways	0	0	0	-	-
102	22.7	Railways	0	0	0	-	-
102	22.8	Crossrail 1	0	0	0	0	-
102	22.9	Crossrail 2	0	0	0	0	-
102	22.10	HS2	0	0	0	0	-



Recent aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2023. All Rights Reserved

Capture Date: 14/04/2020

Site Area: 0.38ha



Recent site history - 2017 aerial photograph



Capture Date: 17/06/2017

Site Area: 0.38ha



Recent site history - 2013 aerial photograph

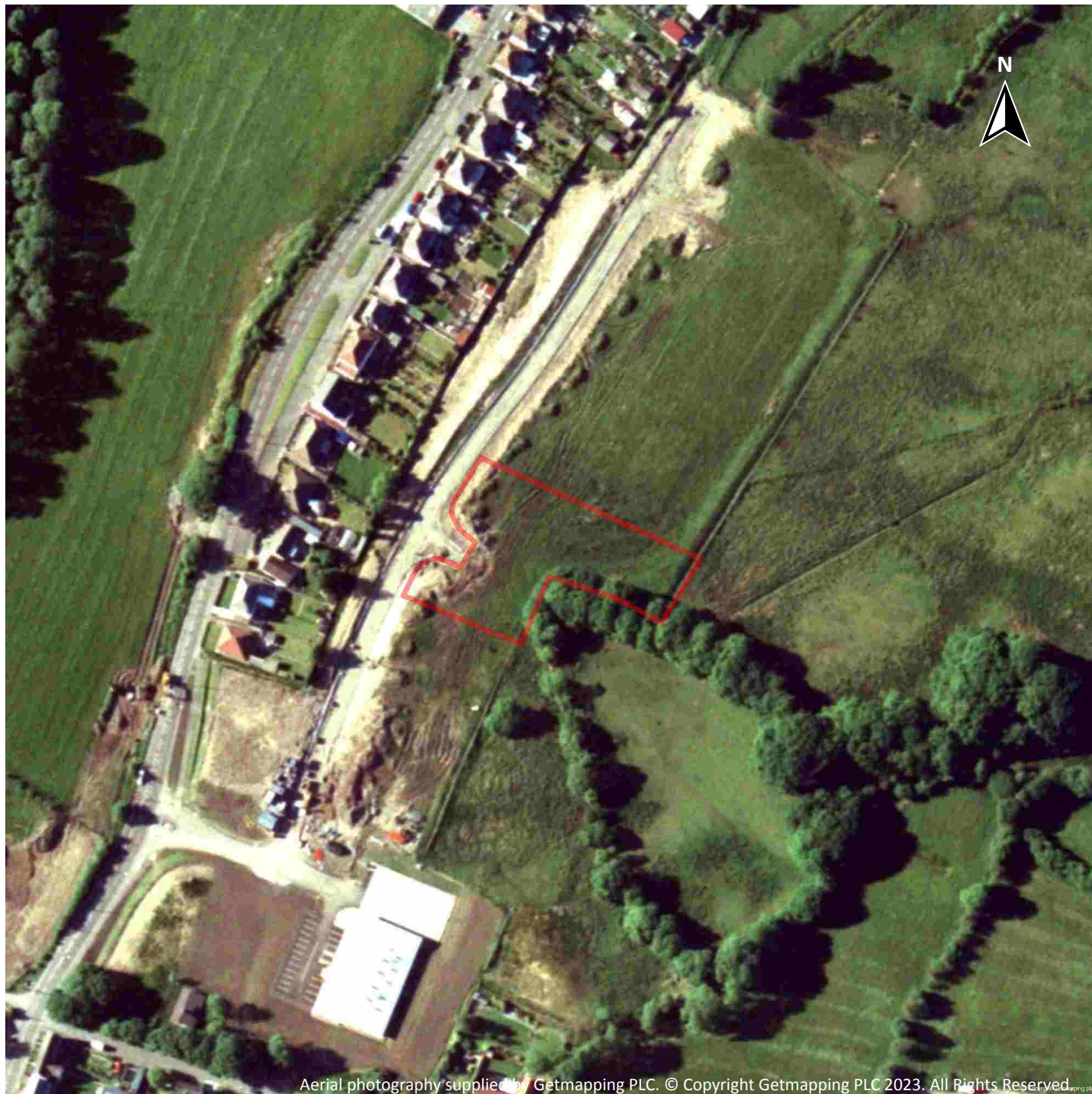


Capture Date: 14/07/2013

Site Area: 0.38ha



Recent site history - 2001 aerial photograph

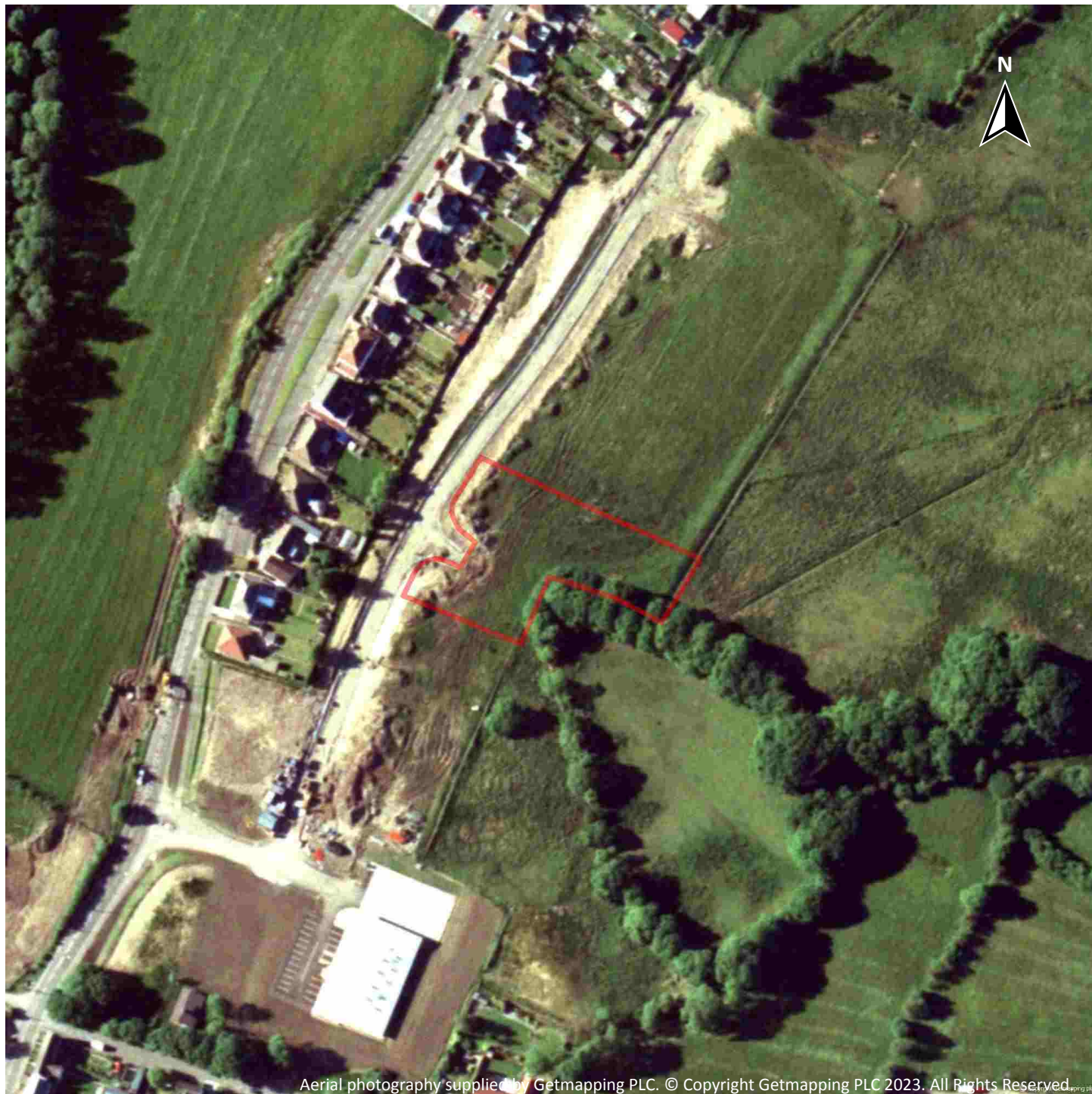


Capture Date: 27/08/2001

Site Area: 0.38ha



Recent site history - 2000 aerial photograph

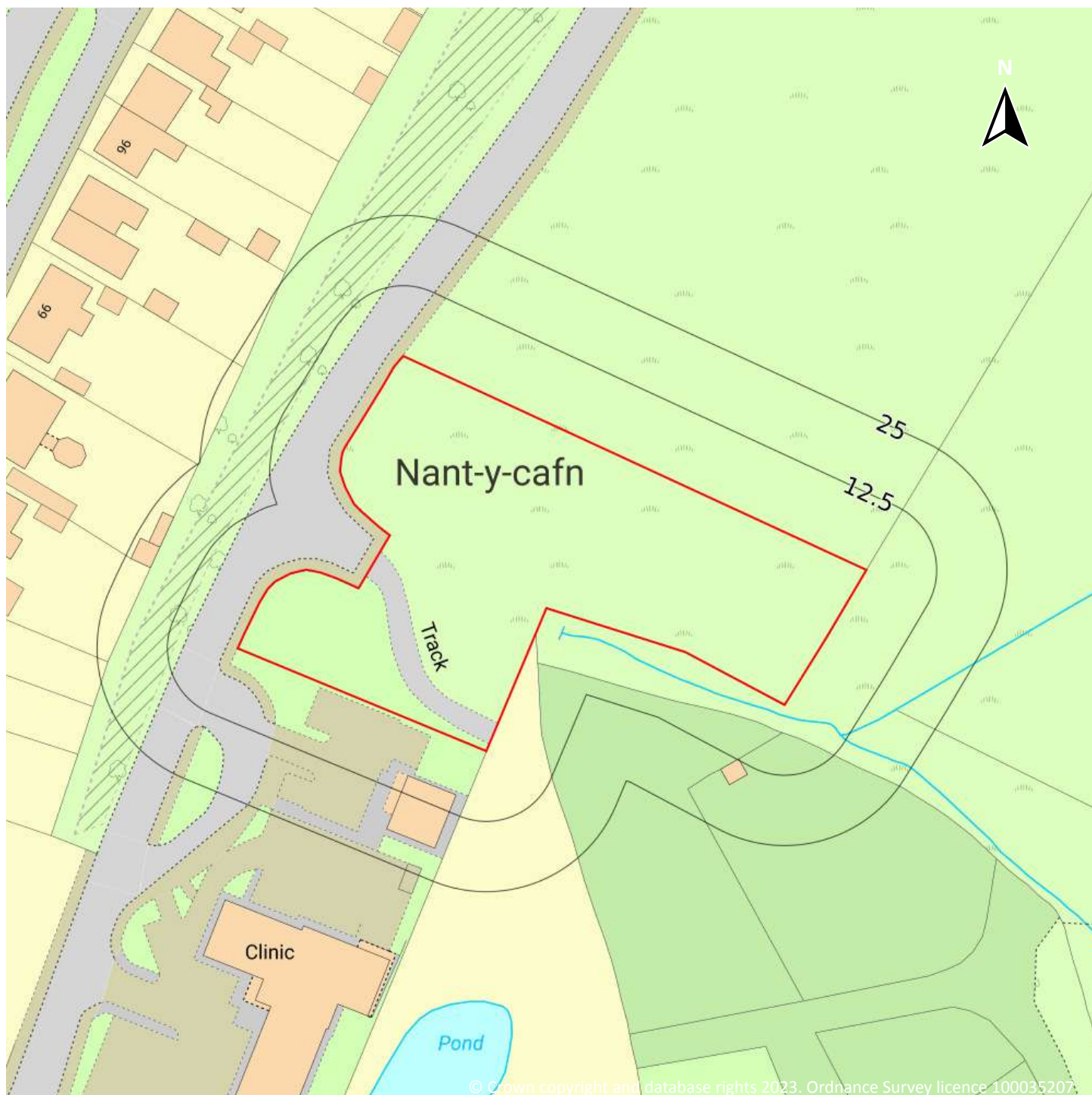


Capture Date: 18/06/2000

Site Area: 0.38ha



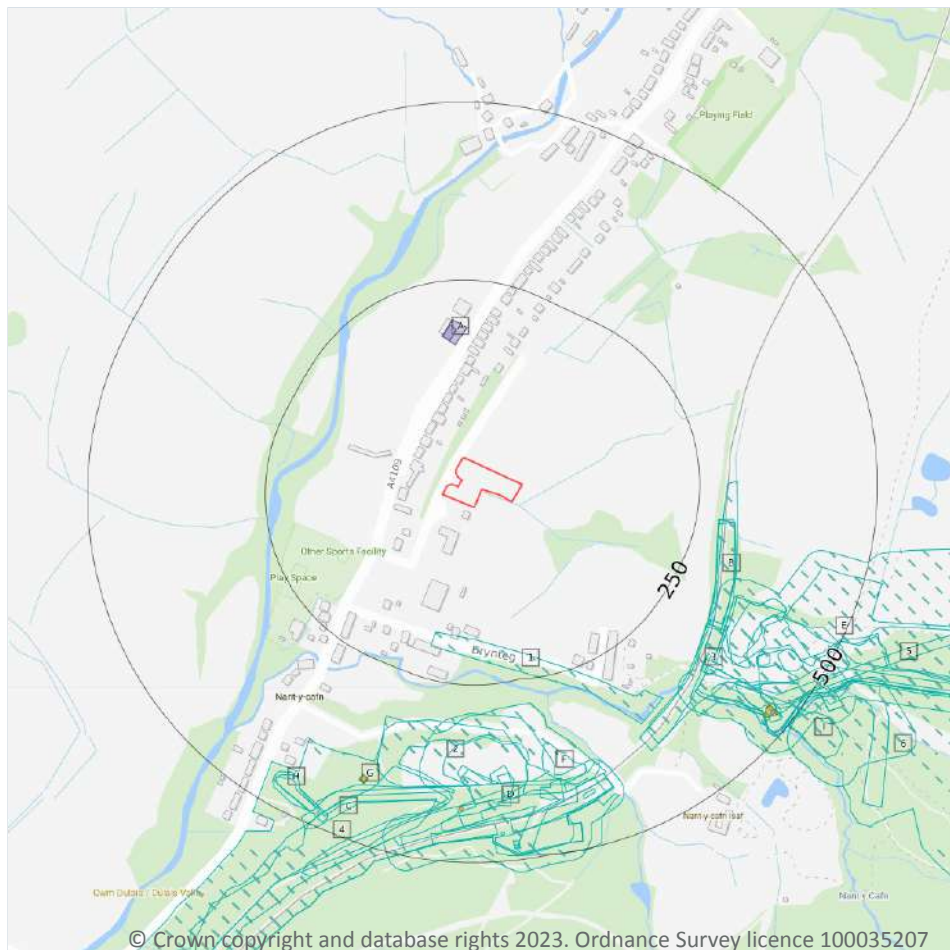
OS MasterMap site plan



Site Area: 0.38ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical garages

1.1 Historical industrial land uses

Records within 500m

51

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	182m S	Railway Sidings	1913 - 1921	316268



ID	Location	Land use	Dates present	Group ID
B	281m E	Cuttings	1921	285337
B	283m E	Cuttings	1948	311574
B	283m E	Cuttings	1913	306709
C	285m S	Colliery	1948	284308
B	287m E	Cuttings	1877	301733
D	290m S	Colliery	1913 - 1921	274806
2	305m S	Refuse Heap	1964 - 1988	295120
E	315m SE	Colliery	1913 - 1921	304625
D	321m S	Refuse Heap	1913 - 1921	281323
E	322m SE	Railway Sidings	1913 - 1921	273597
C	324m S	Refuse Heap	1948	275319
E	324m SE	Railway Sidings	1948	290010
E	338m SE	Unspecified Works	1964 - 1988	307174
E	340m SE	Colliery	1948	297500
F	342m S	Refuse Heap	1948	318236
3	351m SE	Railway Building	1913	256642
E	359m SE	Refuse Heap	1948	271228
D	363m S	Railway Sidings	1913	314670
E	364m SE	Tramway Sidings	1877	256920
E	364m SE	Brick Works	1877	273506
D	369m S	Railway Sidings	1921 - 1948	299003
F	384m S	Unspecified Ground Workings	1913 - 1921	294603
E	386m SE	Refuse Heap	1988	289560
D	390m S	Railway Sidings	1964 - 1988	318419
F	396m S	Railway Building	1964 - 1988	314320
D	400m S	Railway Building	1964 - 1988	303740
4	402m S	Refuse Heaps	1964 - 1988	306348
E	405m SE	Refuse Heap	1948	303219



ID	Location	Land use	Dates present	Group ID
D	407m S	Unspecified Ground Workings	1877	267266
G	407m S	Unspecified Tank	1964 - 1988	313784
E	408m SE	Refuse Heap	1921	277139
E	408m SE	Refuse Heap	1913	279964
E	411m SE	Refuse Heap	1948	280668
F	412m SE	Unspecified Pit	1877	268443
F	420m S	Railway Building	1913	256641
E	432m SE	Refuse Heap	1948	309092
F	436m SE	Unspecified Mine	1964 - 1988	306066
H	441m SW	Old Coal Levels	1913 - 1921	273823
D	446m S	Unspecified Pit	1877	268444
H	447m SW	Unspecified Heap	1948	260086
H	454m SW	Unspecified Level	1964 - 1988	298946
D	459m S	Railway Building	1877	256644
E	462m SE	Unspecified Tanks	1921	287489
E	469m SE	Unspecified Tanks	1877	309776
D	473m S	Smithy	1913 - 1921	307939
D	478m S	Smithy	1948	275083
5	493m SE	Refuse Heap	1948	314145
6	499m SE	Old Brick Works	1948	306950
I	500m SE	Refuse Heap	1988	281274
I	500m SE	Old Brick Works	1913	311351

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

3

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or



succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
G	408m S	Unspecified Tank	1961	34265
D	422m S	Unspecified Tank	1961	34264
E	460m SE	Tanks	1876 - 1919	35608

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0
----------------------------	----------

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
----------------------------	----------

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	2
----------------------------	----------

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
A	159m N	Garage	1987	6056
A	166m N	Garage	1962 - 1993	6315

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

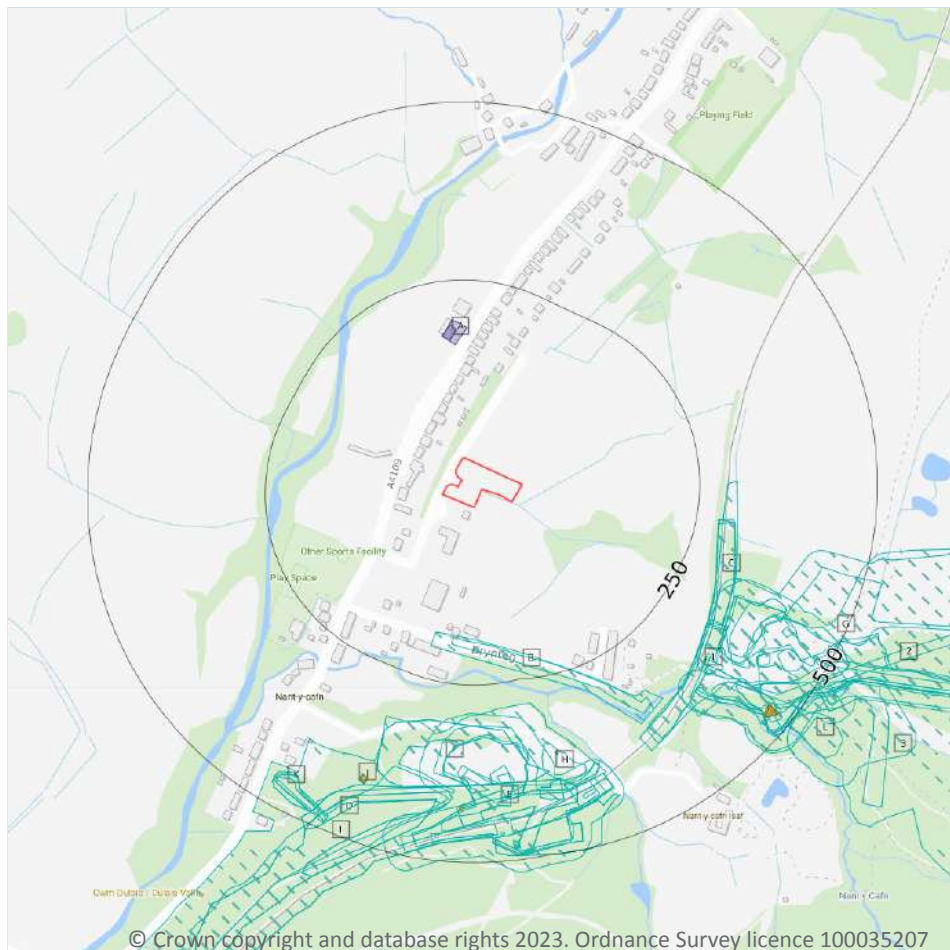
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical garages

2.1 Historical industrial land uses

Records within 500m

69

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20](#) >

ID	Location	Land Use	Date	Group ID
B	182m S	Railway Sidings	1913	316268
B	184m S	Railway Sidings	1921	316268
C	281m E	Cuttings	1921	285337



ID	Location	Land Use	Date	Group ID
C	283m E	Cuttings	1948	311574
C	283m E	Cuttings	1913	306709
D	285m S	Colliery	1948	284308
C	287m E	Cuttings	1877	301733
E	290m S	Colliery	1913	274806
F	305m S	Refuse Heap	1988	295120
F	305m S	Refuse Heap	1964	295120
E	307m S	Colliery	1921	274806
G	315m SE	Colliery	1913	304625
G	317m SE	Colliery	1921	304625
E	321m S	Refuse Heap	1921	281323
G	322m SE	Railway Sidings	1921	273597
E	324m S	Refuse Heap	1913	281323
D	324m S	Refuse Heap	1948	275319
G	324m SE	Railway Sidings	1913	273597
G	324m SE	Railway Sidings	1948	290010
G	338m SE	Unspecified Works	1988	307174
G	338m SE	Unspecified Works	1964	307174
G	340m SE	Colliery	1948	297500
H	342m S	Refuse Heap	1948	318236
1	351m SE	Railway Building	1913	256642
G	359m SE	Refuse Heap	1948	271228
E	363m S	Railway Sidings	1913	314670
G	364m SE	Brick Works	1877	273506
G	364m SE	Tramway Sidings	1877	256920
E	369m S	Railway Sidings	1921	299003
H	384m S	Unspecified Ground Workings	1913	294603
H	385m SE	Unspecified Ground Workings	1921	294603



ID	Location	Land Use	Date	Group ID
G	386m SE	Refuse Heap	1988	289560
E	390m S	Railway Sidings	1988	318419
E	390m S	Railway Sidings	1964	318419
E	391m S	Railway Sidings	1948	299003
H	396m S	Railway Building	1988	314320
H	396m S	Railway Building	1964	314320
E	400m S	Railway Building	1988	303740
E	400m S	Railway Building	1964	303740
I	402m S	Refuse Heaps	1988	306348
I	402m S	Refuse Heaps	1964	306348
G	405m SE	Refuse Heap	1948	303219
E	407m S	Unspecified Ground Workings	1877	267266
J	407m S	Unspecified Tank	1988	313784
J	407m S	Unspecified Tank	1964	313784
G	408m SE	Refuse Heap	1921	277139
G	408m SE	Refuse Heap	1913	279964
G	411m SE	Refuse Heap	1948	280668
H	412m SE	Unspecified Pit	1877	268443
H	420m S	Railway Building	1913	256641
G	432m SE	Refuse Heap	1948	309092
H	436m SE	Unspecified Mine	1988	306066
H	436m SE	Unspecified Mine	1964	306066
K	441m SW	Old Coal Levels	1921	273823
E	446m S	Unspecified Pit	1877	268444
K	446m SW	Old Coal Levels	1913	273823
K	447m SW	Unspecified Heap	1948	260086
K	454m SW	Unspecified Level	1988	298946
K	454m SW	Unspecified Level	1964	298946



ID	Location	Land Use	Date	Group ID
E	459m S	Railway Building	1877	256644
G	462m SE	Unspecified Tanks	1921	287489
G	469m SE	Unspecified Tanks	1877	309776
E	473m S	Smithy	1921	307939
E	476m S	Smithy	1913	307939
E	478m S	Smithy	1948	275083
2	493m SE	Refuse Heap	1948	314145
3	499m SE	Old Brick Works	1948	306950
L	500m SE	Refuse Heap	1988	281274
L	500m SE	Old Brick Works	1913	311351

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

4

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

ID	Location	Land Use	Date	Group ID
J	408m S	Unspecified Tank	1961	34265
E	422m S	Unspecified Tank	1961	34264
G	460m SE	Tanks	1919	35608
G	463m SE	Tanks	1876	35608

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

3

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

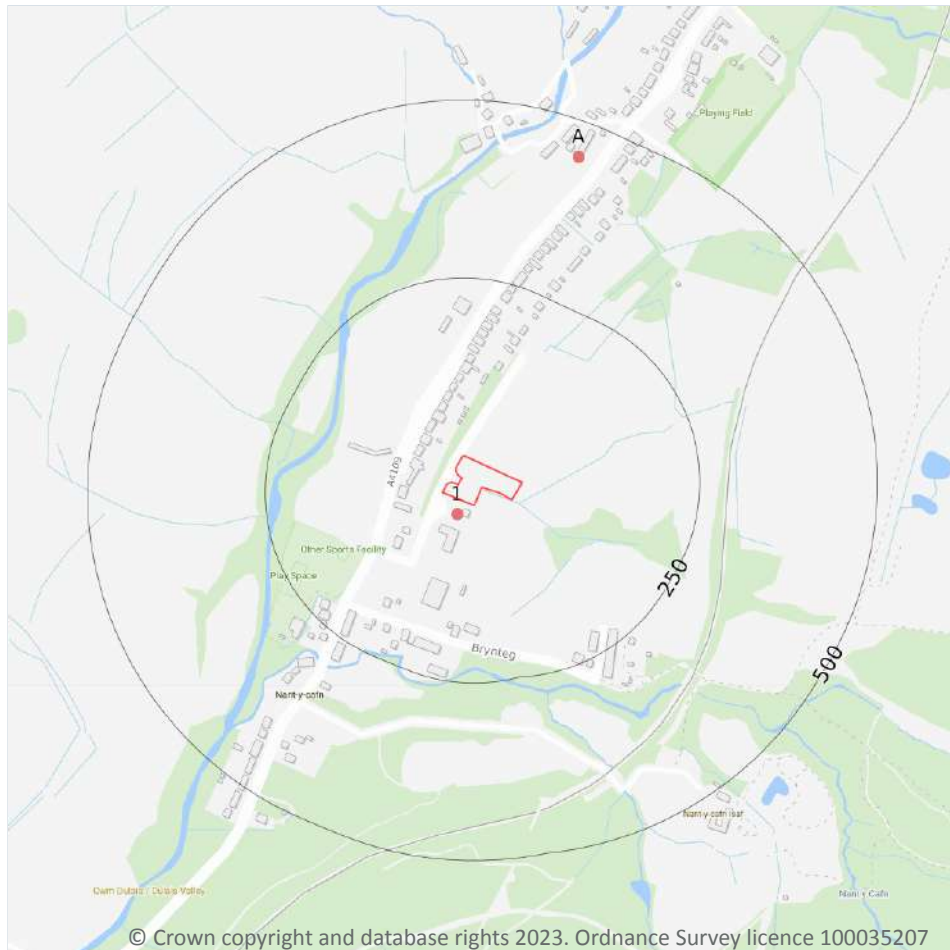
Features are displayed on the Past land use - un-grouped map on [page 20 >](#)

ID	Location	Land Use	Date	Group ID
A	159m N	Garage	1987	6056
A	166m N	Garage	1962	6315
A	166m N	Garage	1993	6315

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m**0**

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m**0**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m**0**

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m**0**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m**12**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

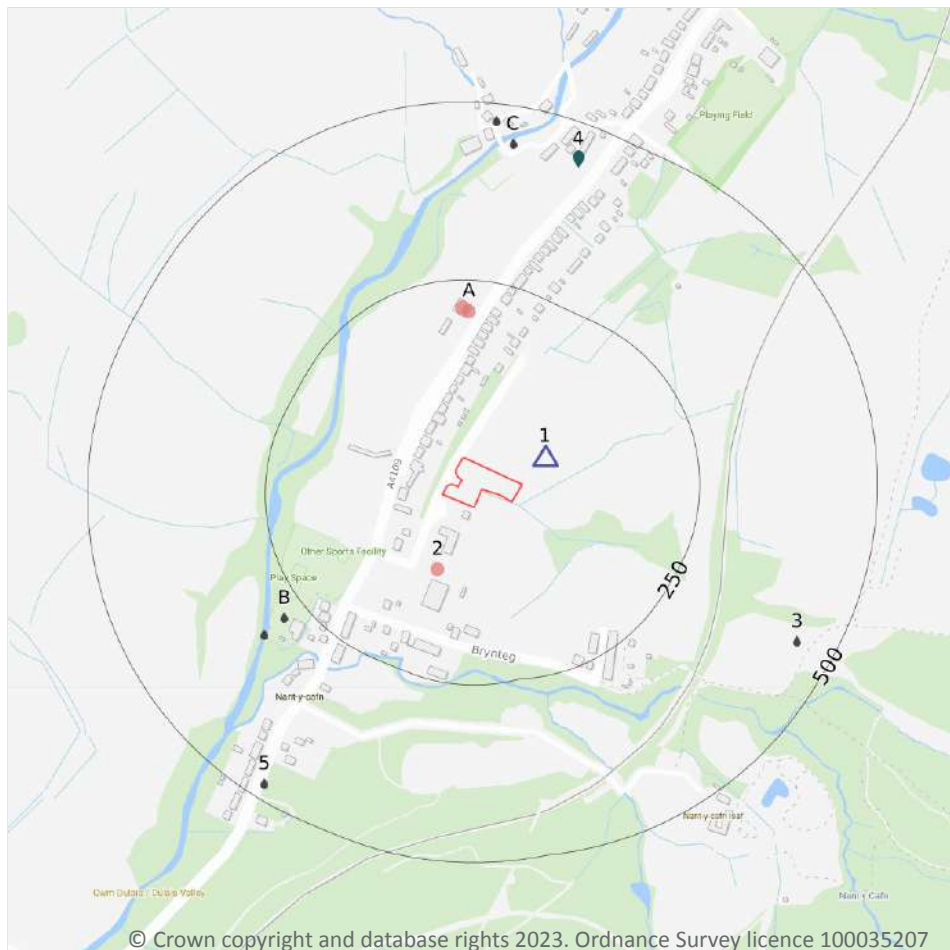
Features are displayed on the Waste and landfill map on [page 25](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	21m SW	M W Phillips Chemists, M W Phillips Chemists, Dulais Road, Nant Y Cafn, Seven Sisters, Neath, SA10 9EY	NRW-WME048230	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	450m N	Ynysdawley Estates, Ynys Dawly, Dulais Road, Seven Sisters, Neath, Castell-nedd Port Talbot, SA10 9EN	NRW-WME073482	Using waste exemption	Not on a farm	Use of waste in construction
A	450m N	TEGFAN GROUNDWORKS, Ynys Dawly, Dulais Road, Seven Sisters, Neath, Castell-nedd Port Talbot, SA10 9EN	NRW-WME039251	Using waste exemption	Waste Exemption - Agricultural and Non-Agricultural	Use of waste in construction
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Using waste exemption	On a farm	Use of waste for a specified purpose
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Disposing of waste exemption	On a farm	Burning waste in the open
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Using waste exemption	On a farm	Use of waste in construction
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Storing waste exemption	On a farm	Storage of waste in a secure place
A	450m N	Ynys Dawly, Dulais Road, Blaendulais, Castell-Nedd, SA109EN	NRW-WME014615	Using waste exemption	On a farm	Incorporation of ash into soil

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- ◆ Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

3

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Company	Address	Activity	Category
2	100m SW	Electricity Sub Station	West Glamorgan, SA10	Electrical Features	Infrastructure and Facilities
A	206m N	Electricity Sub Station	West Glamorgan, SA10	Electrical Features	Infrastructure and Facilities
A	211m N	Garden City Garage	-, Dulais Road, Seven Sisters, West Glamorgan, SA10 9ES	Vehicle Repair, Testing and Servicing	Repair and Servicing



This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 28](#) >

ID	Location	Company	Address	LPG	Status
1	51m NE	OBSOLETE	A4109, Nant-Y-Cafn, Neath, Neath Port Talbot, SA10 9ES	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.



This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0
---------------------	---

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0
---------------------	---

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0
---------------------	---

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0
---------------------	---

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	1
---------------------	---

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 28 >](#)

ID	Location	Address	Details	
4	450m N	Newscheme Limited, Ynysdawley Farm, Neath, SA10 9WP	Process: Coal & Coke Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements issued Date of enforcement: No enforcements issued Comment: No enforcements issued

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0
----------------------------	----------

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	7
----------------------------	----------

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 28 >](#)

ID	Location	Address	Details	
B	283m SW	Nant-y-Cafan CSO Dulais Valley, Off Dilwyn Close, Nant y Cavin, Neath Port Talbot, SA10 9EY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: BW2904001 Permit Version: 3 Receiving Water: RIVER DULAIS	Status: Effective Issue date: 18/09/2019 Effective Date: 18/09/2019 Revocation Date: -
B	319m SW	NANT Y CAFN SWO DULAIS VALLEY, NANT Y CAFN SWO, DULAIS VALLEY, DULAIS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: BW2904001 Permit Version: 2 Receiving Water: RIVER DULAIS	Status: Effective Issue date: 08/09/2010 Effective Date: 08/09/2010 Revocation Date: -
B	319m SW	Nant-y-Cafan CSO, Dulais Valley, Off Dilwyn Close, Nant y Cavin, Neath Port Talbot, SA10 9EY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: BW2904001 Permit Version: 0 Receiving Water: RIVER DULAIS	Status: Effective Issue date: 18/09/2019 Effective Date: 18/09/2019 Revocation Date: -

ID	Location	Address	Details	
3	445m SE	BRYNTEG FARM OCCS NANT Y CAFN NEATH, BRYNTEG FARM OCCS, NANT Y CAFN, SEVERN SISTERS NEATH, SA10 9ET	Effluent Type: MINEWATER Permit Number: BP0266201 Permit Version: 1 Receiving Water: NANT-Y-CAFN	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 20/05/1997 Effective Date: 20/05/1997 Revocation Date: 24/01/2006
C	446m N	NEATH GWAUNIARLL FARM SEVEN SISTERS, NEATH GWAUNIARLL FARM SEVEN SIST, GWAUNIARLL FARM SEVEN SISTERS WE, SEVEN SISTERS WEST GLAM, WEST GLAM	Effluent Type: UNSPECIFIED Permit Number: BP0013701 Permit Version: 1 Receiving Water: TO LAND	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 22/04/1986 Effective Date: 22/04/1986 Revocation Date: 01/08/1994
C	476m N	GWAUN IARLL FARM SEVEN SISTERS, GWAUN IARLL FARM, SEVEN SISTERS, NEATH PORT TALBOT, WALES, SA10 9EW	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: BP0310301 Permit Version: 1 Receiving Water: A TRIB OF THE RIVER DULAIS	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY Issue date: 15/12/2003 Effective Date: 15/12/2003 Revocation Date: -
5	478m SW	SEVEN SISTERS - 131 DULAIS ROA	Effluent Type: UNSPECIFIED Permit Number: BP0003401 Permit Version: 1 Receiving Water: TO LAND	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 23/10/1985 Effective Date: 23/10/1985 Revocation Date: 25/07/1994

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.16 List 1 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m**0**

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m**0**

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m

0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



ID	Location	Designation	Description
3	228m NW	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

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



[illegible]

-  Principal
-  Secondary A
-  Secondary B
-  Secondary Undifferentiated
-  Unproductive

Records within 500m	1
---------------------	---

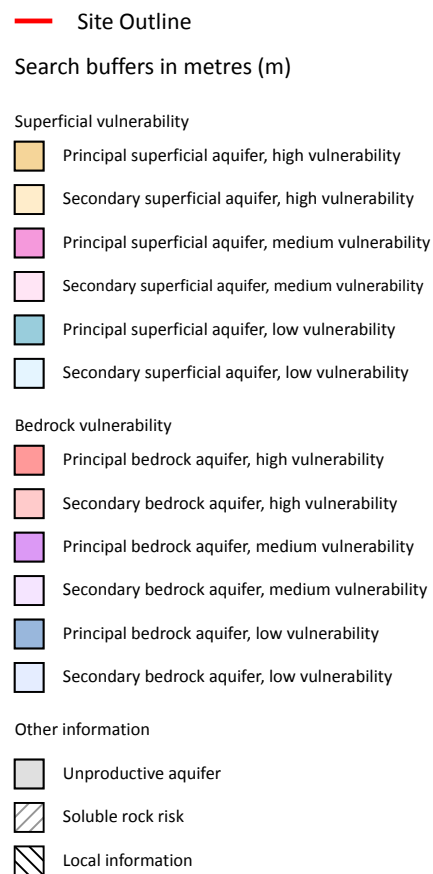
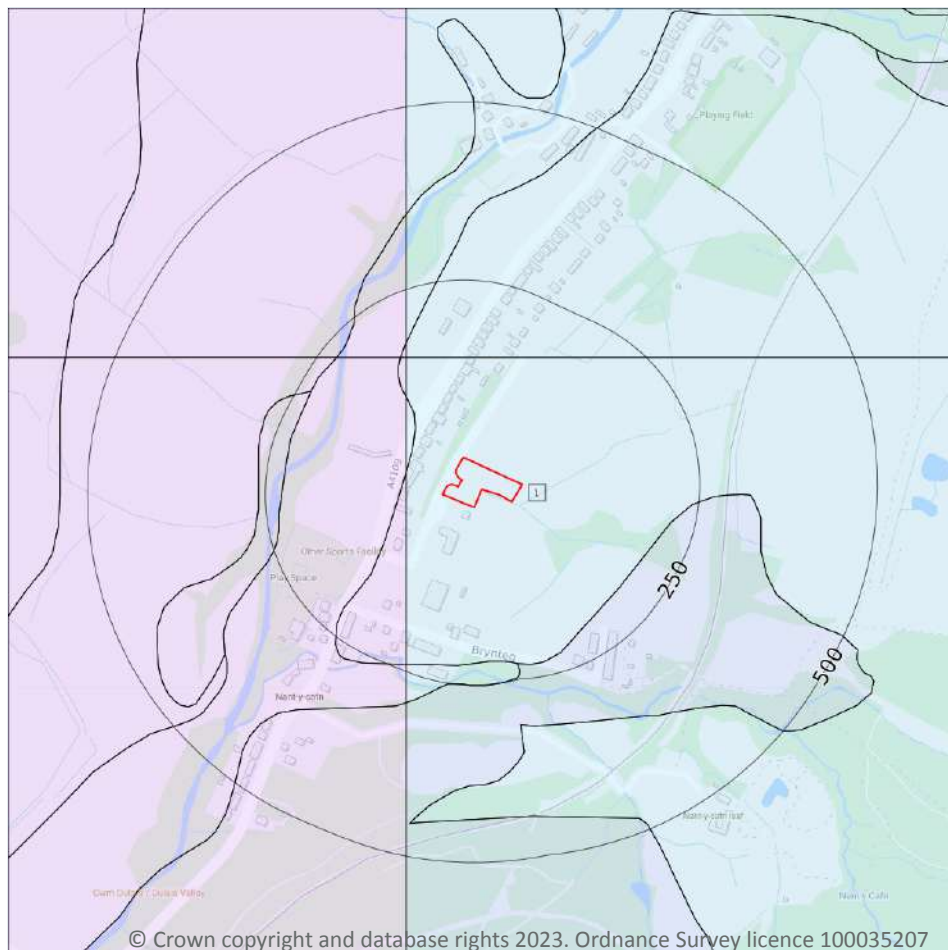
ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers


 Contact us with any questions at:
info@groundsure.com ↗
 01273 257 755

Date: 29 November 2023

37

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 38](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

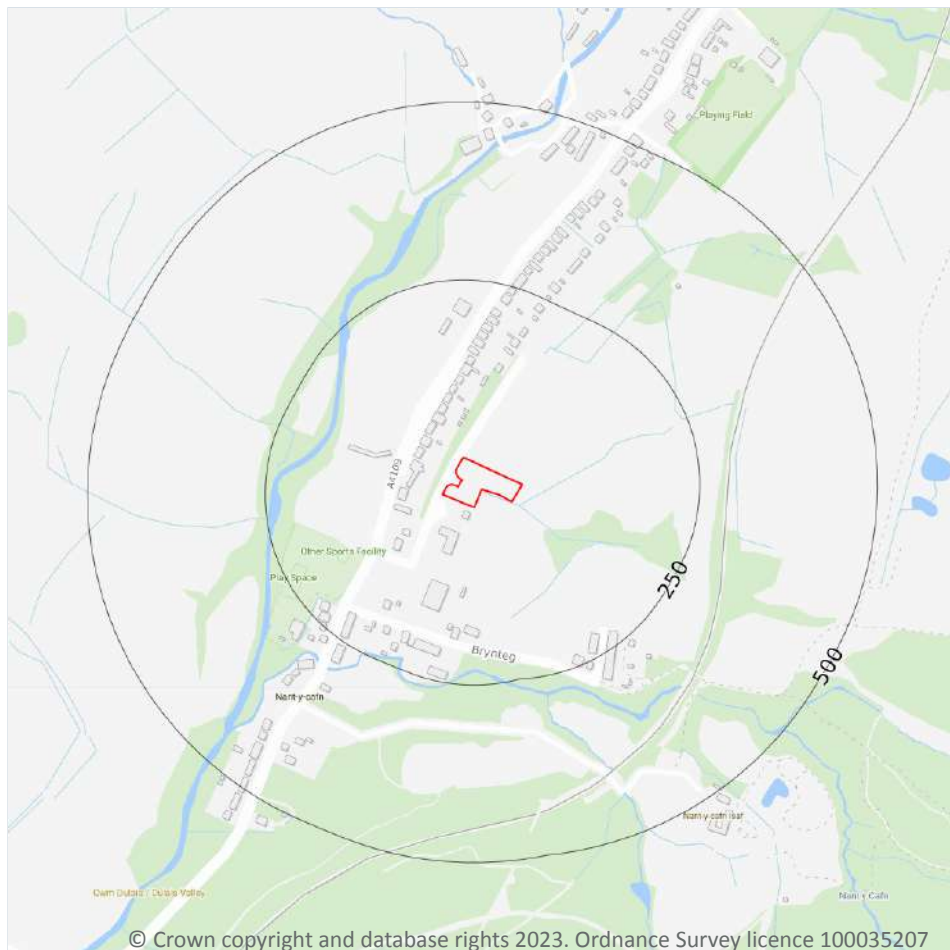
5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

2

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 40](#) >

ID	Location	Details	
-	857m E	Status: Historical Licence No: 21/58/73/0019 Details: Make-Up or Top Up Water Direct Source: EAW Surface Water Point: TRIBUTARY OF NANT-Y-CAFN Data Type: Point Name: 3J's Coal Trading Company Ltd Easting: 281950 Northing: 207480	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/05/1994 Expiry Date: 30/11/2007 Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1111m SE	Status: Historical Licence No: 21/58/73/0019 Details: Make-Up or Top Up Water Direct Source: EAW Surface Water Point: TRIBUTARY OF NANT-Y-CAFN Data Type: Point Name: 3J's Coal Trading Company Ltd Easting: 282060 Northing: 207160	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/05/1994 Expiry Date: 30/11/2007 Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m

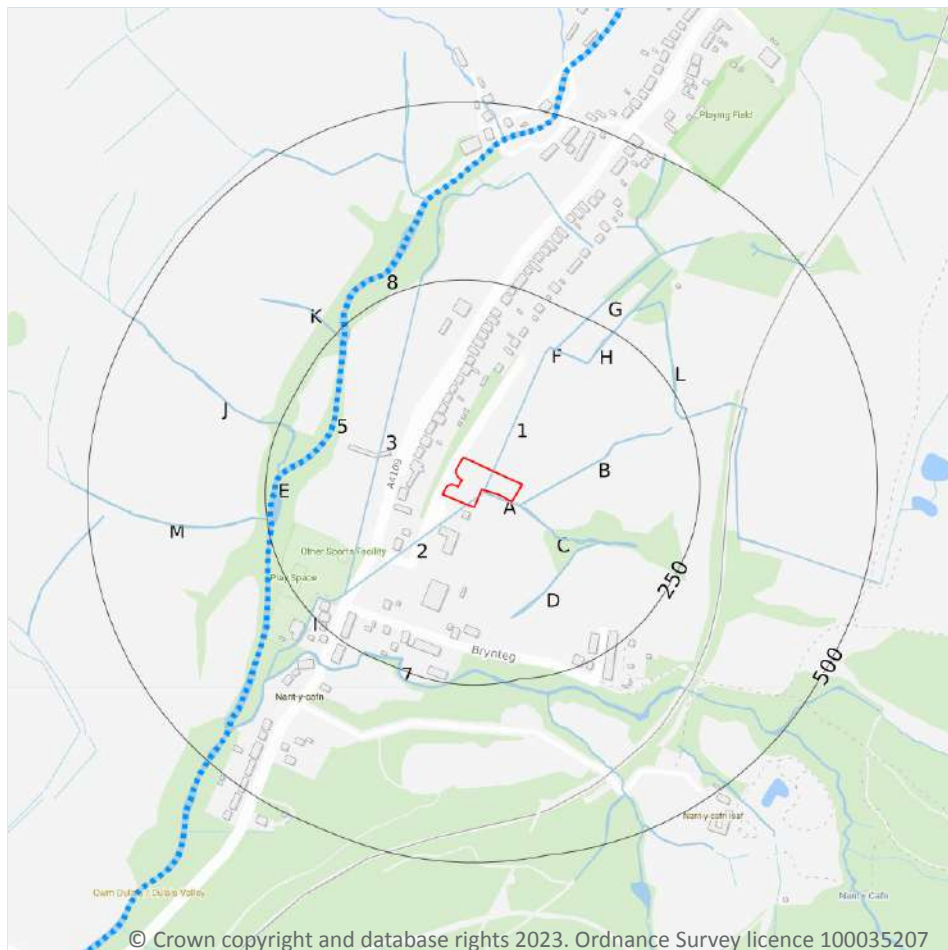
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

26

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 43](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	1m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	11m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	11m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	100m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	114m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	115m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	116m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	135m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	180m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
F	181m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	191m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	191m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
I	196m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	222m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	229m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
E	229m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
7	230m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant y Cafn
E	235m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
8	237m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
K	237m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	239m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	244m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
I	244m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dulais
M	245m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.



6.2 Surface water features

Records within 250m

15

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 43 >](#)

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 43 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	Dulais - headwaters to confluence with River Neath	GB110058032360	Neath	Tawe to Cadoxton

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified

1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.

Features are displayed on the Hydrology map on [page 43 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
4	181m W	River	Dulais - headwaters to confluence with River Neath	GB110058032360	Good	Good	Good	2016



This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site

1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on [page 43 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Swansea Carboniferous Coal Measures	GB41002G201000	Poor	Poor	Good	2017

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m

0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m

0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m

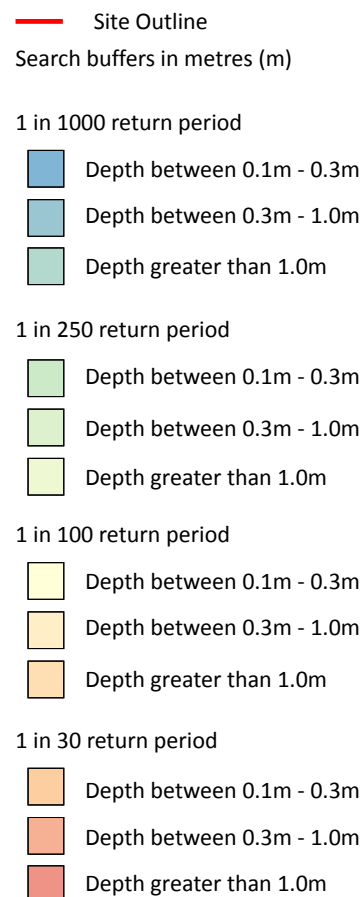
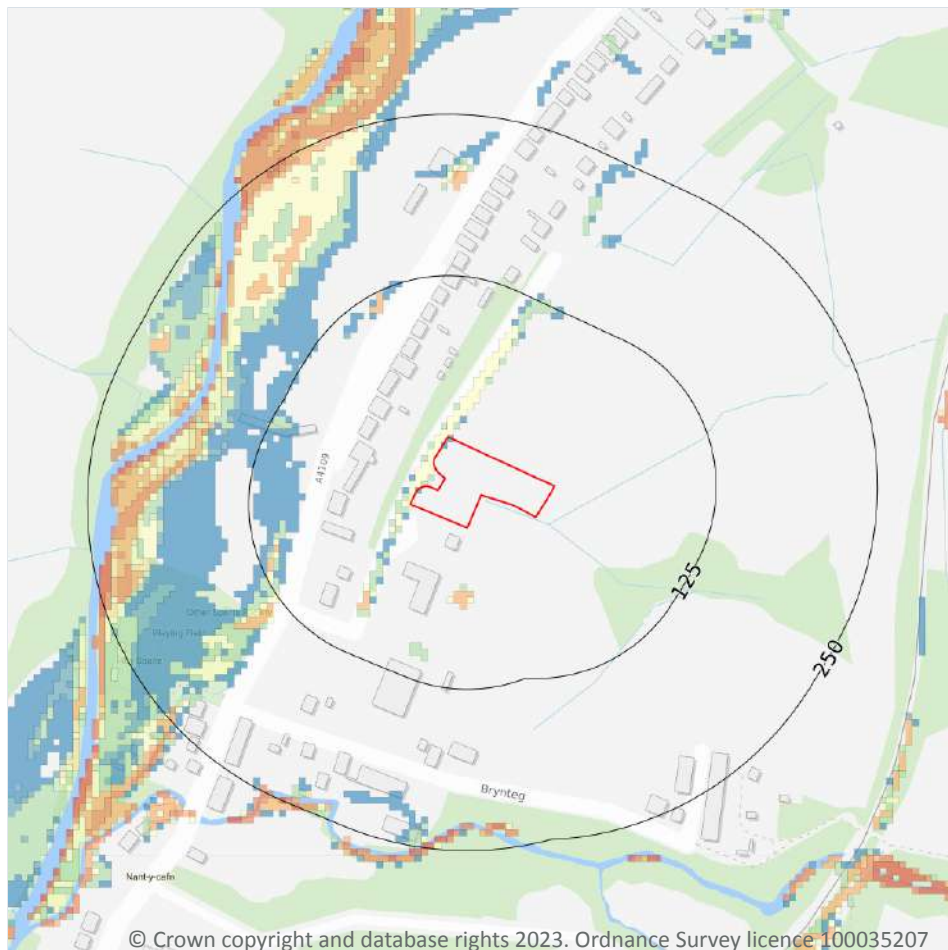
0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 100 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 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 some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 51](#) >

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

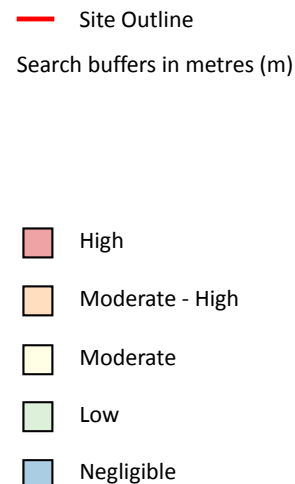
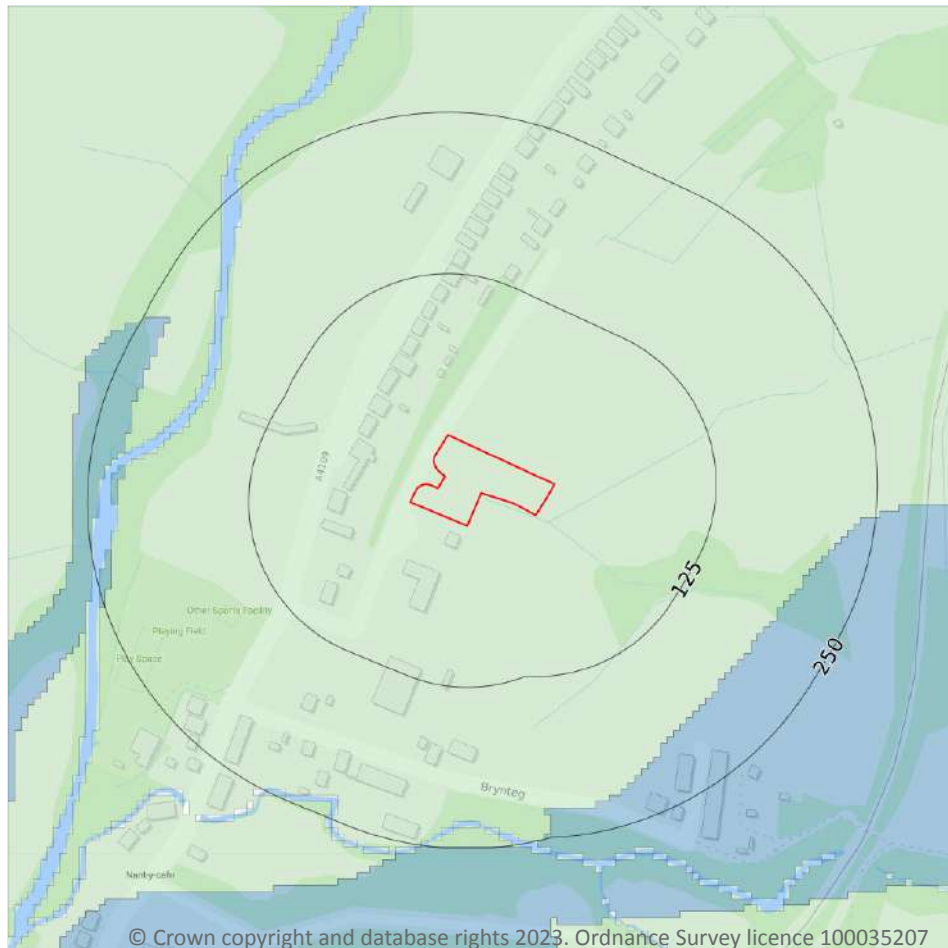
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Between 0.1m and 0.3m
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

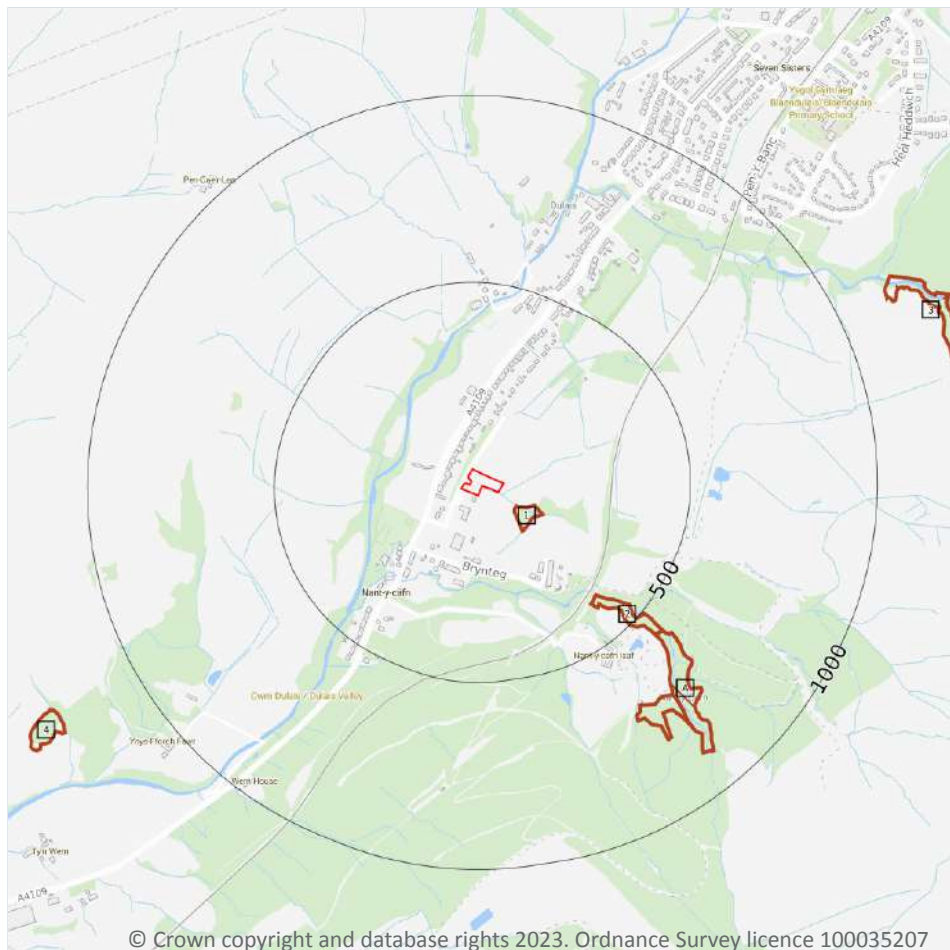
Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 53](#) >

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

1

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on [page 54](#) >

ID	Location	Name	Data source
-	1841m W	Nant y Rhos	Natural Resources Wales



This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m

0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

15

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on [page 54 >](#)

ID	Location	Name	Woodland Type
1	62m SE	Unknown	Ancient Semi Natural Woodland
2	379m SE	Unknown	Plantation on Ancient Woodland Site
A	568m SE	Unknown	Ancient Semi Natural Woodland
A	683m SE	Unknown	Plantation on Ancient Woodland Site
3	1139m NE	Unknown	Ancient Semi Natural Woodland
4	1235m SW	Unknown	Restored Ancient Woodland Site
5	1279m E	Unknown	Plantation on Ancient Woodland Site
-	1467m NE	Unknown	Ancient Semi Natural Woodland
-	1652m NE	Unknown	Ancient Semi Natural Woodland
-	1699m SW	Unknown	Ancient Semi Natural Woodland
-	1731m E	Unknown	Ancient Semi Natural Woodland
-	1824m E	Unknown	Ancient Semi Natural Woodland
-	1839m NE	Unknown	Ancient Semi Natural Woodland
-	1846m NE	Unknown	Ancient Semi Natural Woodland
-	1904m E	Unknown	Plantation on Ancient Woodland Site

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m**0**

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m**0**

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m**0**

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m**0**

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site

0

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

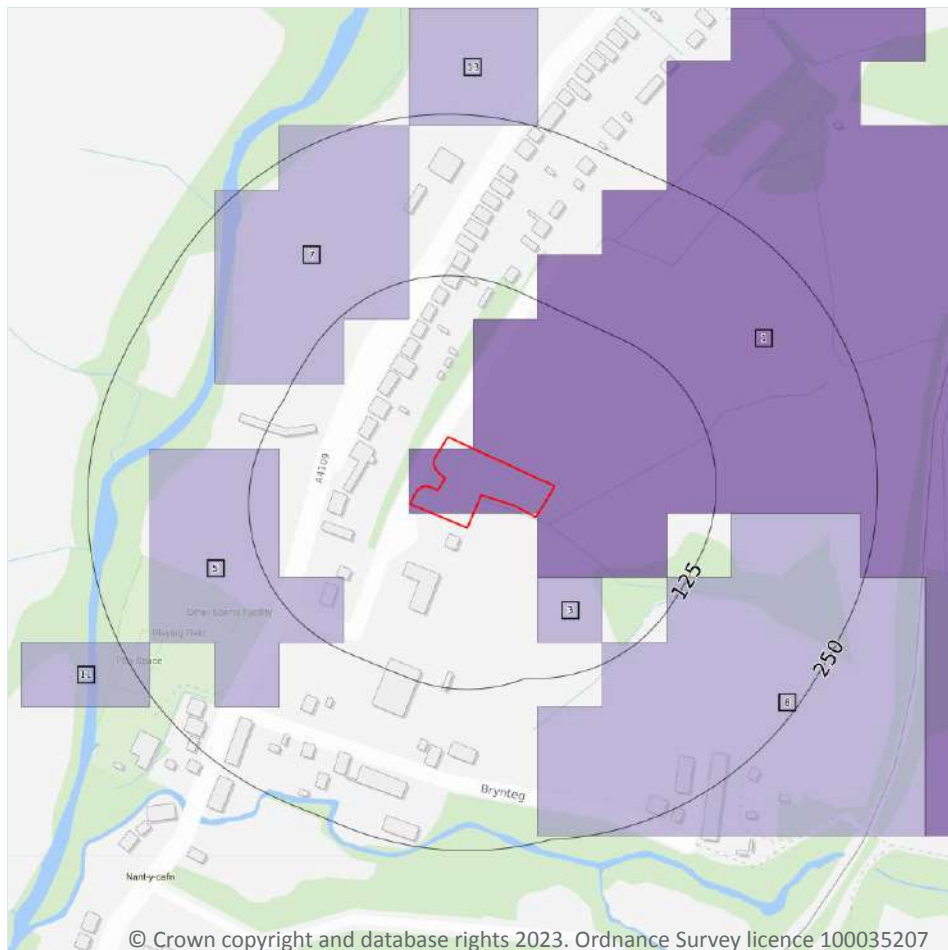
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

7

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 62](#) >

ID	Location	Classification	Description
1	On site	Grade 5	Very poor quality agricultural land
3	47m SE	Grade 4	Poor quality agricultural land
5	77m SW	Grade 4	Poor quality agricultural land

ID	Location	Classification	Description
7	90m NW	Grade 4	Poor quality agricultural land
8	110m SE	Grade 4	Poor quality agricultural land
11	228m SW	Grade 4	Poor quality agricultural land
13	241m N	Grade 4	Poor quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m **0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m **0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m **0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.



13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

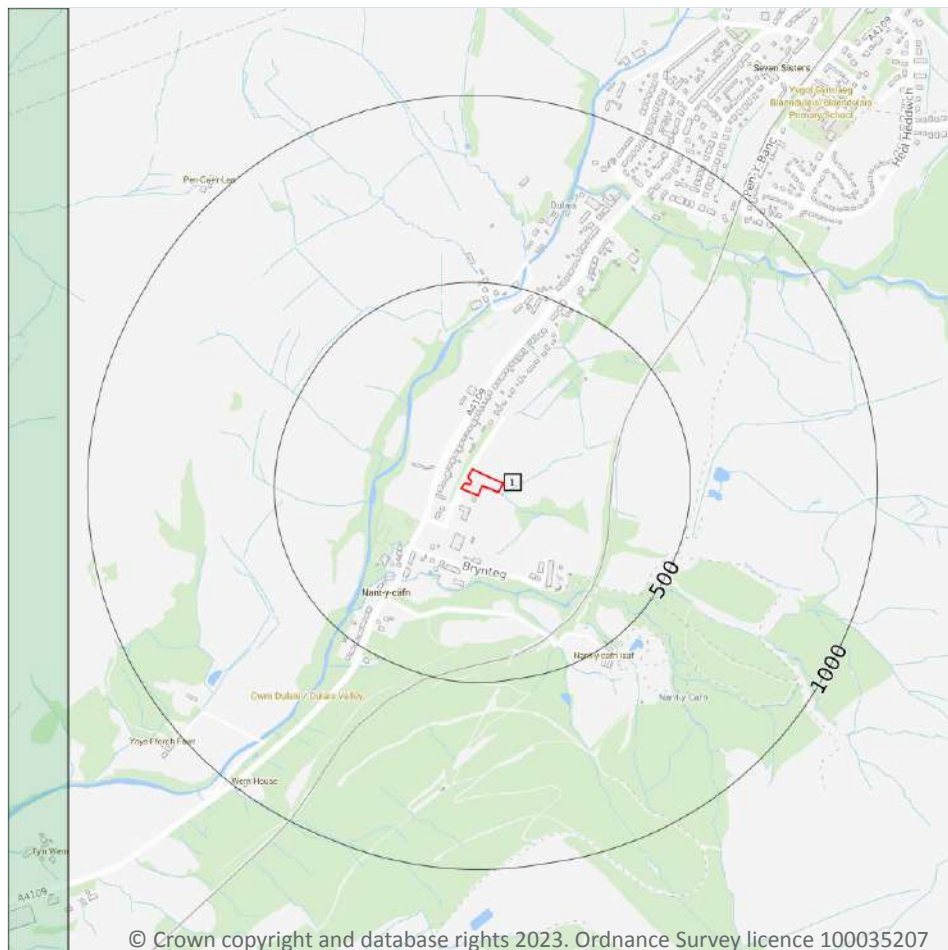
0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 66](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

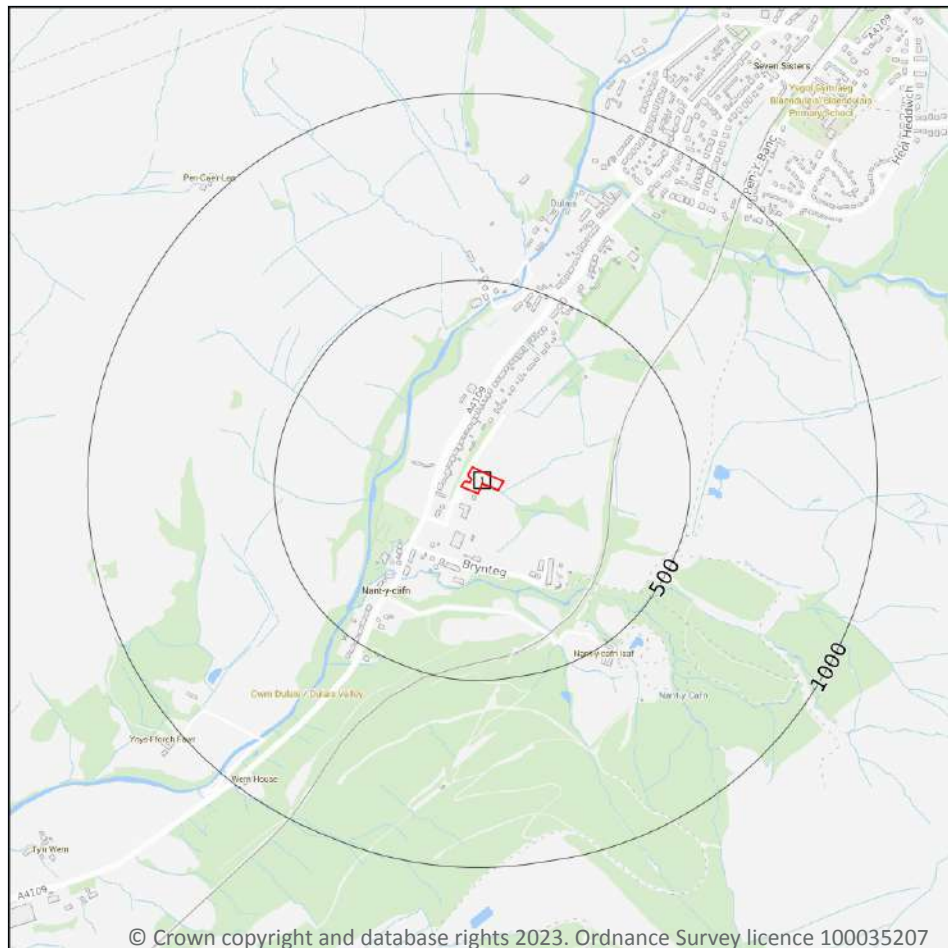
0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

☐ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

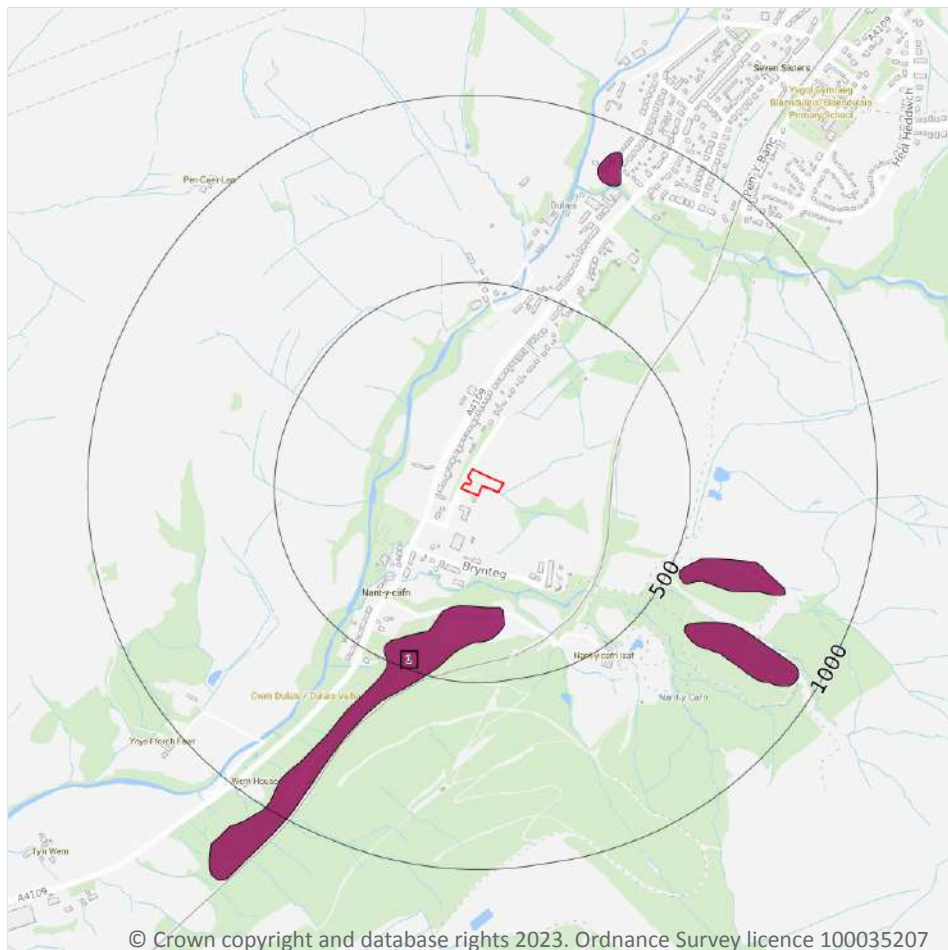
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 70](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW231_merthyr_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

1

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 71](#) >

ID	Location	LEX Code	Description	Rock description
1	296m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

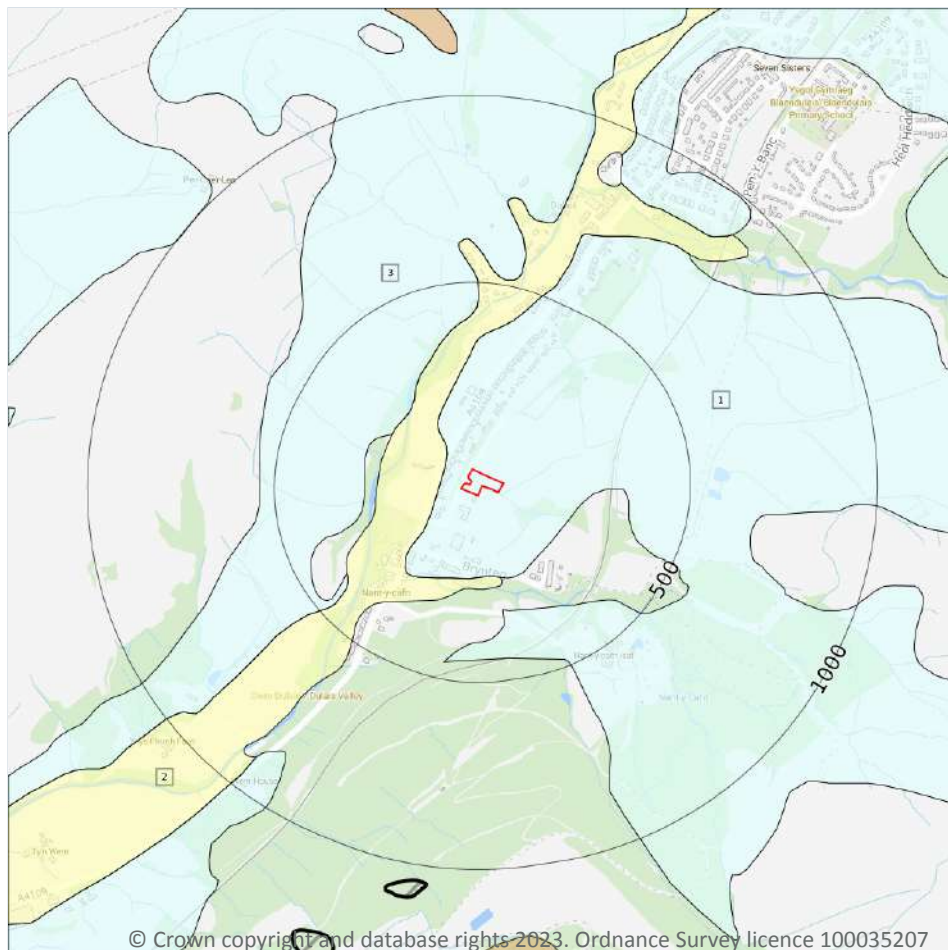
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

3

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 73](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
2	58m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	228m NW	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

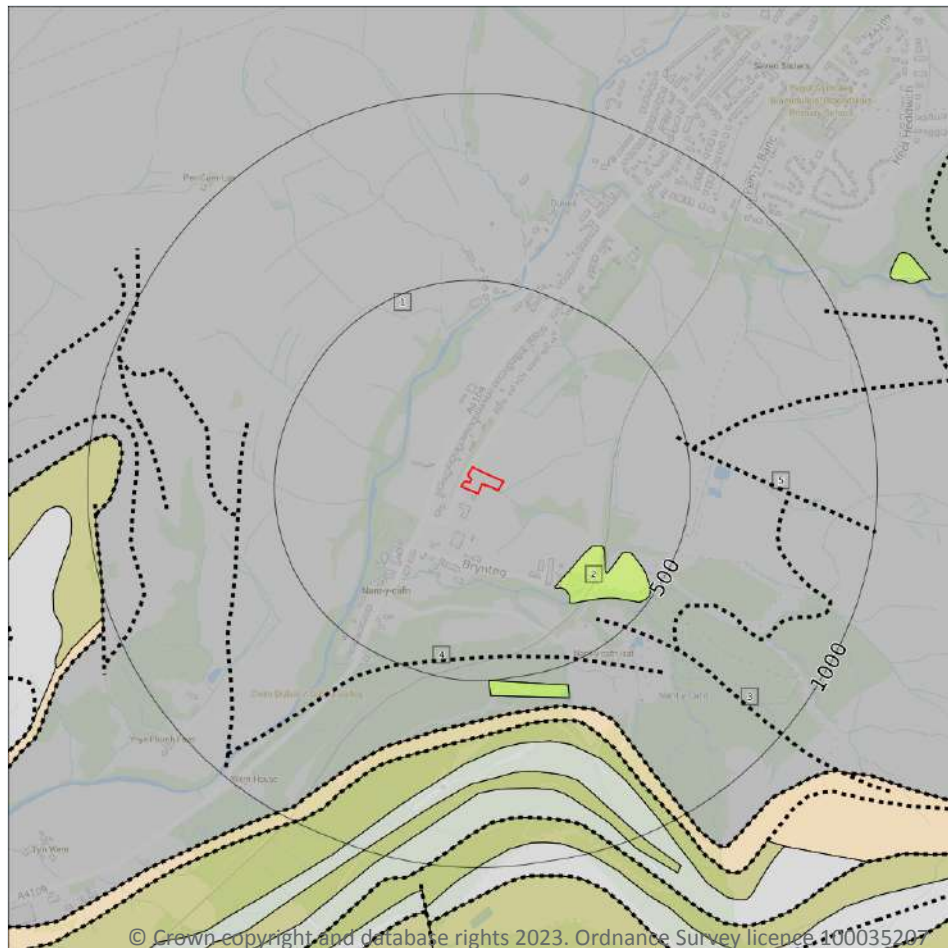
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

2

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 75 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	SWMCM-MDSS	SOUTH WALES MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	285m SE	SWMCM-SDST	SOUTH WALES MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

3

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

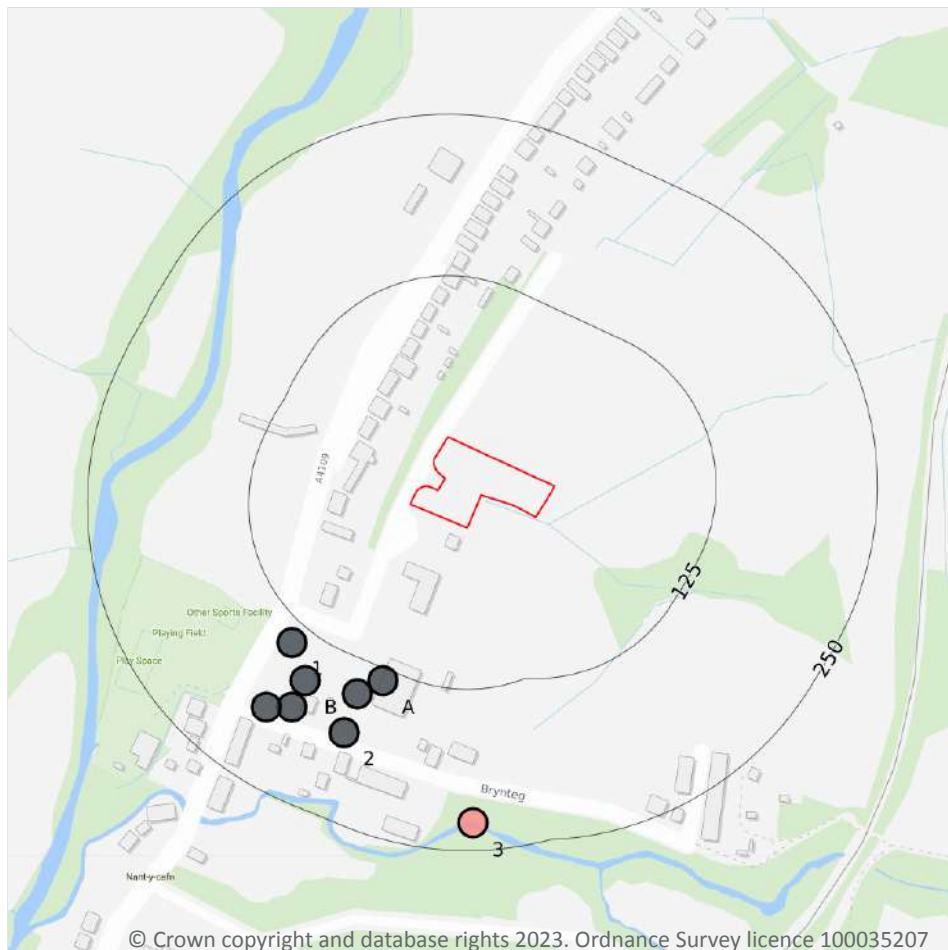
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 75 >](#)

ID	Location	Category	Description
3	432m SE	FAULT	Fault, inferred, displacement unknown
4	439m S	ROCK	Coal seam, inferred
5	479m E	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



16 Boreholes



Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

8

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 77](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	135m SW	281030 207670	UPVC FACTORY NANT-Y-CAFN TP 3	-	Y	N/A
1	141m SW	280960 207700	UPVC FACTORY NANT-Y-CAFN TP 2	-	Y	N/A
A	152m SW	281010 207660	UPVC FACTORY NANT-Y-CAFN 2	-	Y	N/A

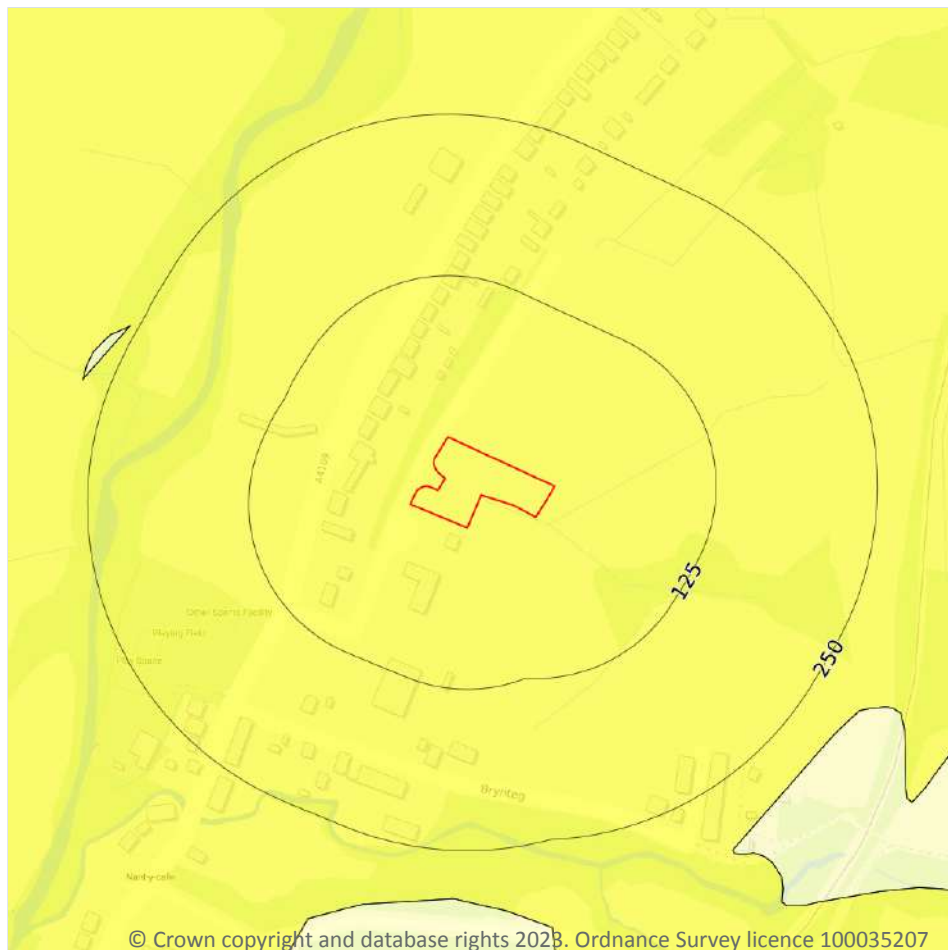


ID	Location	Grid reference	Name	Length	Confidential	Web link
B	159m SW	280970 207670	UPVC FACTORY NANT-Y-CAFN TP 4	-	Y	N/A
B	182m SW	280960 207650	UPVC FACTORY NANT-Y-CAFN 1	-	Y	N/A
2	183m SW	281000 207630	UPVC FACTORY NANT-Y-CAFN TP 5	-	Y	N/A
B	192m SW	280940 207650	UPVC FACTORY NANT-Y-CAFN TP 1	-	Y	N/A
3	229m S	281100 207560	BRYNLEY COLLIERY 231/45. (SITE PLAN)	48.16	N	258129 ↗

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

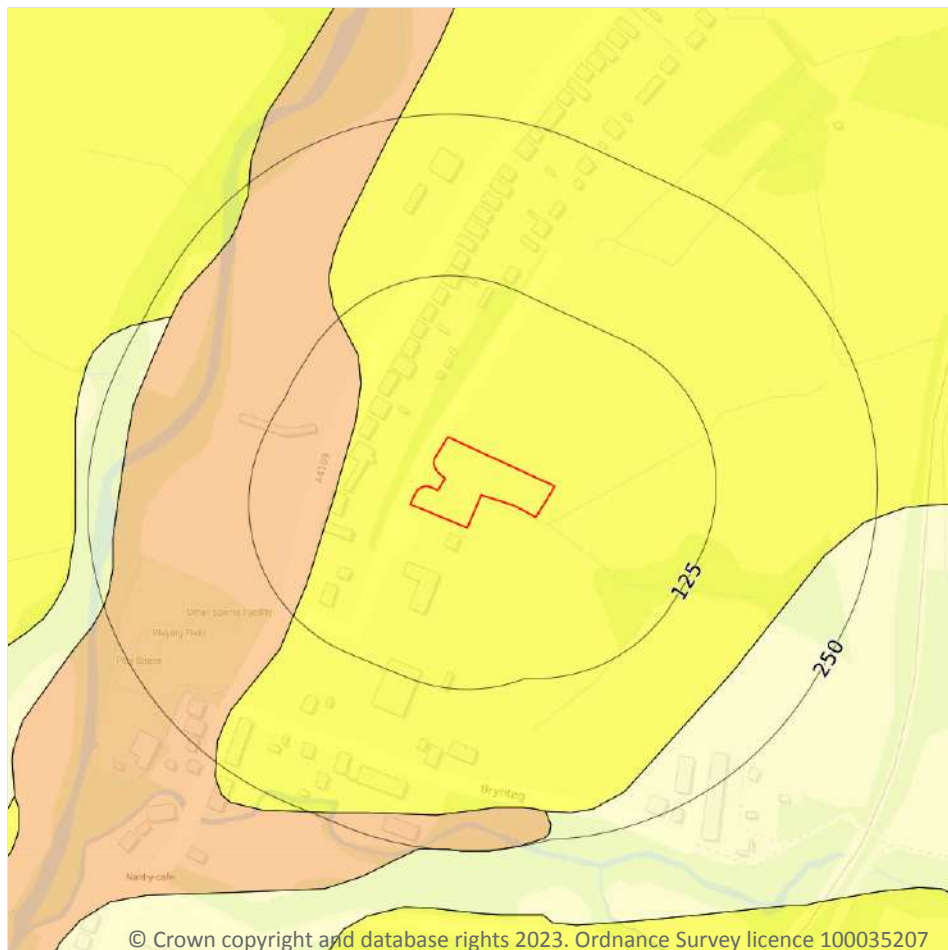
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 79 >](#)

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

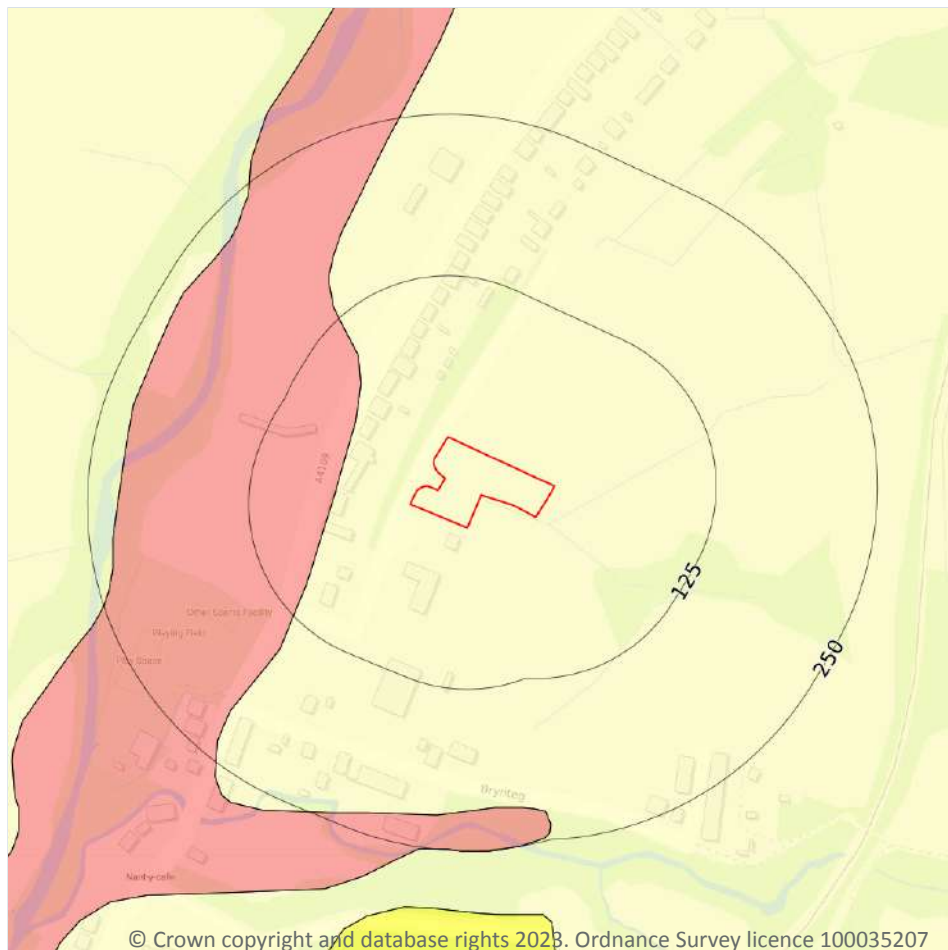
Features are displayed on the Natural ground subsidence - Running sands map on [page 80](#) >

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

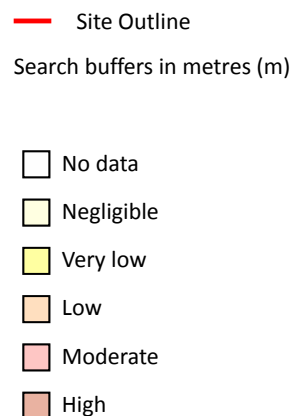
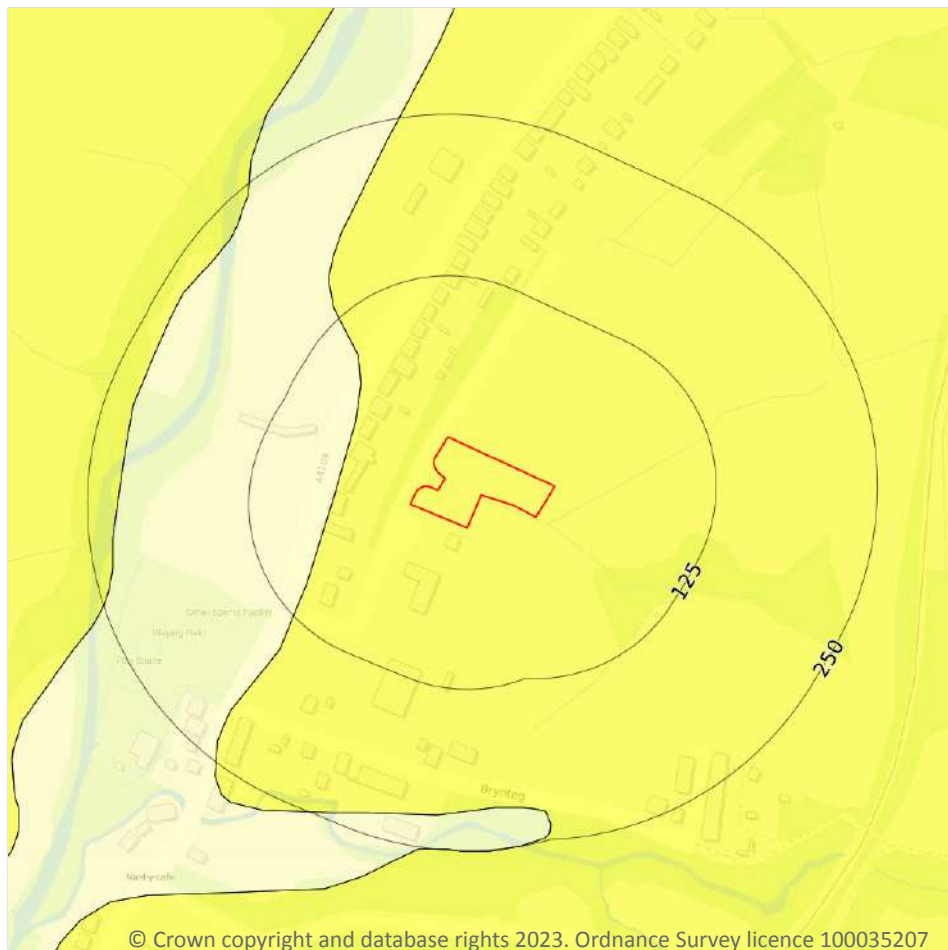
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 81](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

1

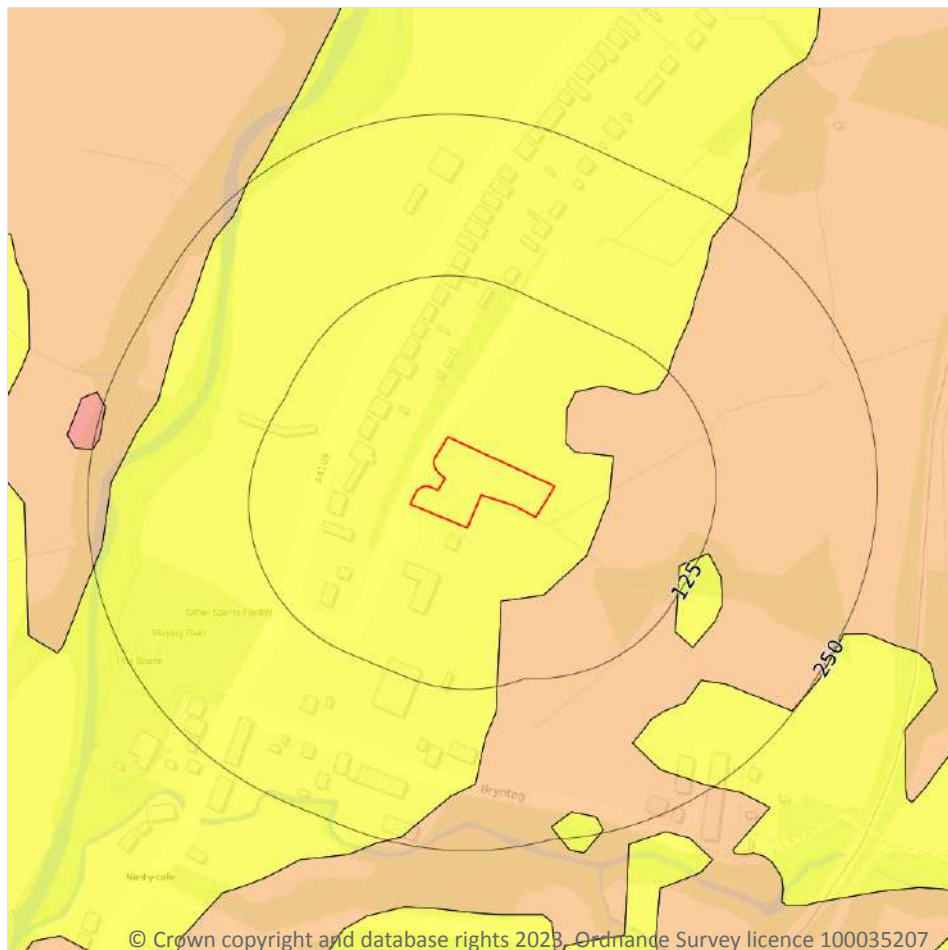
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 82 >](#)

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

2

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 83](#) >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

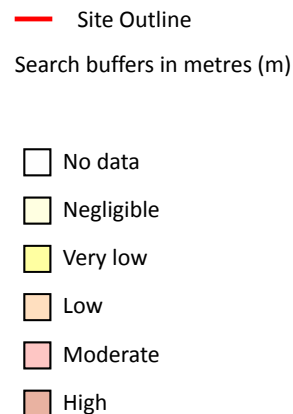
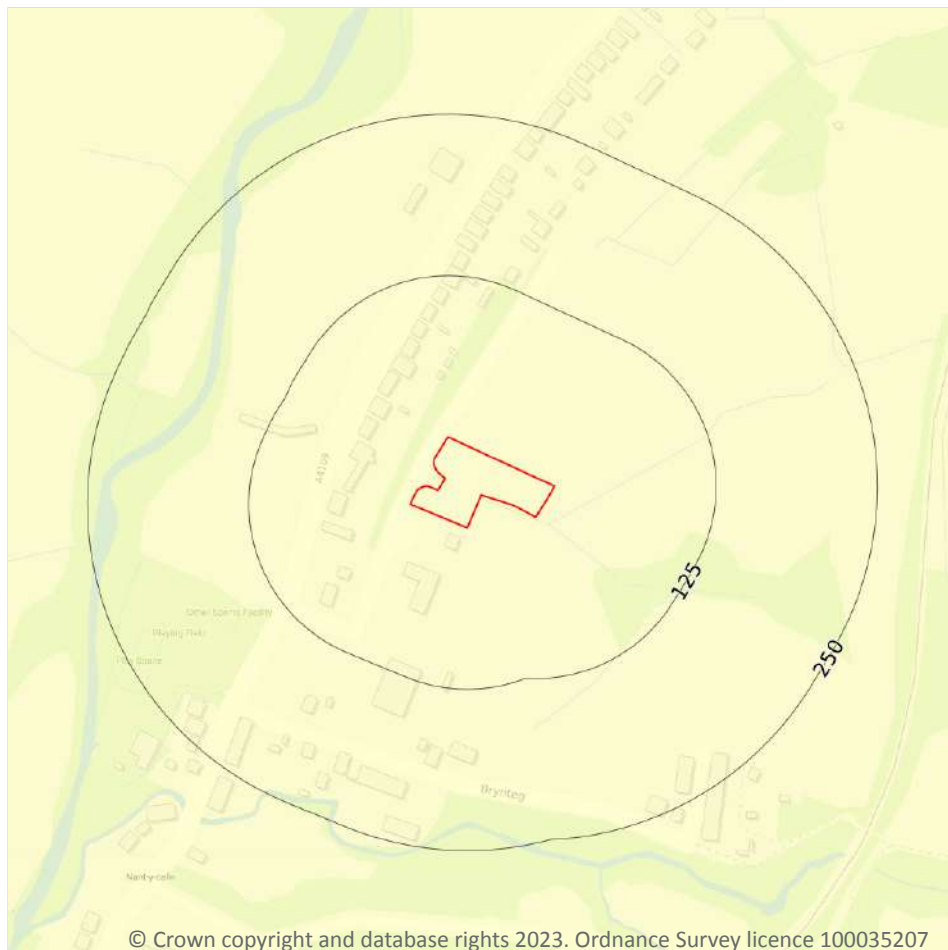


Location	Hazard rating	Details
31m E	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 85](#)

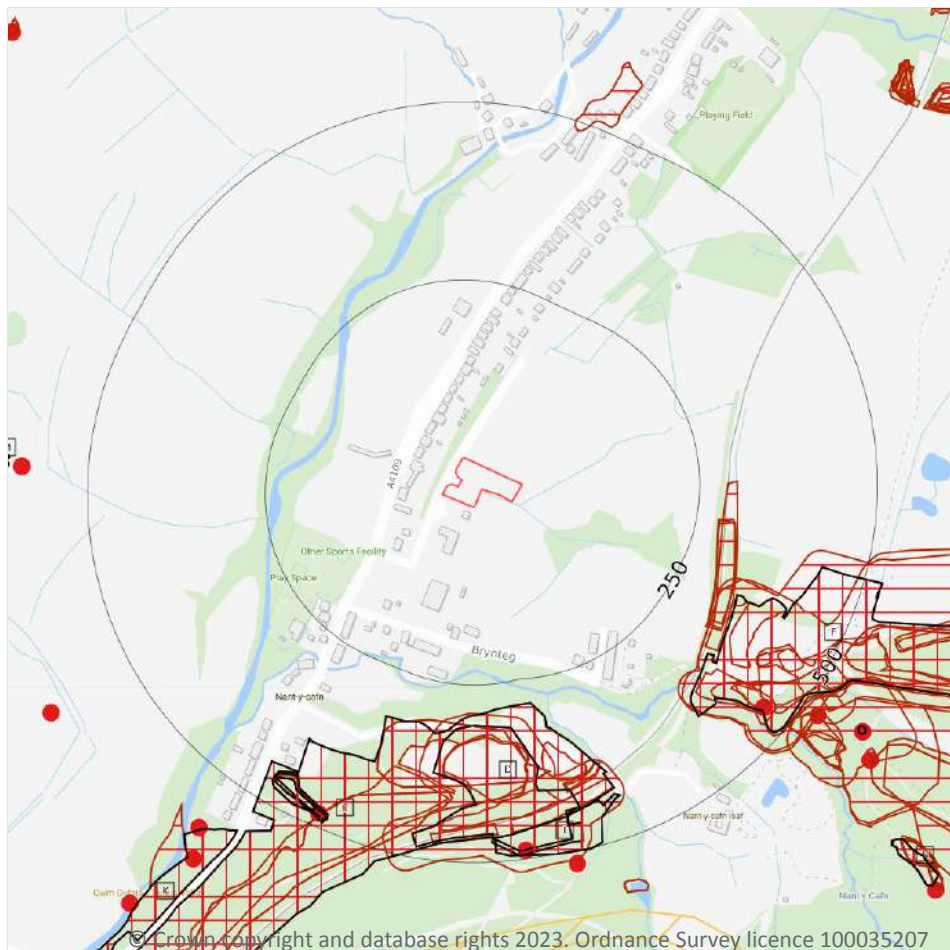
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▢ Surface ground workings
- ▢ Underground workings
- ▢ Underground mining extents
- ▢ Historical mineral planning areas
- ▢ TCA non-coal mining
- Non Coal Mining
- ▢ Sporadic underground mining of restricted extent possible
- ▢ Localised small scale underground mining possible
- ▢ Small scale mining possible
- ▢ Underground mining known or likely within or in close proximity
- ▢ Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

3

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on [page 87](#) >

ID	Location	Details	Description
H	457m SE	Name: Bryn-teg Brick Works Address: Seven Sisters, SWANSEA, Glamorgan Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
J	481m SW	Name: Dillwyn Colliery, Coal Level Address: Seven Sisters, NEATH, West Glamorgan Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
3	488m S	Name: Dillwyn Colliery, No. 1 Mine Address: Seven Sisters, NEATH, West Glamorgan Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

0

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

This data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

68

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on [page 87 >](#)



ID	Location	Land Use	Year of mapping	Mapping scale
C	285m S	Colliery	1948	1:10560
D	307m S	Colliery	1921	1:10560
F	340m SE	Colliery	1948	1:10560
I	436m SE	Unspecified Mine	1988	1:10000
I	436m SE	Unspecified Mine	1964	1:10560
J	441m SW	Old Coal Levels	1921	1:10560
J	446m SW	Old Coal Levels	1913	1:10560
J	454m SW	Unspecified Level	1988	1:10000
J	454m SW	Unspecified Level	1964	1:10560
K	554m SW	Coal Level	1948	1:10560
A	583m SE	Unspecified Disused Shaft	1988	1:10000
A	583m SE	Unspecified Disused Shaft	1964	1:10560
M	612m W	Coal Level	1921	1:10560
M	612m W	Coal Level	1913	1:10560
-	615m W	Coal Level	1948	1:10560
-	644m W	Old Coal Level	1913	1:10560
-	644m W	Old Coal Level	1921	1:10560
-	644m W	Old Coal Level	1948	1:10560
-	658m E	Old Coal Level	1913	1:10560
-	670m W	Old Coal Levels	1921	1:10560
-	673m W	Old Coal Levels	1913	1:10560
-	673m W	Old Coal Levels	1948	1:10560
-	684m W	Old Coal Levels	1921	1:10560
-	684m W	Old Coal Levels	1948	1:10560
-	684m W	Old Coal Levels	1913	1:10560
-	700m W	Coal Level	1877	1:10560
-	707m W	Old Coal Levels	1913	1:10560
-	708m W	Old Coal Levels	1921	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	711m W	Old Coal Levels	1913	1:10560
-	712m W	Old Coal Levels	1948	1:10560
-	713m W	Old Coal Levels	1921	1:10560
N	718m SE	Unspecified Disused Level	1988	1:10000
N	718m SE	Unspecified Disused Level	1964	1:10560
-	757m E	Old Coal Level	1913	1:10560
-	758m W	Old Trial Shaft	1948	1:10560
-	761m E	Old Coal Level	1921	1:10560
-	762m W	Old Trial Shaft	1921	1:10560
-	763m W	Old Trial Shaft	1913	1:10560
-	774m E	Coal Level	1877	1:10560
-	801m SW	Disused Colliery	1948	1:10560
-	814m E	Old Coal Level	1948	1:10560
N	821m SE	Unspecified Disused Shaft	1988	1:10000
N	821m SE	Unspecified Disused Shaft	1964	1:10560
-	821m SE	Old Coal Shaft	1921	1:10560
-	823m SE	Old Coal Shaft	1913	1:10560
-	826m SE	Old Coal Shaft	1948	1:10560
-	826m W	Old Coal Levels	1913	1:10560
-	827m W	Old Coal Levels	1948	1:10560
-	830m W	Old Coal Levels	1921	1:10560
-	830m SW	Coal Level	1913	1:10560
-	843m SW	Coal Level	1921	1:10560
-	856m SW	Colliery	1921	1:10560
-	867m SW	Colliery	1913	1:10560
-	928m W	Old Trial Level	1913	1:10560
-	929m W	Old Trial Level	1921	1:10560
-	930m W	Old Trial Level	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	937m E	Disused Air Shaft	1988	1:10000
-	937m E	Disused Air Shaft	1964	1:10560
-	942m E	Air Shaft	1921	1:10560
-	942m E	Air Shaft	1948	1:10560
-	943m E	Air Shaft	1877	1:10560
-	943m E	Air Shaft	1913	1:10560
-	954m W	Old Trial Shaft	1921	1:10560
-	954m W	Old Trial Shaft	1913	1:10560
-	955m W	Old Trial Shaft	1948	1:10560
-	977m S	Old Trial Level	1921	1:10560
-	981m S	Old Trial Level	1913	1:10560
-	994m S	Old Trial Level	1948	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

1

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining and ground workings map on [page 87 >](#)

ID	Location	Name	Commodity	Class	Likelihood
4	594m S	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.



18.9 Researched mining

Records within 500m

0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

3

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

Location	Mineral
On site	Coal
302m NE	Coal
489m NE	Coal

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

1

Areas which could be affected by past, current or future coal mining.



Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).



19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.

19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

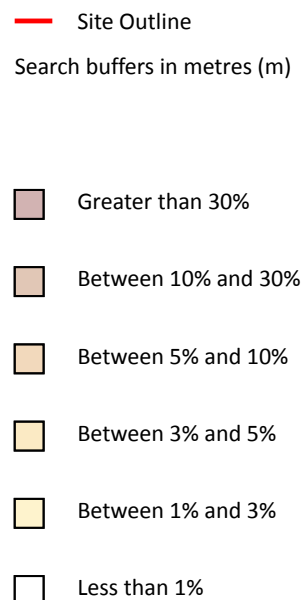
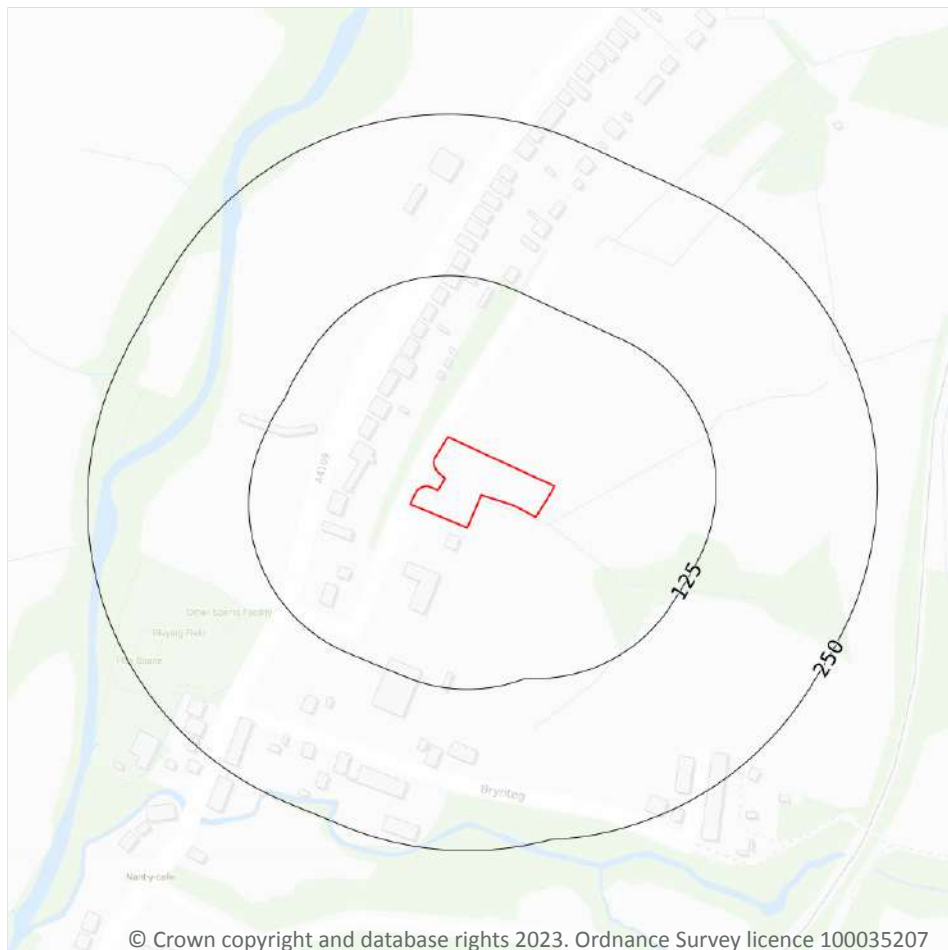
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.



20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 97](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m**1**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m**0**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

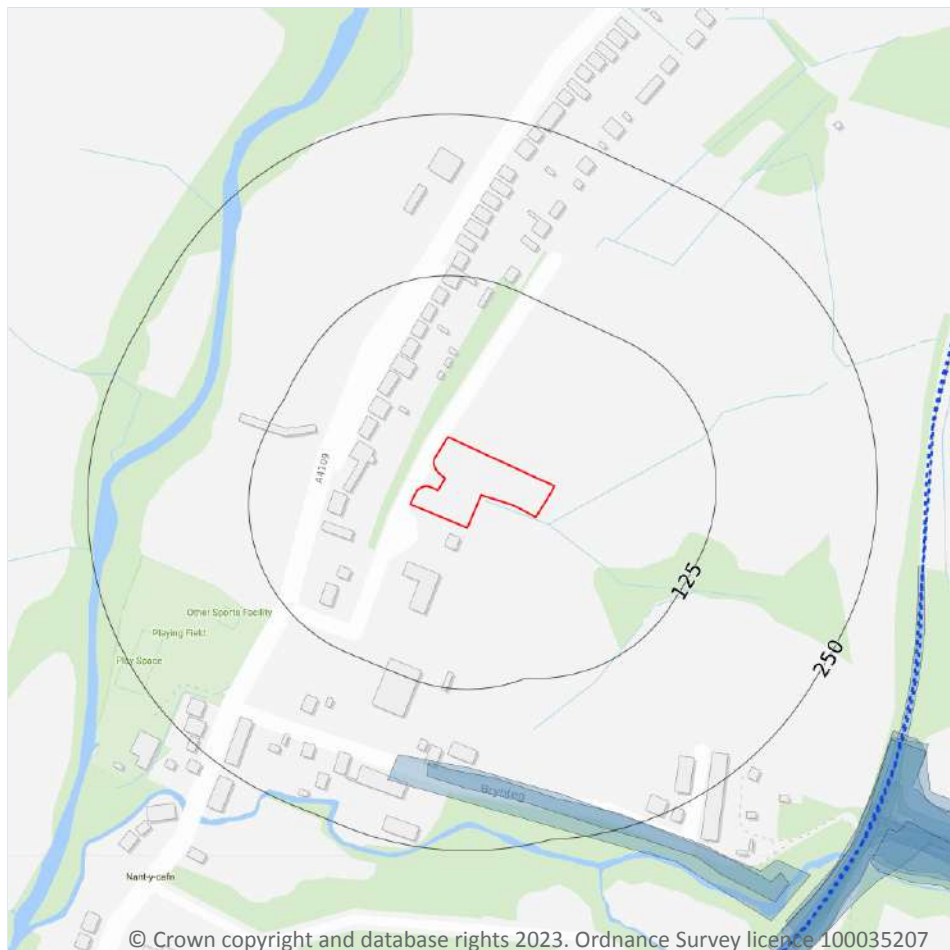
Records within 50m**0**

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

2

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 100 >](#)

Location	Land Use	Year of mapping	Mapping scale
182m S	Railway Sidings	1913	10560
184m S	Railway Sidings	1921	10560

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.



22.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.





APPENDIX F

HISTORICAL ORDNANCE SURVEY MAP EXTRACTS

Groundsure Historical Map Pack Legend

Small scale maps 1:10,560 and 1:10,000

1876-1877, 1877, 1901, 1903,
1913-1914, 1921, 1948, 1964-1965,
1983-1988, 2001, 2010 and 2023

Large scale maps 1:2,500

1876, 1899, 1919, 1961-1962, 1962,
1990, 1988-1993, 1987-1993, 1993
and 2003



Groundsure

INSIGHTS

HISTORICAL MAP PACK LEGEND

COUNTY SERIES & NATIONAL GRID 1:10,560 & 1:10,000

Information present on these legends is sourced from the same Ordnance Survey mapping as the maps used in this product.

If you have a query regarding any of the maps provided please contact Groundsure's technical helpline. We will endeavour to answer any queries you may have.

Technical Help
Tel 0800 028 0000

insight@groundsure.com
WWW.GROUNDSURE.COM

COUNTY SERIES 1:10,560

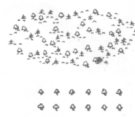
VEGETATION



Fir Wood



Deciduous Wood



Mixed Wood



Brushwood



Orchard



Reeds



Rough Pasture



Furze

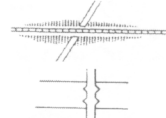


Marsh

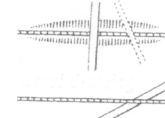


Osiers

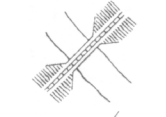
ROADS



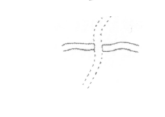
Railway over Road



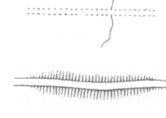
Road over Railway



Road over River or Canal



Level Crossing



Railway over River



Road over Stream



Road over Stream



Sunken Road



Raised Road

RAILWAYS



Double Lines of Railway



Single Lines of Railway and Tramway

GENERAL FEATURES



Gravel Pit



Sand Pit



Quarry



Shingle



Other Pits



Antiquities, Site of

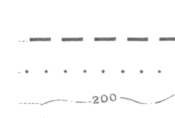


Arrow, showing direction of flow of water



Trigonometrical Station

BOUNDARIES



County Boundary



Parish Boundary



Contours



Parliamentary Division Boundary



Union Boundary



Rural District Boundary

NATIONAL GRID 1:10,000 & 1:10,560

HEIGHTS (METRES)

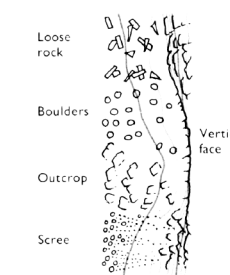
Values are given in metres above mean sea level at Newlyn.

Surface heights determined by ground survey 163m

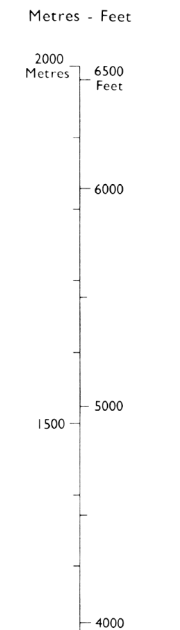
Bench marks and their values are shown on large scale maps, and bench mark lists containing fuller and possibly later levelling information are obtainable from the Director General, Ordnance Survey.

Contours are at 5 metres vertical interval.

ROCK FEATURES



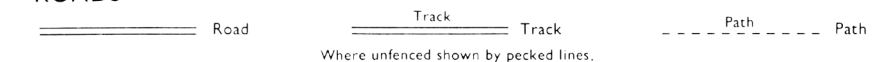
CONVERSION SCALE



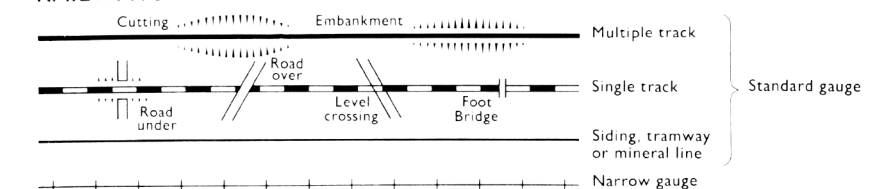
ABBREVIATIONS

BP,BS	Boundary Post or Stone	PO	Post Office
Ch	Church	PC	Public Convenience
CH	Club House	PH	Public House
F Sta	Fire Station	S	Stone
FB	Foot Bridge	Spr	Spring
Fn	Fountain	TCB	Telephone Call Box
GP	Guide Post	TCP	Telephone Call Post
MP,MS	Mile Post or Stone	TH	Town Hall
P	Pole or Post	W	Well
Pol Sta	Police Station	Y	Youth hostel

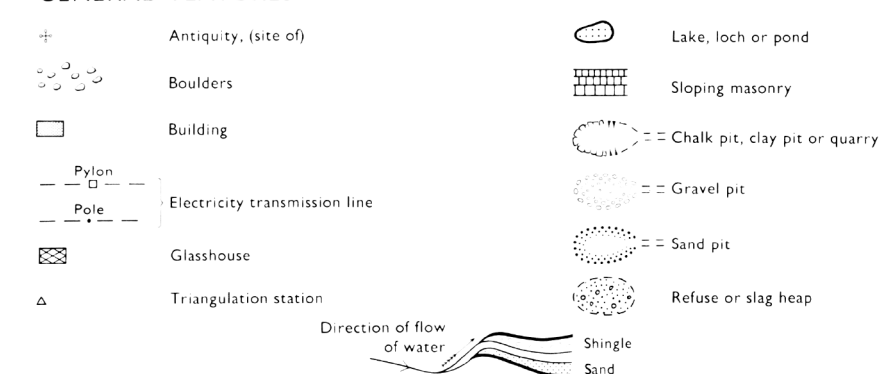
ROADS



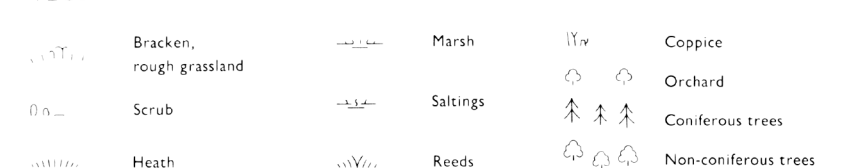
RAILWAYS



GENERAL FEATURES



VEGETATION



In some areas bracken () and rough grassland () are shown separately.



Groundsure
INSIGHTS

HISTORICAL MAP PACK LEGEND

COUNTY SERIES
1:1,2500
NATIONAL GRID
1:1,250 & 1:2,500

Information present on these legends is sourced
from the same Ordnance Survey mapping
as the maps used in this product.

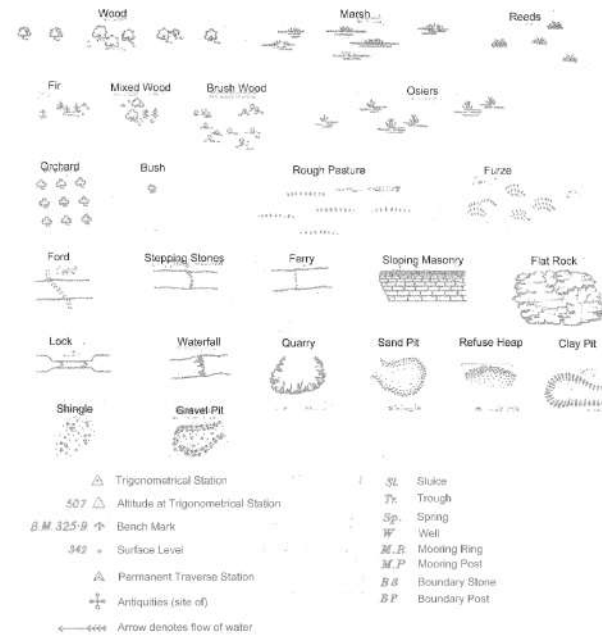
If you have a query regarding any of the maps
provided please contact Groundsure's technical helpline.
We will endeavour to answer any queries you may have.

Technical Help
Tel 0800 028 0000

insight@groundsure.com
WWW.GROUNDSURE.COM

COUNTY SERIES 1:2,500

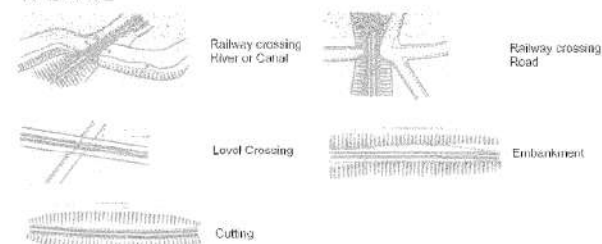
GENERAL FEATURES



ROADS



RAILWAYS

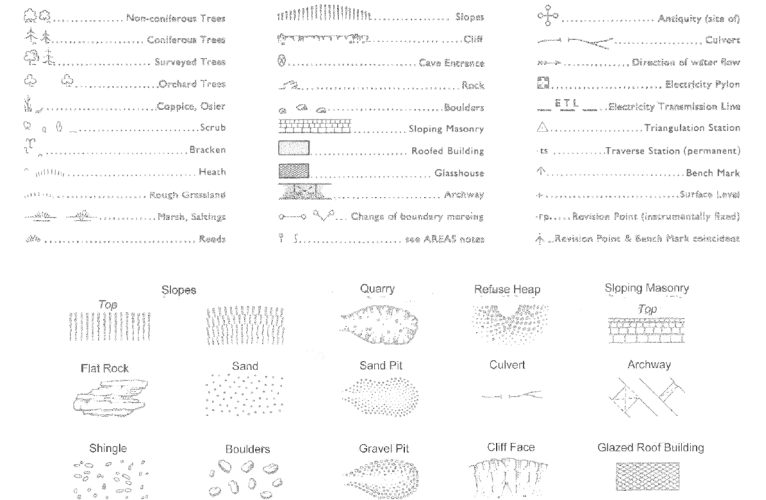


ABBREVIATIONS

Trigonometrical Station	Sluice
Altitude at Trigonometrical Station	Trough
Bench Mark	Spring
Surface Level	Well
Permanent Traverse Station	Mooring Ring
Antiquities (site of)	Mooring Post
	Boundary Stone
	Boundary Post

NATIONAL GRID 1:2,500 & 1:1,250

GENERAL FEATURES



BOUNDARIES

England & Wales	
County Boundary (geographical)	
County & Civil Parish Boundary coterminous	
Admin County or County Borough Boundary	
London Borough Boundary	
County District Boundaries based on civil parish	
England, Wales & Scotland	
Civil Parish Boundary	
Parly & Ward Boundaries based on civil parish	
Parly & Ward Boundaries not based on civil parish	
Scotland	
County Boundary (geographical)	
County Council Boundary	
County of the City Boundary	
Burgh Boundary	
District Council Boundary	
* Not with parish	† Coincident with parish

ABBREVIATIONS

B.H.	Beer House	M.P.U.	Mail Pick-up
B.M.	Bench Mark	M.S.	Mile Stone
B.P.	Boundary Post	N.T.	National Trust
B.S.	Boundary Stone	N.T.L.	Normal Tidal Limit
C.	Crane	N.T.S.	National Trust for Scotland
C.H.	Club House	P.	Pillar, Pole or Post
Chy.	Chimney	P.C.	Public Convenience
Cn.	Capstan	P.C.B.	Police Call Box
D.Fn.	Drinking Fountain	P.H.	Public House
Dk.	Dock	P.O.	Post Office
E.I.P.	Electricity Pillar or Pole	Pp.	Pump
E.T.L.	Electricity Transmission Line	P.T.P.	Police Telephone Pillar
F.A.	Fire Alarm	Rear.	Rearrangir
F.A.P.	Fire Alarm Pillar	R.H.	Road House
F.B.	Filter Bed, Foot Bridge	rp.	Revision Point
F.B.M.	Fundamental Bench Mark	S.	Stane
F.S.	Flagstaff	S.B.	Signal Box
F.Sta.	Fire Station	S.L.	Signal Light
G.P.	Guide Post	Sl.	Sluice
G.V.C.	Gas Valve Compound	S.P.	Signal Post
H.	Hydrant or Hydraulic	Spr.	Spring
ha.	Haecares	S.Sta.	Signal Station
L.B.	Letter Box	T.C.B.	Telephone Call Box
L.B.Sta.	Lifeboat Station	T.C.P.	Telephone Call Post
L.C.	Level Crossing	Tk.	Tank or Track
L.G.	Loading Gauge	Tr.	Trough
L.Ho.	Lighthouse	ts.	Traverse Station
L.Twr.	Lighting Tower	W.	Well
m.	Metres	W.B.	Weighbridge
M.H.W.	Mean High Water	Wd.Pp.	Wind Pump
M.H.W.S.	Mean High Water Springs	Wks.	Works
M.L.W.	Mean Low Water	W.r.Pc.	Water Point
M.L.W.S.	Mean Low Water Springs	W.r.T.	Water Tap
M.P.	Mile or Mooring Post		

Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

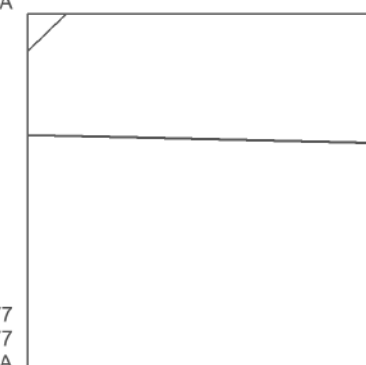
Map date: 1876-1877

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1877
Revised 1877
Edition N/A
Copyright N/A
Levelled N/A

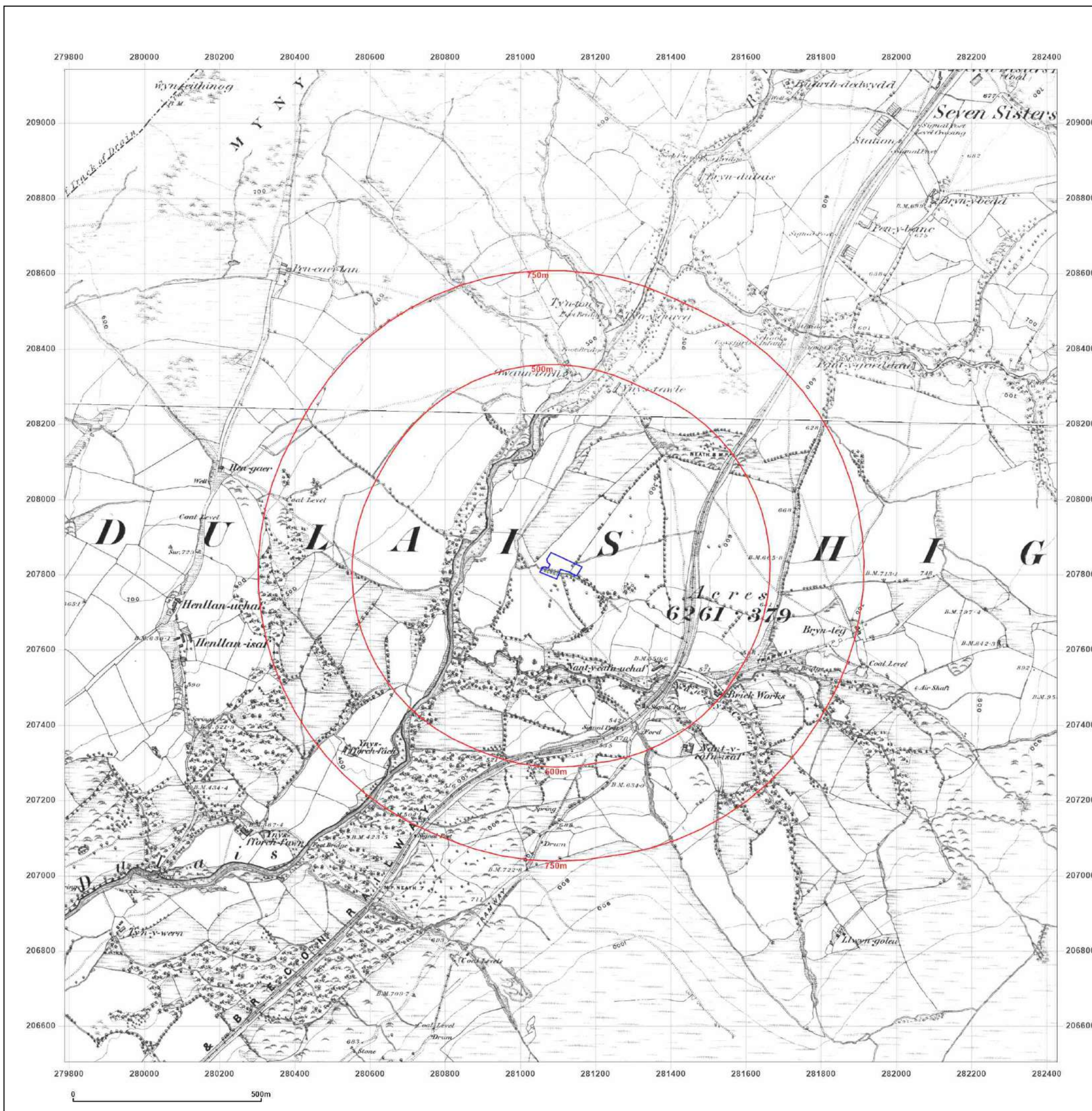


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

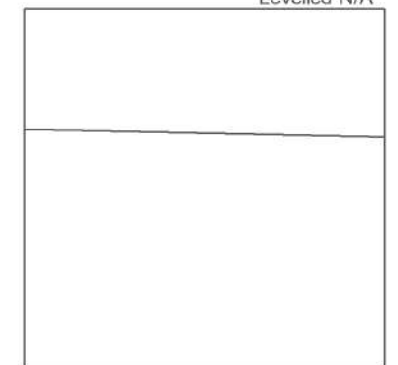
Map date: 1901

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1901
Edition N/A
Copyright N/A
Levelled N/A

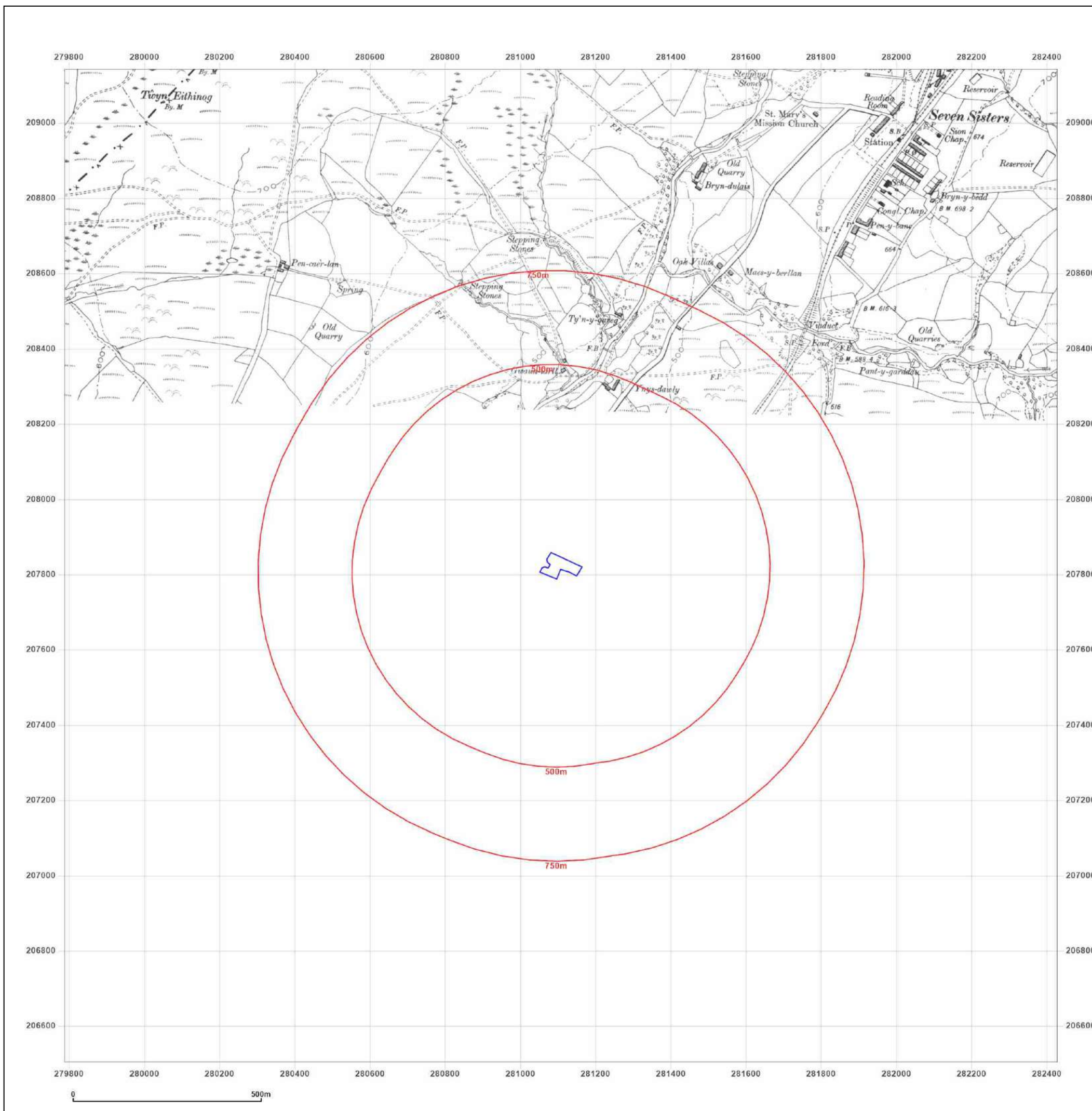


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAI PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

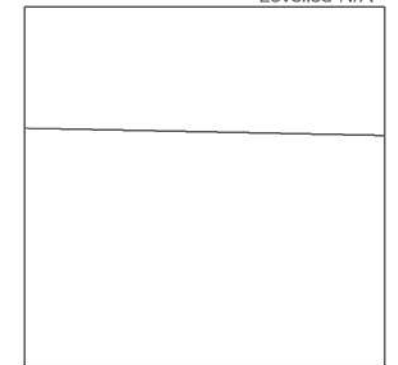
Map date: 1903

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

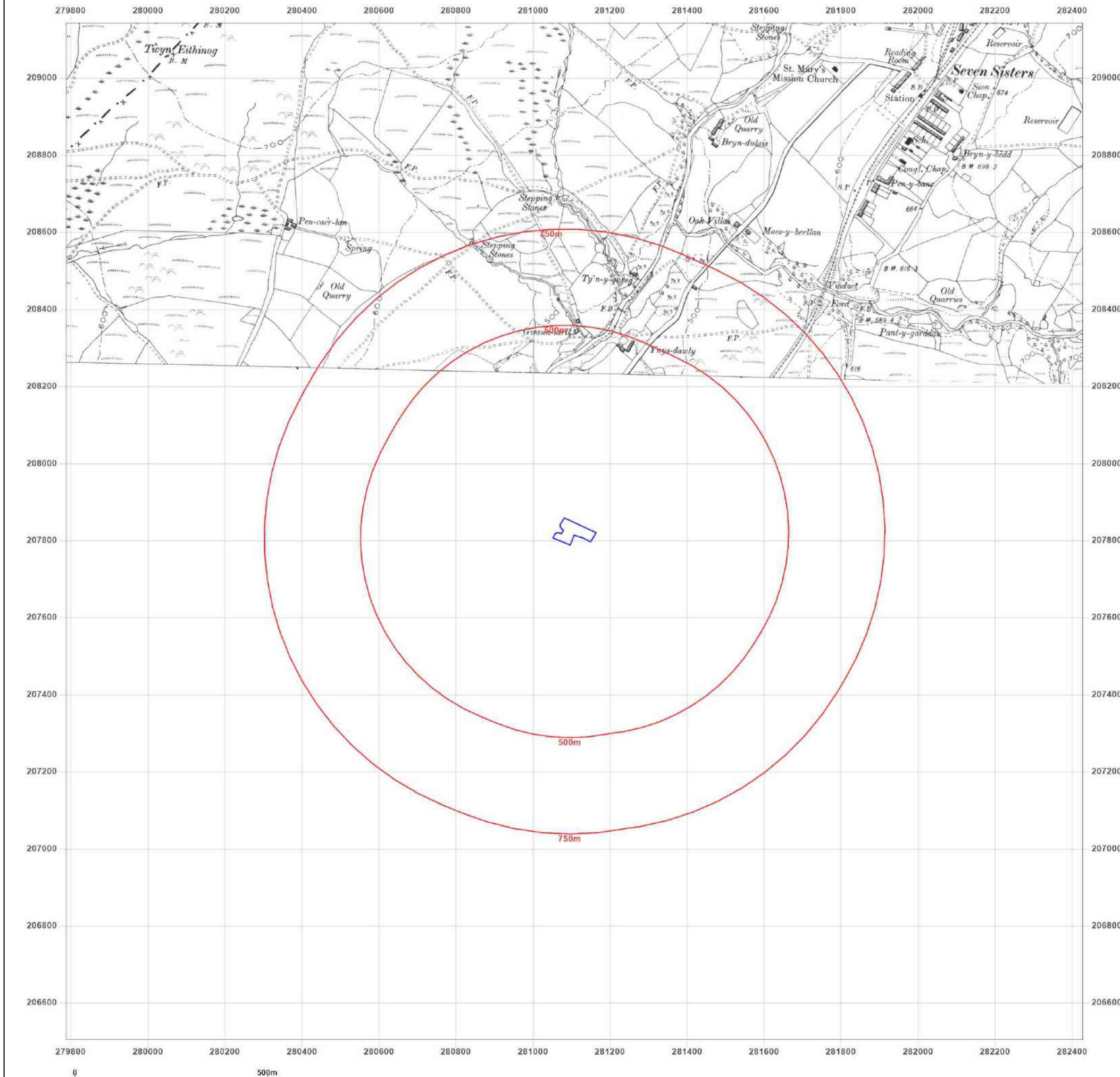


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1913-1914

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1914
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1913
Edition N/A
Copyright N/A
Levelled N/A

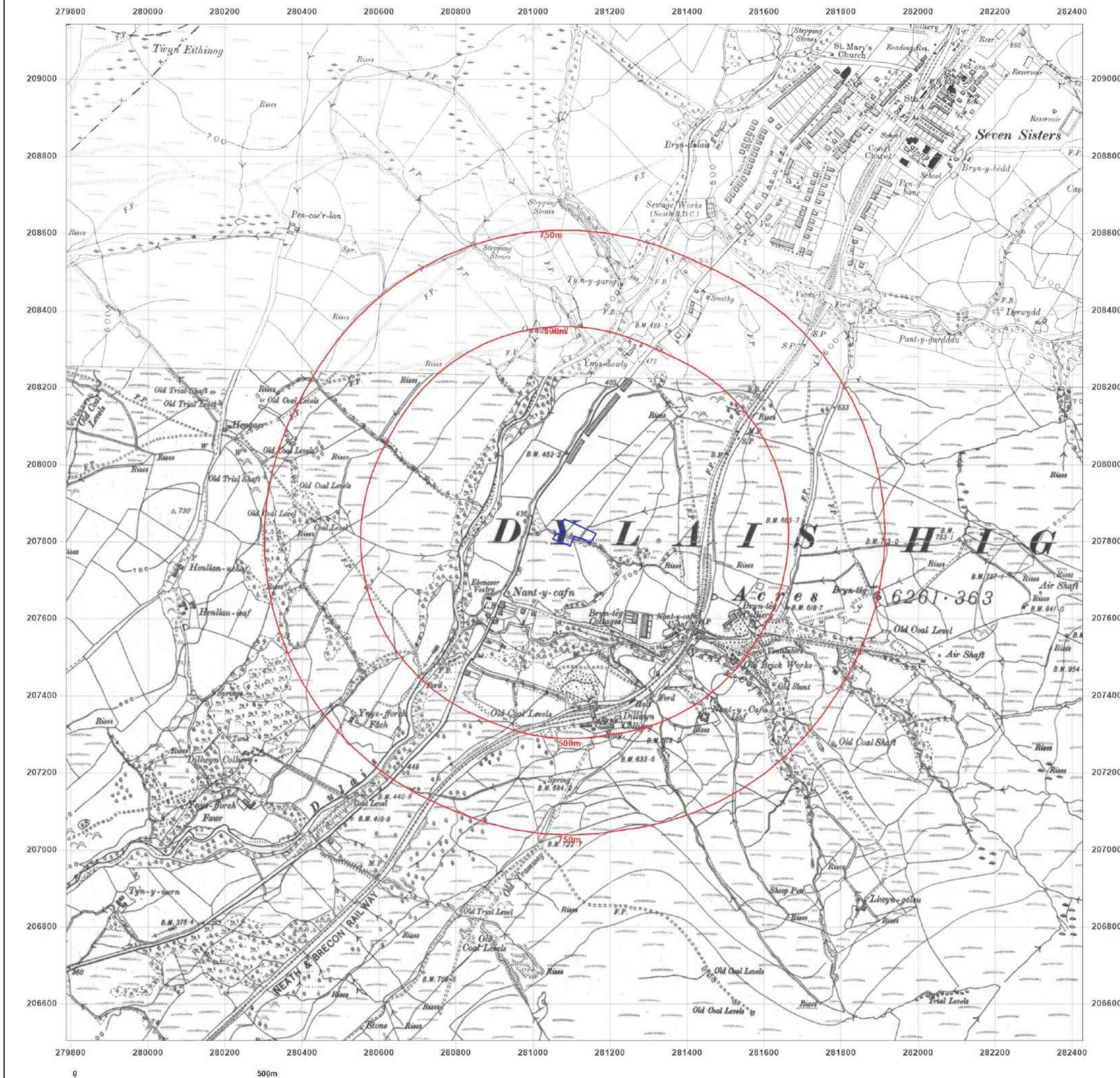


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1921

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAI PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

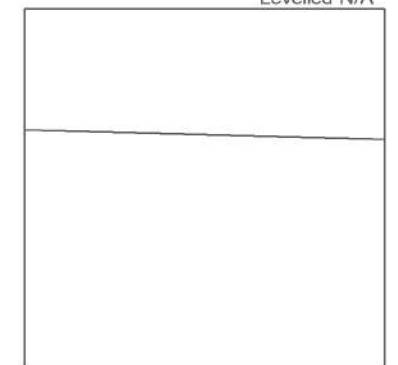
Map date: 1921

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1921
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

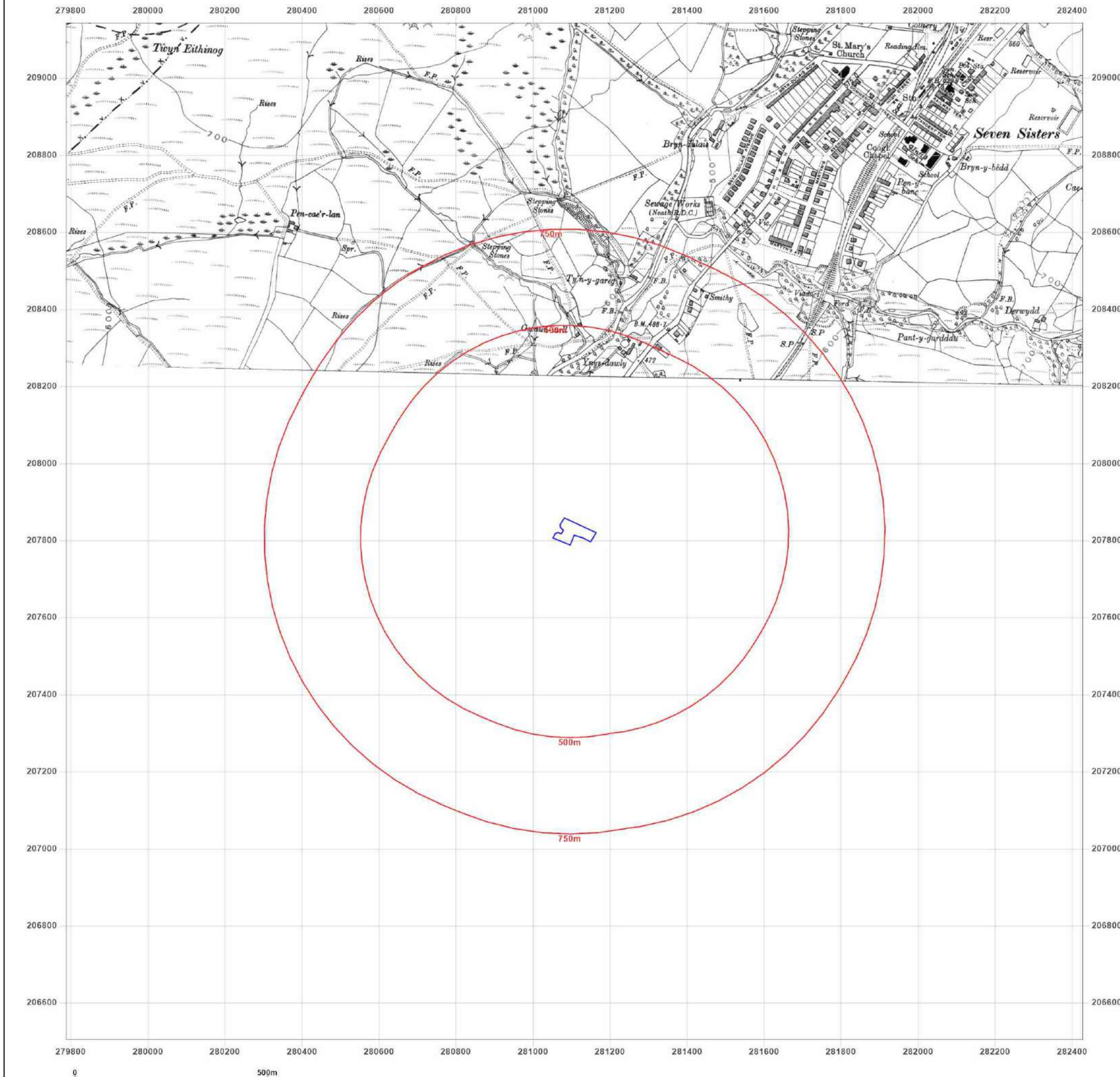


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1948

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: Provisional

Map date: 1964-1965

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1965
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1964
Revised 1964
Edition N/A
Copyright N/A
Levelled N/A

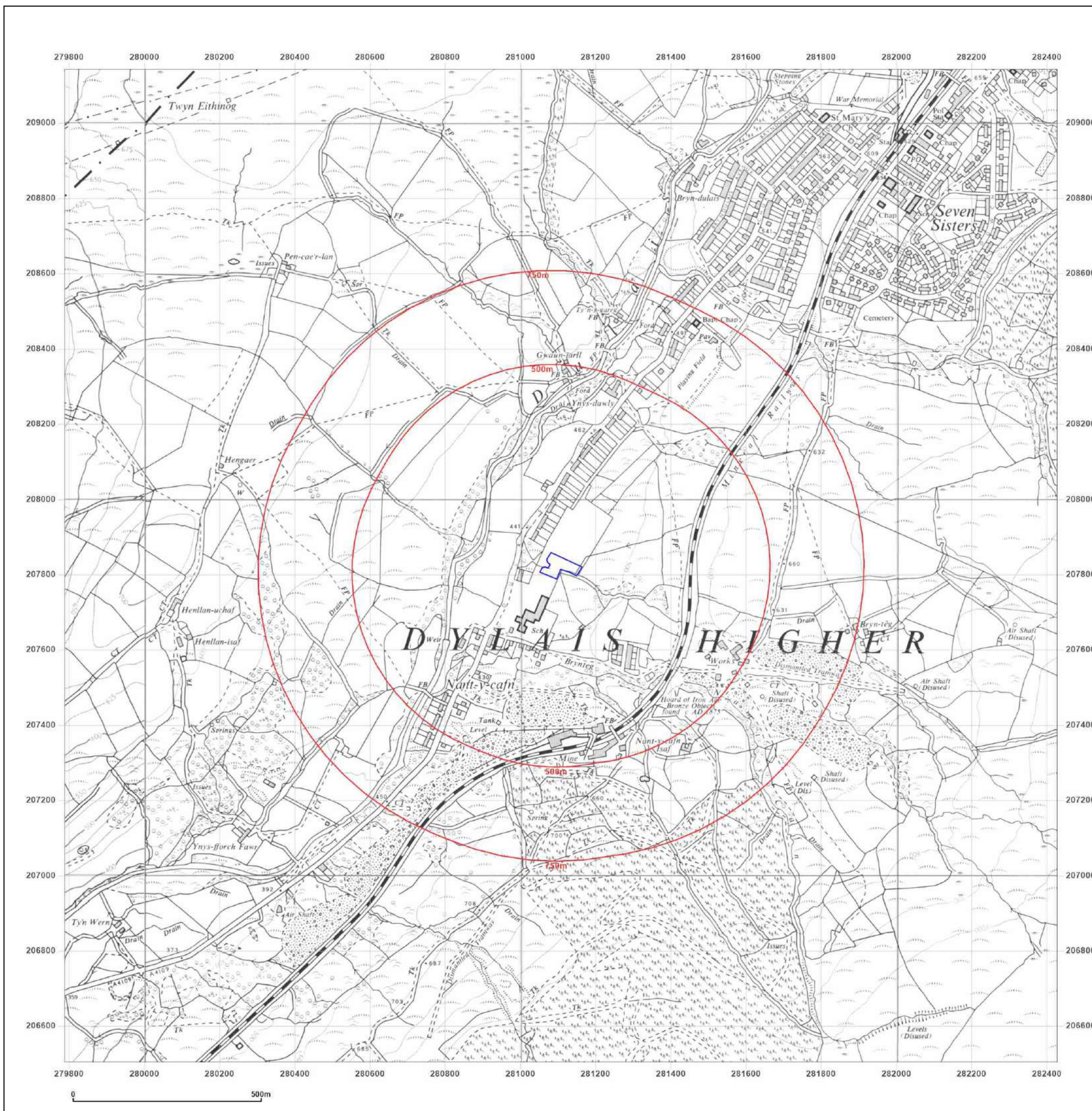


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1983-1988

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1975
Revised 1983
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1962
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

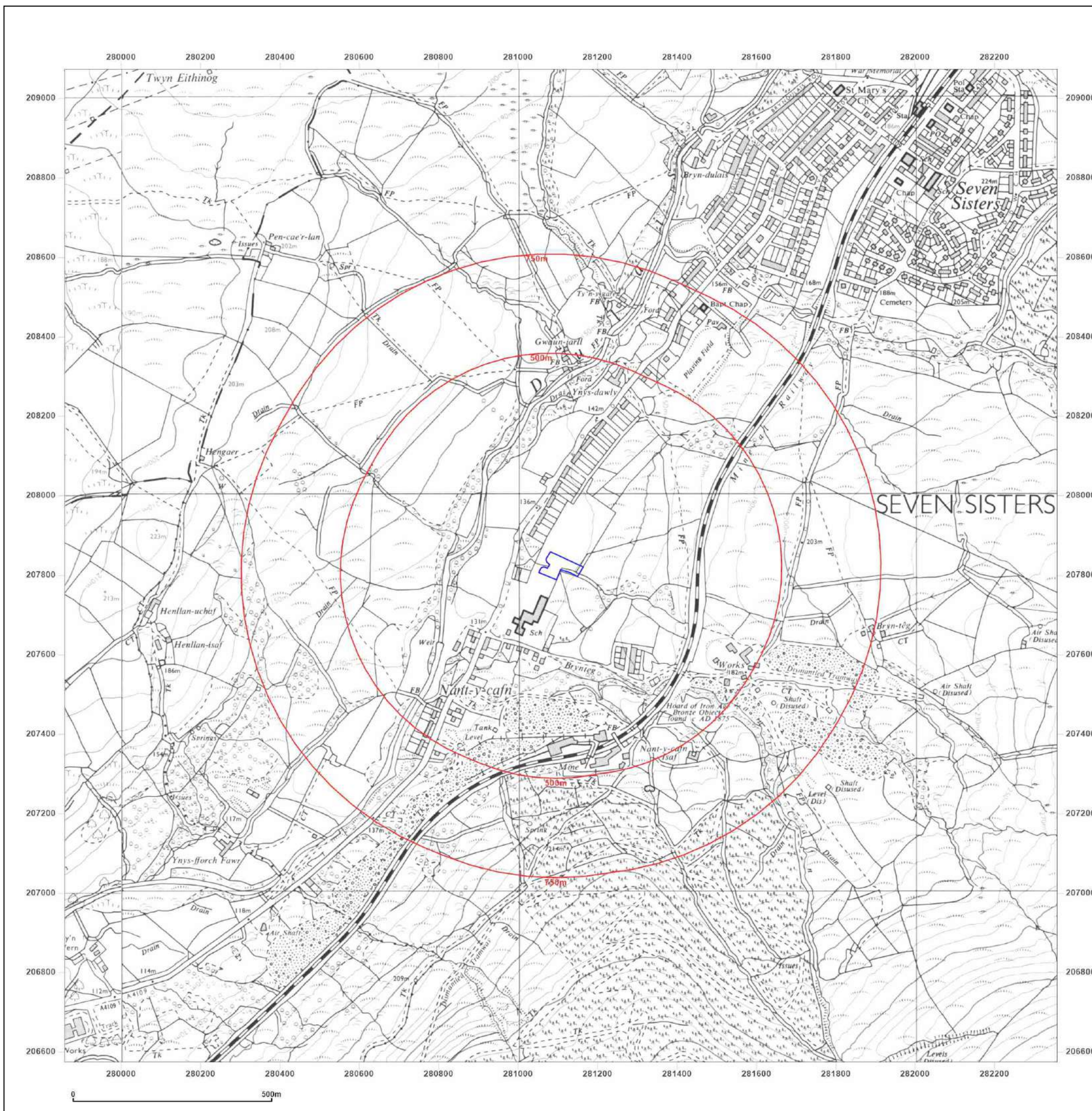


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 2023

Scale: 1:10,000

Printed at: 1:10,000



2023

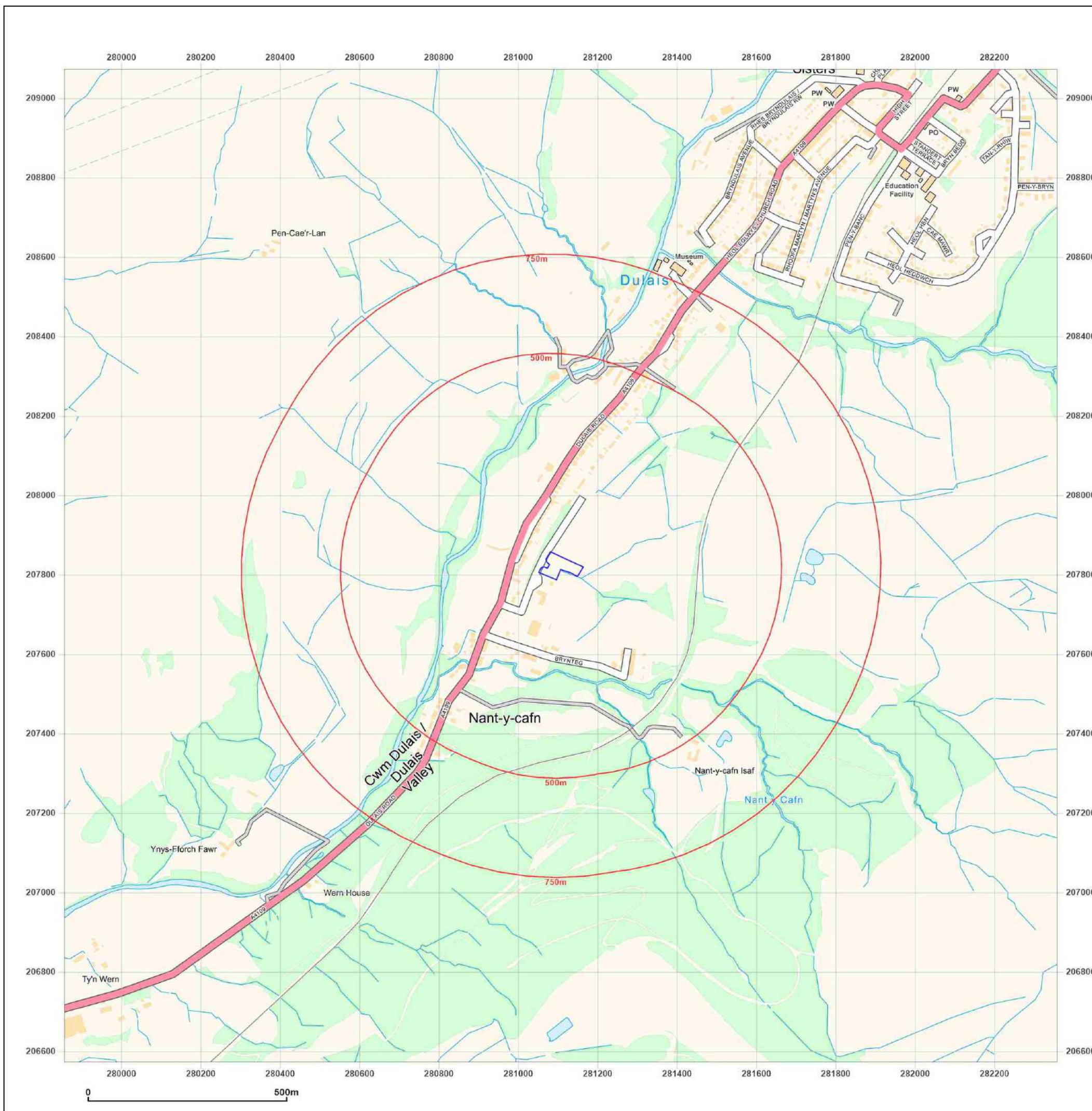


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1876

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

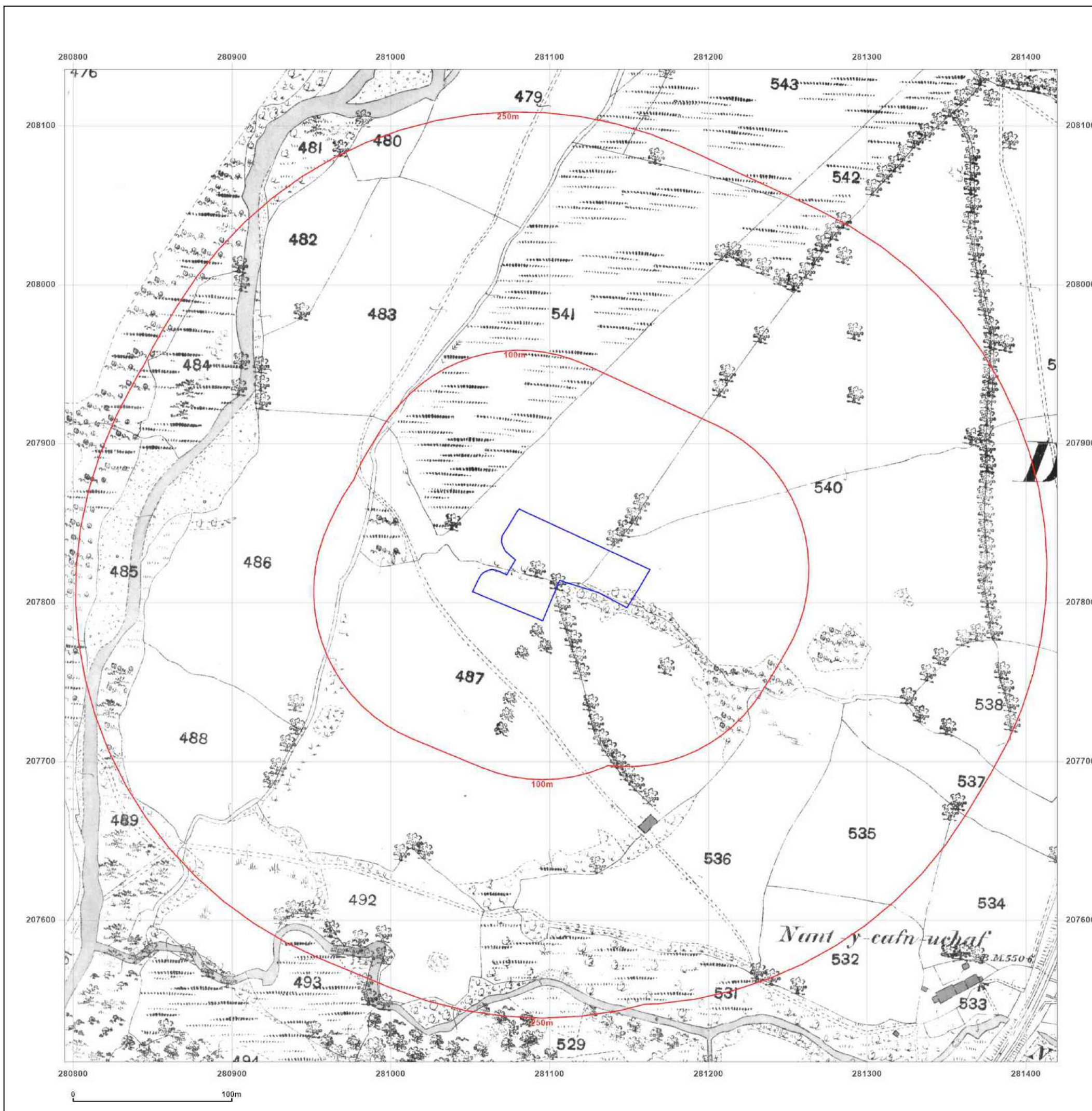


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1899

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

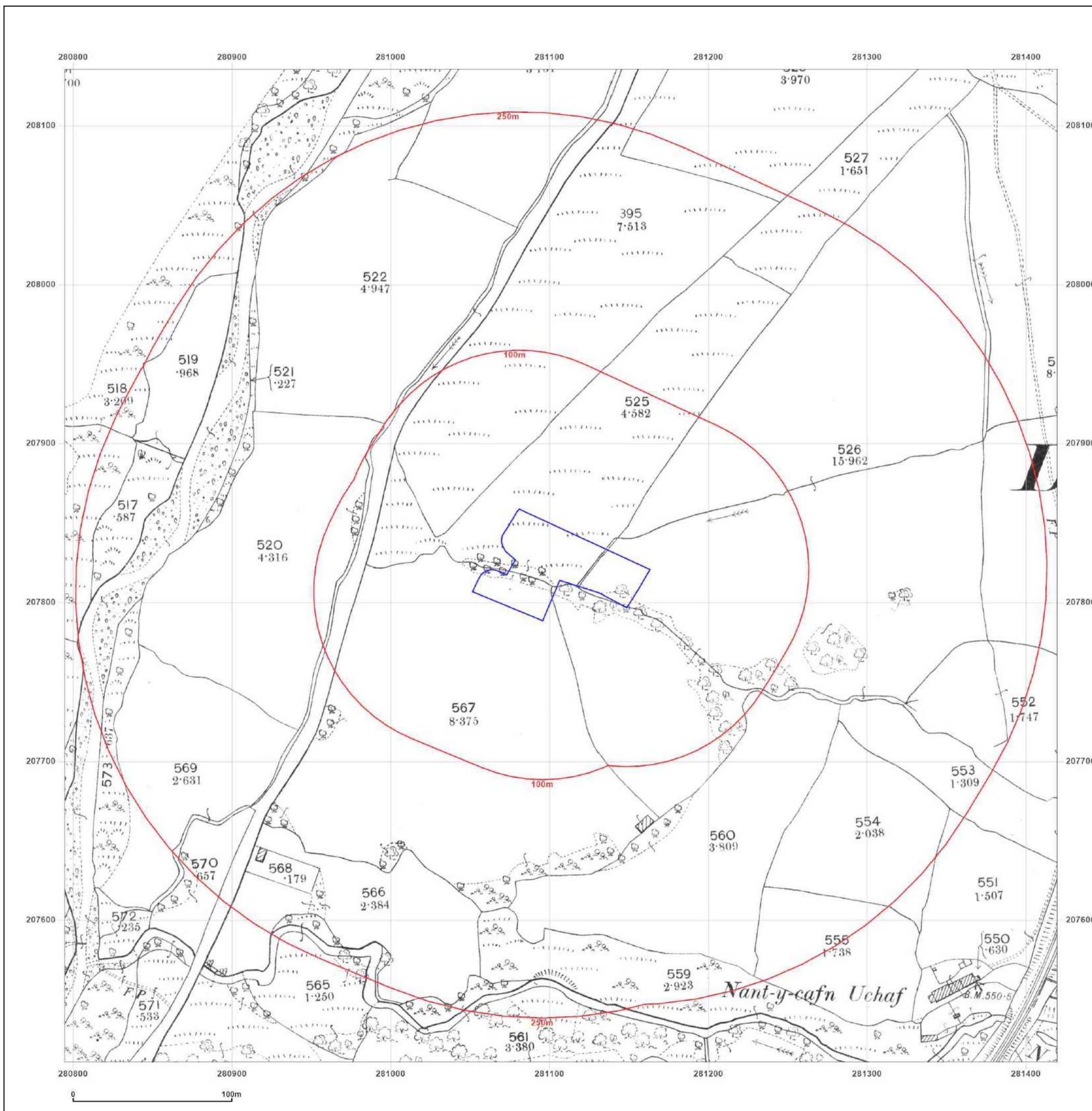


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: County Series

Map date: 1919

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1919
Revised 1919
Edition N/A
Copyright N/A
Levelled N/A

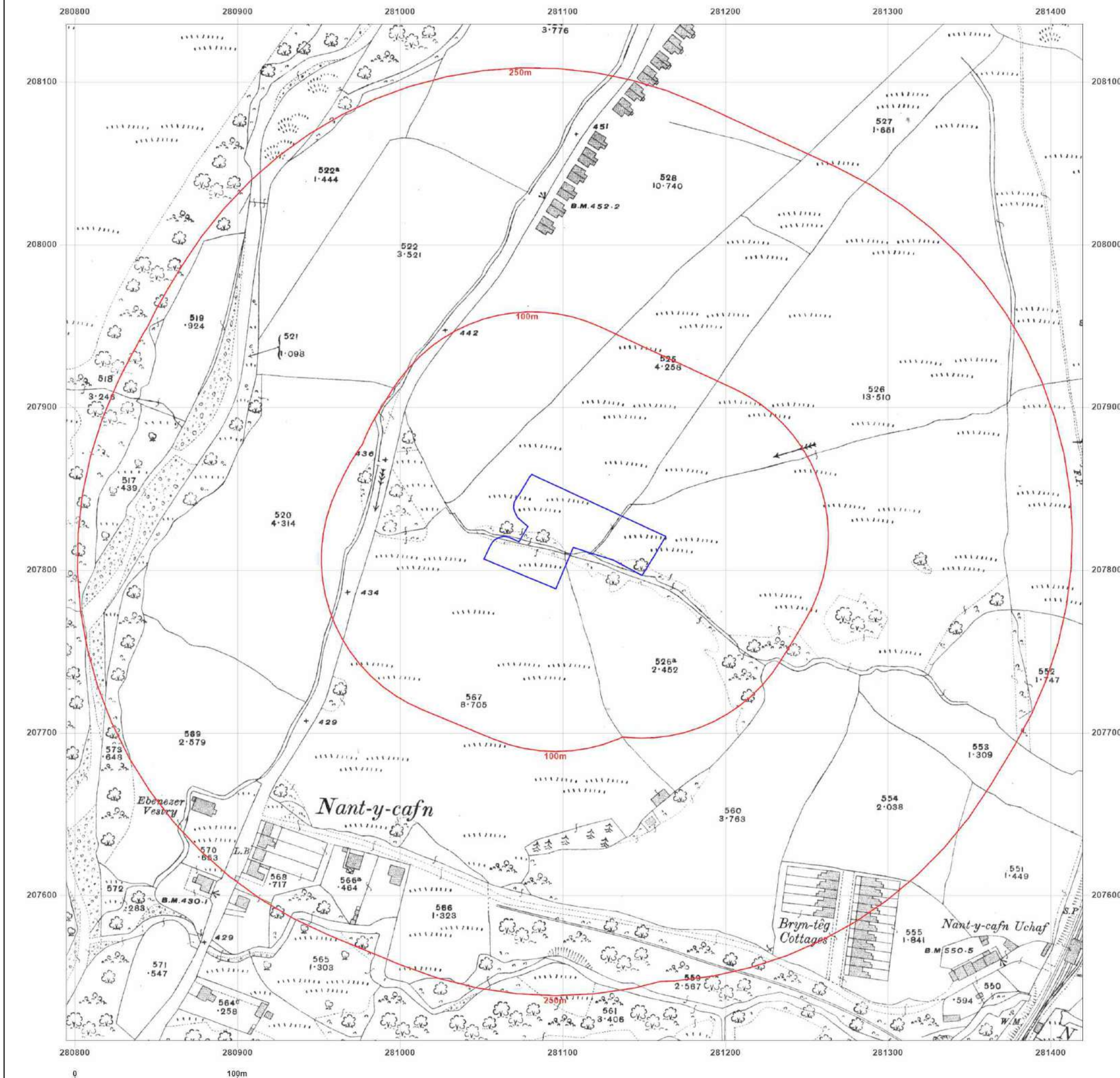


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1961-1962

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1961
Revised 1961
Edition N/A
Copyright 1962
Levelled 1956

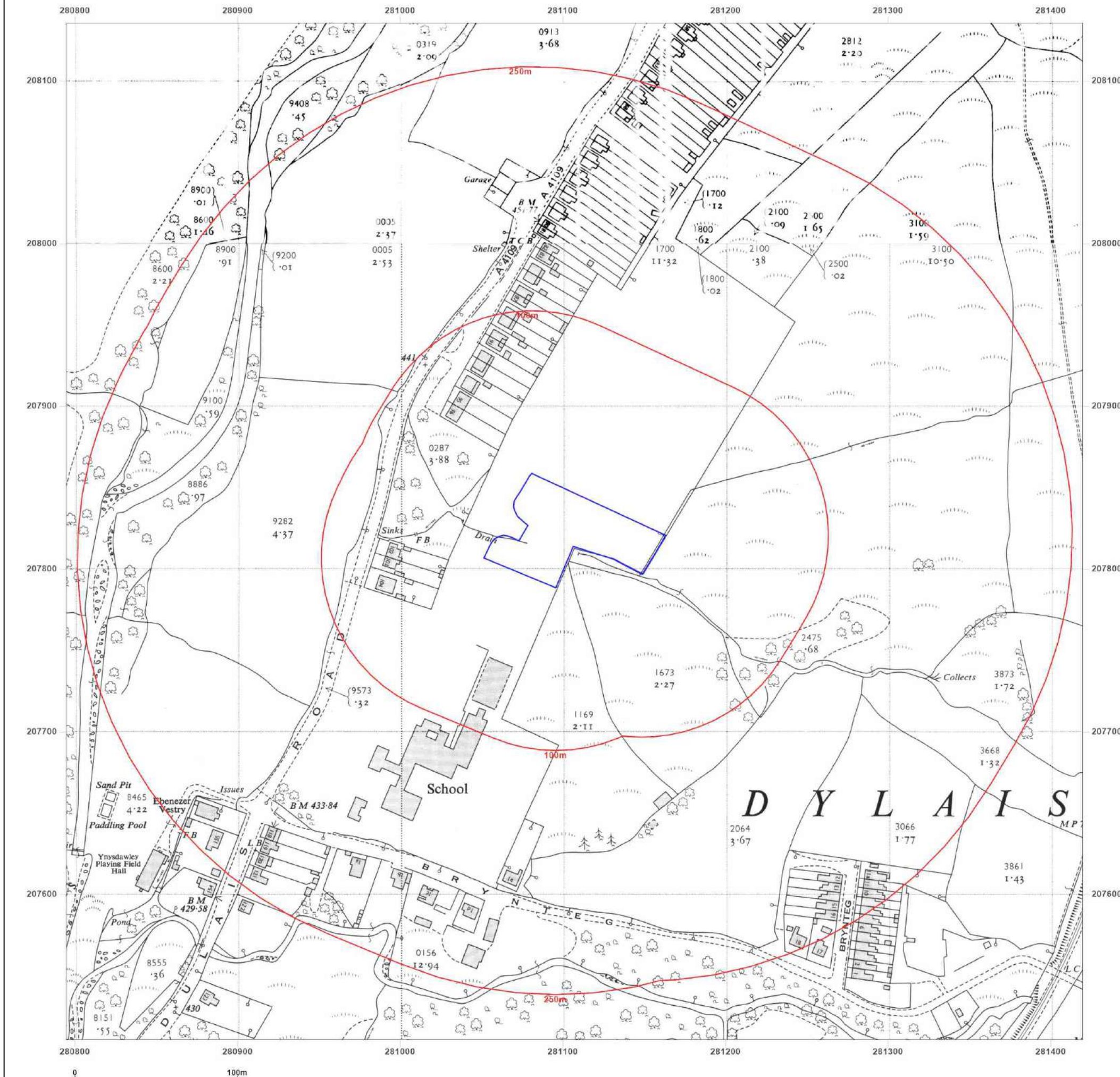


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1962

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1962
Revised 1962
Edition N/A
Copyright 1962
Levelled 1956

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

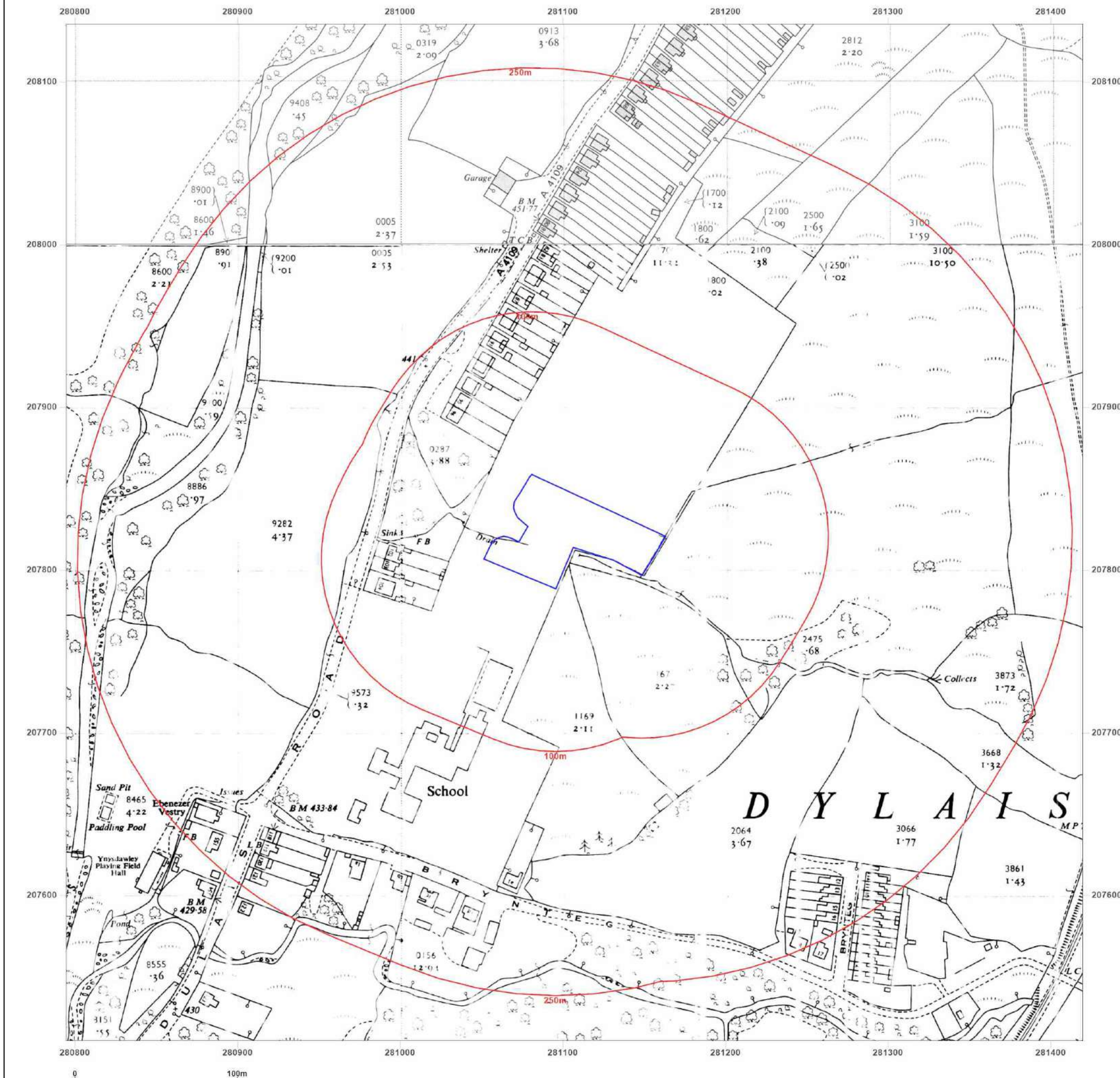


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

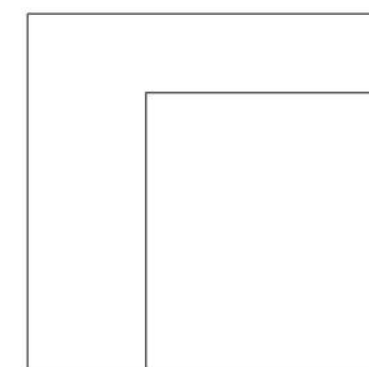
Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1990

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1990
Revised 1990
Edition N/A
Copyright 1990
Levelled N/A

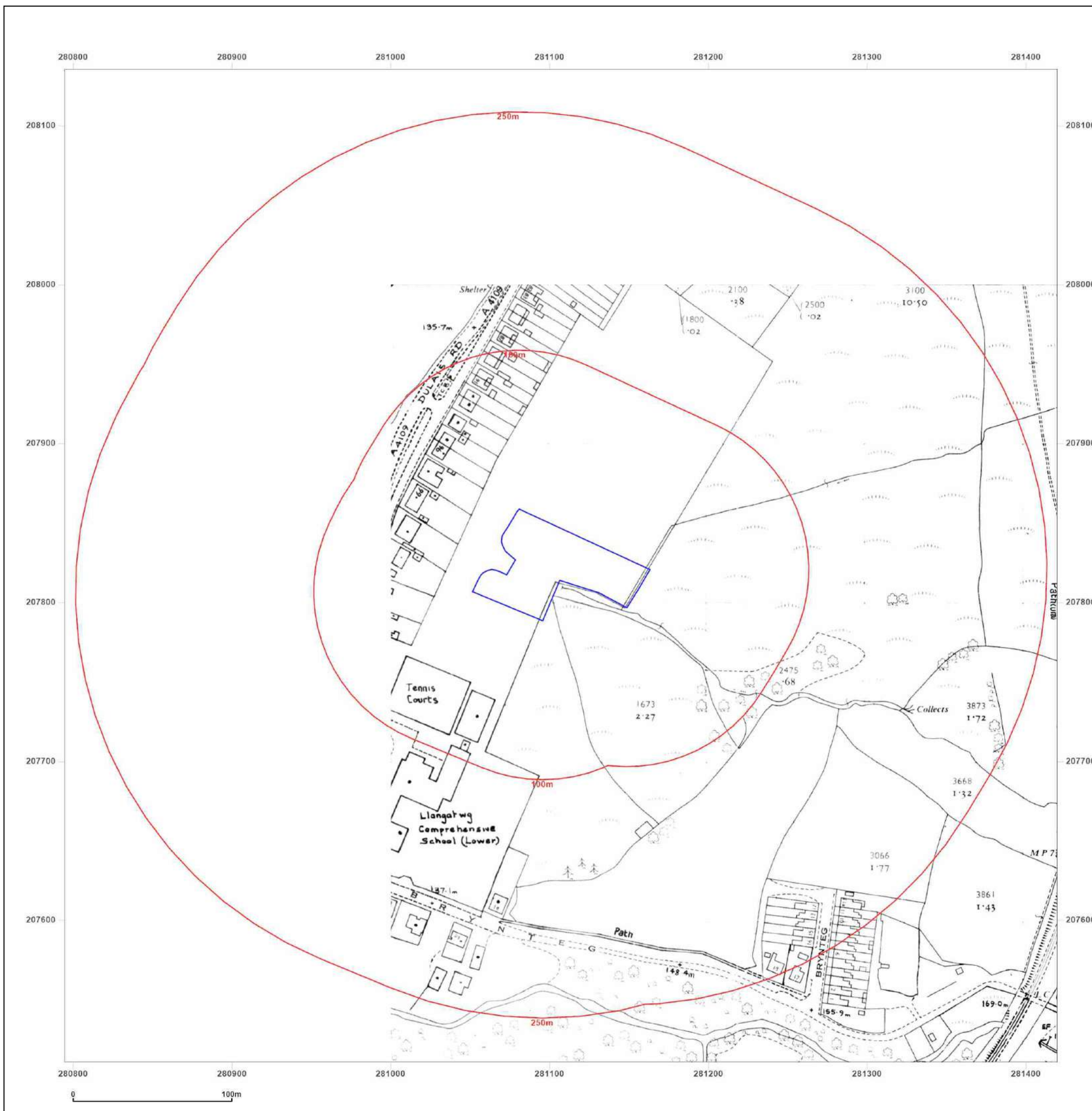


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1988-1993

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1963
Revised 1988
Edition N/A
Copyright 1988
Levelled 1963

Surveyed 1963
Revised 1988
Edition N/A
Copyright 1988
Levelled 1963



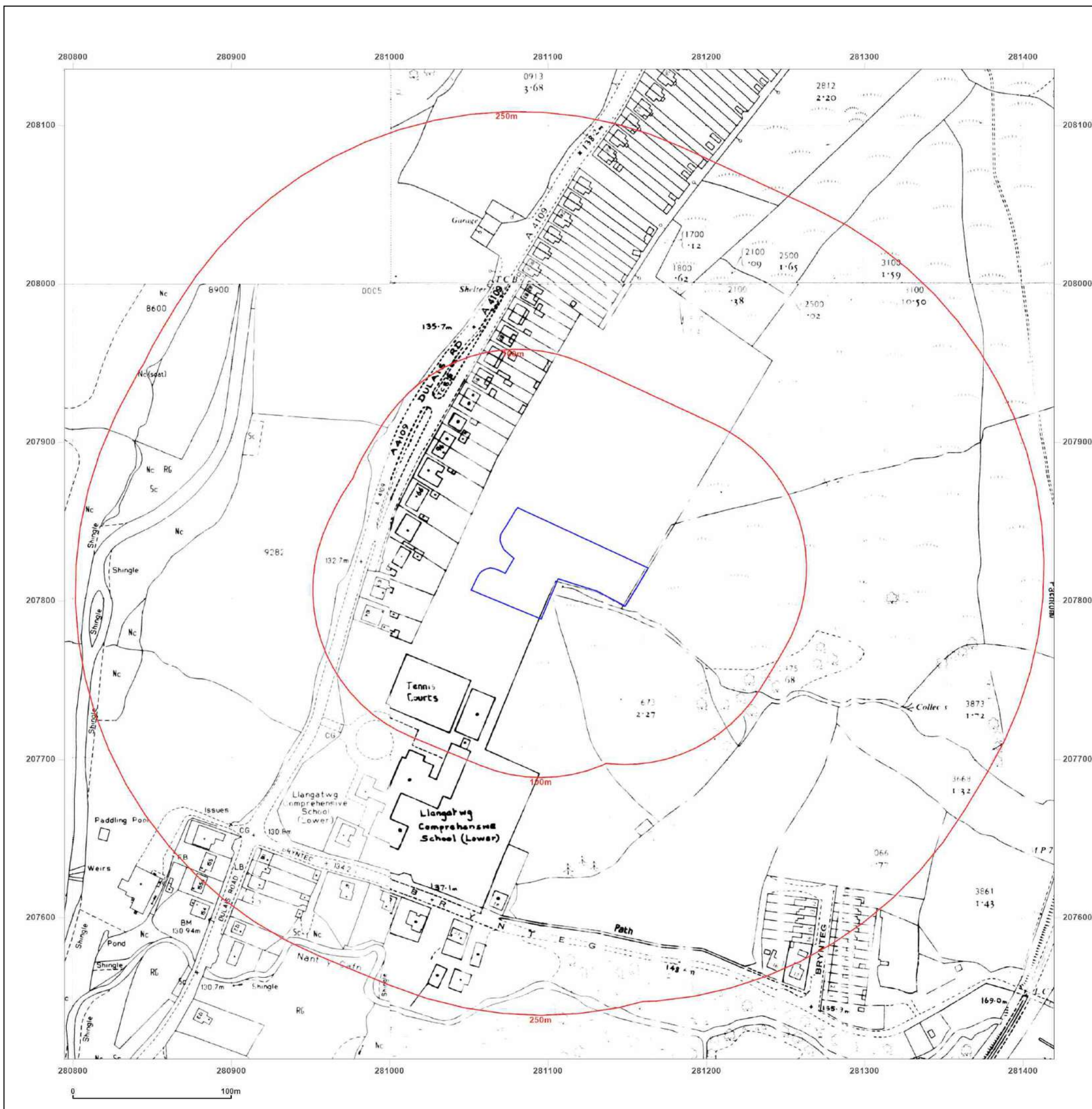
Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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





Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name:	National Grid
------------------	---------------

Map date: 1987-1993

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1963
Revised 1987
Edition N/A
Copyright 1987
Levelled 1963

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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

Site Details:

M W PHILLIPS CHEMISTS,
DULAI PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

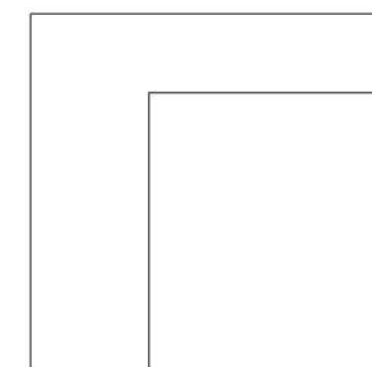
Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

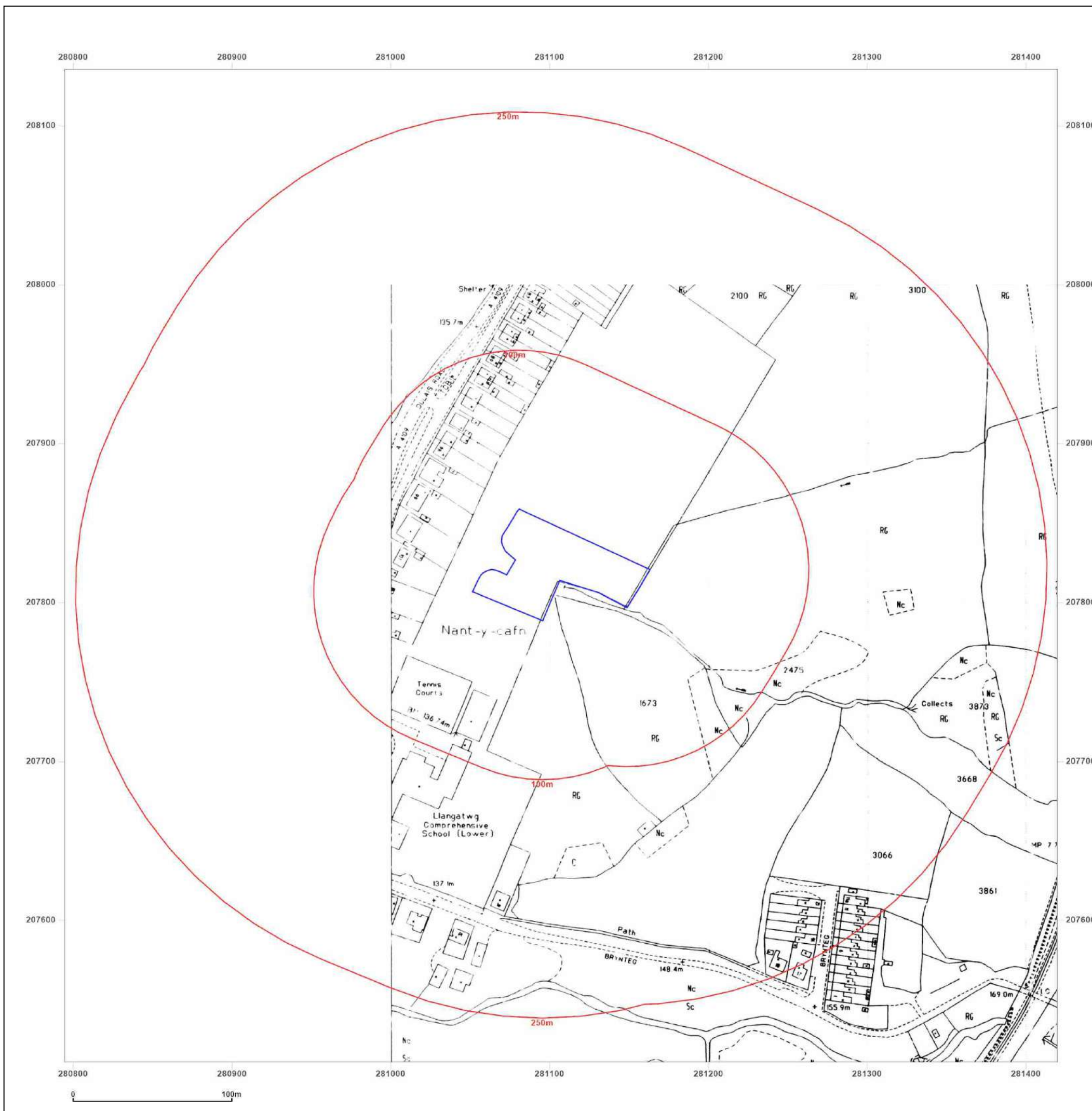


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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



Site Details:

M W PHILLIPS CHEMISTS,
DULAIS PHARMACY, NANT Y
CAFN BUSINESS PARK, SEVEN
SISTERS, SA10 9EY

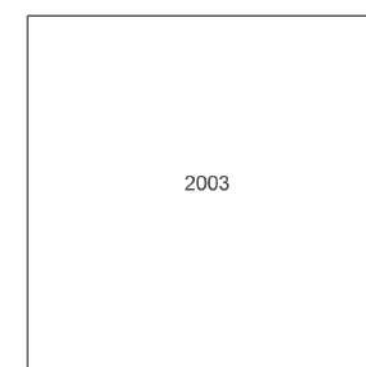
Client Ref: H5810
Report Ref: GS-N2T-W5P-TGK-4FE
Grid Ref: 281107, 207823

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

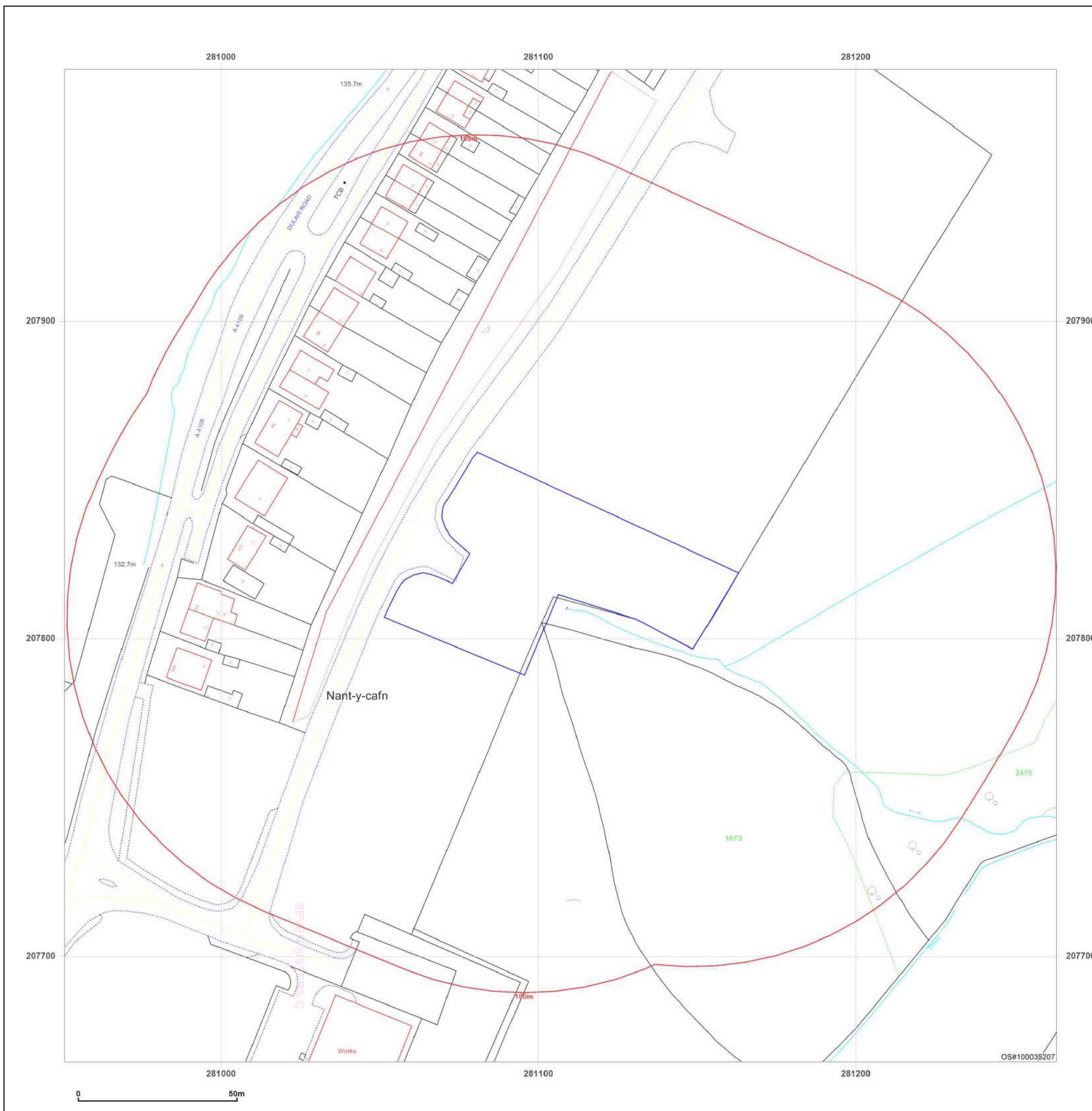


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 29 November 2023

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





SOCOTEC

APPENDIX G
COAL AUTHORITY REPORT

Coal Authority Report

GS-31H-7GE-T9P-57C

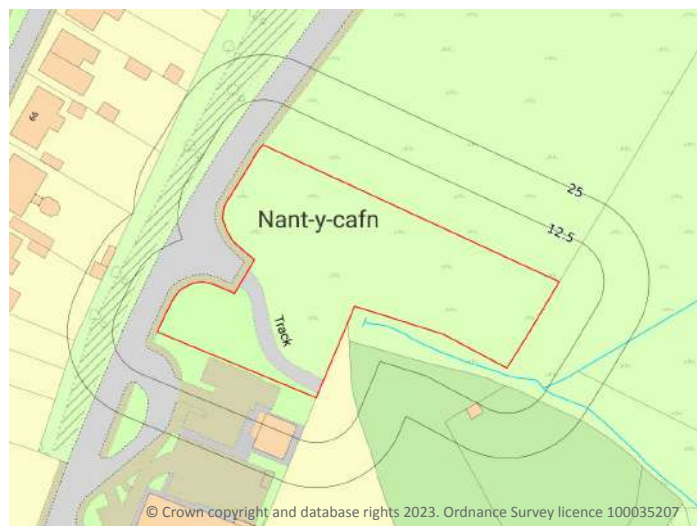
M W PHILLIPS CHEMISTS, DULAIS PHARMACY, NANT Y CAFN BUSINESS PARK, SEVEN SISTERS, SA10 9EY

Professional opinion

Inc. integrated mine entry interpretive assessment



Site plan



Search results

	1. Past underground coal mining Not identified		9. Coal mining subsidence claims Not identified
	2. Present underground coal mining Not identified		10. Mine gas emissions Not identified
	3. Future underground coal mining Identified page 4 >		11. Emergency Call Out incidents Not identified
	4. Mine entries Not identified		12. Withdrawal of support Not identified
	5. Coal mining geology Not identified		13. Working facilities orders Not identified
	6. Past opencast coal mining Not identified		14. Payments to copyhold owners Not identified
	7. Present opencast coal mining Not identified		Cheshire Brine Not identified
	8. Future opencast coal mining Not identified		

Coal mining (CON29M) assessment

We consider the property to be acceptably free from coal mining related risk. No further action is required with regards to past coal mining.

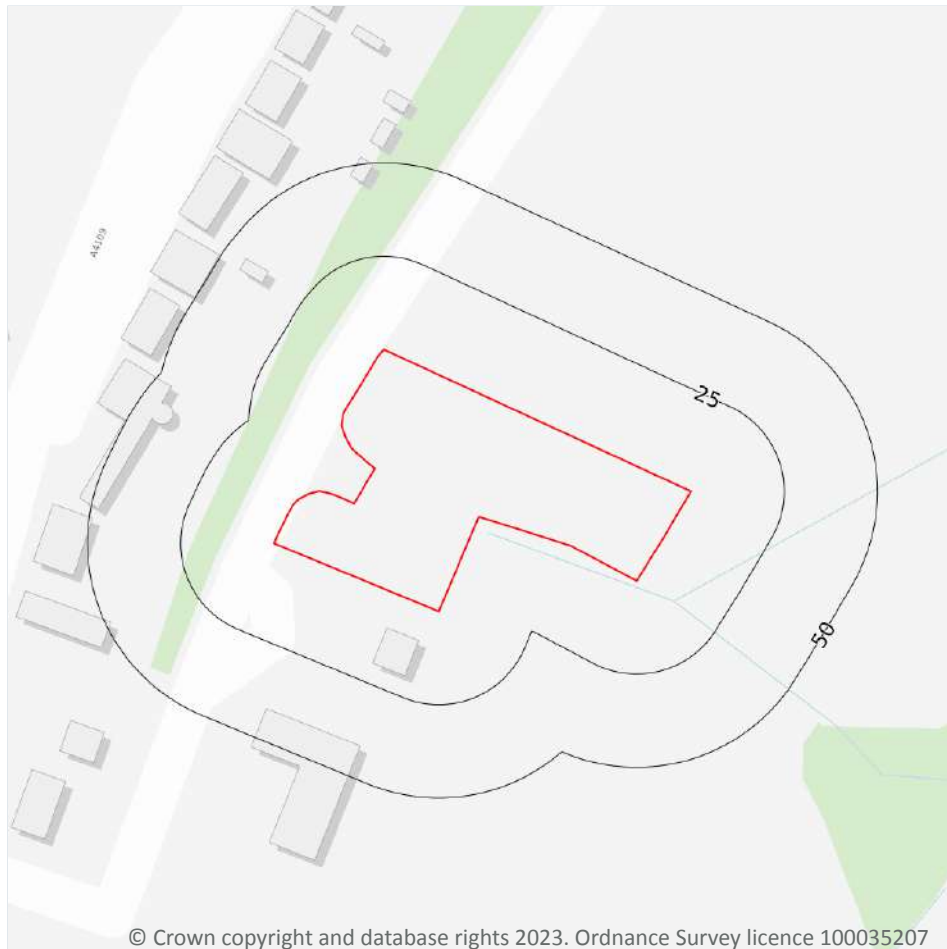


Coal mining

CON29M reports are a requirement for conveyancing and are recommended throughout the official Coal Mining Reporting Area. This is the area within which it is deemed prudent to clarify the risk presented by coal mining, using the questions laid out in the Law Society's CON29M form. The need for a CON29M does not always translate to an identification of risk, and reports will often be assessed as free from risk or 'Passed' even though they are within the official Coal Mining Reporting Area.



Coal mining (CON29M)



- Site Outline
- Search buffers in metres (m)
- Mine entries
 - Adits
 - Shafts
 - Calculated 'zone of influence'
- Subsidence claims
 - Awaiting decision
 - Rejected
 - Admitted
 - Deferred
 - Settled
 - Withdrawn
- Probable shallow coal mine workings
- Coal outcrops
- Past shallow coal mine workings

Coal mining (CON29M)

The map above shows relevant, mappable hazards identified that could constitute a risk to the property. It does not necessarily show all features or potential issues identified in this report. Further details of any features shown indicating the location of Mine Entries or Subsidence Claims can be found in the relevant sections of this report (4 and 9 respectively).

Responses to the Law Society CON29M Coal Mining search enquiries are produced using official Coal Authority data and the expert interpretation of Groundsure. This report is prepared in accordance with The Law Society CON29M (2018) Guidance Notes. Additional interpretation and calculation of mine entry zones of influence has also been carried out by Groundsure using Coal Authority and British Geological Survey data.

Please read this report carefully, and in particular any sections flagged with an amber 'i'.



**The Law Society**

These enquiries are The Law Society CON29M (2018) Coal Mining search enquiries and are used with permission of The Law Society. The Law Society CON29M Coal Mining search enquiries are protected by copyright owned by The Law Society of 113 Chancery Lane, London WC2A 1PL. The Law Society has no responsibility for information provided in response to CON29M (2018) Coal Mining search enquiries within this report or otherwise.

1. Past underground coal mining



Is the property within the zone of likely physical influence on the surface of past underground coal workings?

- The property does not lie within the potential zone of influence of any recorded underground coal workings.

2. Present underground coal mining



Is the property within the zone of likely physical influence on the surface of present underground coal workings?

- The property does not lie within the boundary of an underground site from which coal is being removed by underground methods.

3. Future underground coal mining



(a) Is the property within any geographical area for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods?

- The property does not lie within the boundary of an underground site for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods.

(b) Is the property within any geographical area for which a licence to remove coal by underground methods has been granted?

- The property lies within the boundary of an underground site for which a licence to remove coal by underground methods has been granted.

(c) Is the property within the zone of likely physical influence on the surface of planned future underground coal workings?

- The property does not lie within the zone of likely physical influence on the surface of planned future underground workings.

(d) Has any notice of proposals relating to underground coal mining operations been given under section 46 of

[Back to Summary](#)

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Ref: GS-31H-7GE-T9P-57C
Your ref: H5810
Grid ref: 281095 207827

the Coal Mining Subsidence Act 1991?

- No notices have been given under Section 46 of the Coal Mining Subsidence Act 1991 stating that the land is at risk of subsidence.

4. Mine entries



Are there any shafts and adits or other entries to underground coal mine workings within the property or within 20 metres of the boundary of the property?

- No coal mine entries are recorded to lie within 20 metres of the property.

5. Coal mining geology



Is there any record of any fault or other line of weakness due to coal mining at the surface within the boundary of the property that has made the property unstable?

- No damage arising from geological faults or other lines of weakness activated by coal mining are recorded within the property.

6. Past opencast coal mining



Is the property situated within the geographical boundary of an opencast site from which coal has been removed in the past by opencast methods?

- The property does not lie within the boundary of an opencast site from which coal was removed by opencast methods.

7. Present opencast coal mining



Is the property within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods?

- The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8. Future opencast coal mining



(a) Is the property within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods?



- The property does not lie within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods.

(b) Is the property within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted?

- The property does not lie within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9. Coal mining subsidence claims



(a) Has any damage notice or claim for alleged coal mining subsidence damage to the property been given, made or pursued since 31st October 1994?

- We have no evidence of a damage notice or subsidence claim for the property or within 50m of the property since 31st October 1994.

(b) In respect of any such notice or claim has the responsible person given notice agreeing that there is a remedial obligation or otherwise accepted that a claim would lie against them?

- Not applicable.

(c) In respect of any such notice or acceptance has the remedial obligation or claim been discharged?

- Not applicable.

(d) Does any current "Stop Notice" delaying the start of remedial works or repairs affect the property?

- There are no current Stop Notices delaying the start of remedial works or repairs to the property.

(e) Has any request been made under Section 33 of the 1991 Act to execute preventive works before coal is worked, which would prevent the occurrence or reduce the extent of subsidence damage to any buildings, structures or works and, if yes, has any person withheld consent or failed to comply with any such request to execute preventive works?

- There is no record of a request that has been made to carry out preventive works before coal is worked under Section 33 of the Coal Mining Subsidence Act 1991.

NB. Records of damage notices or subsidence claims before 31st October 1994 are excluded from The Coal Authority data from which this search is compiled.

10. Mine gas emissions



Does the Coal Authority have record of any mine gas emission within the boundary of the property being reported that subsequently required action by the Authority to mitigate the effects of the mine gas emission?

- No mine gas emissions are recorded within the boundary of the property.



11. Emergency Surface Hazard Call Out incidents



Have the Coal Authority carried out any work on or within the boundaries of the property following a report of an alleged hazard related to coal mining under the Authority's Emergency Surface Hazard Call Out procedures?

- **No Emergency Surface Hazard Call Out procedures are recorded against the property.**

12. Withdrawal of support



(a) Does the land lie within a geographical area in respect of which a notice of entitlement to withdraw support has been published?

- **The property does not lie in an area where the right to withdraw support has been granted.**

(b) Does the land lie within a geographical area in respect of which a revocation notice has been given under section 41 of the Coal Industry Act 1994?

- **The property does not lie within a geographical area in which a revocation notice has been given under section 41 of the Coal Industry Act 1994.**

13. Working facilities orders



Is the property within a geographical area subject to an order in respect of the working of coal under the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof?

- **The property is not in an area where a court order has been issued.**

14. Payments to owners of former copyhold land



(a) Has any relevant notice, which may affect the property, been given?

- **The property does not lie within former copyholder land.**

(b) If yes, has any notice of retained interests in coal and coal mines been given?

- **No notices of retained interests in coal and coal mines been given.**

(c) If yes, has any acceptance notice or rejection notice been served?

- **No acceptance or rejection notices have been served.**

(d) If any such acceptance notice has been served, has any compensation been paid to a claimant?

- **No compensation has been paid to a claimant.**



CON29M notes and guidance

This report is prepared in accordance with [The Law Society Guidance Notes 2018](#); under which all replies to these enquiries are made. Groundsure's Terms and Conditions are applicable at the time the report was produced.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by telephoning 0345 762 6848. Further information can be found on their website:

www.groundstability.com ↗.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries).

The Coal Authority emergency telephone number at all times is 01623 646333.

Responses to The Law Society CON29M (2018) Coal Mining Search enquiries and associated findings and recommendations relating to coal mining risk have been provided by Groundsure Ltd. Groundsure Ltd have additionally provided information relating to the Cheshire Brine Compensation Area, and have compiled all information into this report.

Queries should be made of Groundsure Ltd on 01273 257 755, or via email: info@groundsure.com ↗.

CON29M report limitations

This CON29M (2018) Coal Mining Report has been carried out with reference to all available official Coal Authority licensed data, an extensive collection of abandoned mine plans, maps and records. From this material, we have endeavoured to provide as accurate a report as possible. Any and all analysis and interpretation of licensed Coal Authority data in this report is made by Groundsure

The information provided in this report by Groundsure Ltd has been compiled in response to The Law Society CON29M (2018) Coal Mining search enquiries. The scope of the assessment is limited to interpretation of past, present and future extraction of coal, and does not consider the impact from non-coal mining hazards and/or natural ground stability hazards. The Law Society's Guidance Notes 2018 recommends separate enquiries to the appropriate sources are made with regard to other minerals.

The Report is created by a remote investigation and reviews only information provided by the client (address and site location boundaries) and from the databases of publicly available and/or licensable information that enable a desk-based assessment of the Site. The Report does not include a Site Investigation, nor does Groundsure Ltd make additional specific information requests of the regulatory authorities for any relevant information they may hold.

This report is concerned solely with the Site searched and should not be used in connection with nearby properties, as only known coal mining features that could potentially have a direct influence upon the Site searched are considered relevant; other features present in the general area may have been omitted for ease of reference.

This report is confidential to the client, the client's legal advisor and the client's Mortgage lender, as defined in the Groundsure terms & conditions, and as such may be used by them for conveyancing or related purposes. Groundsure has no liability toward any person or organisation not party to commissioning this report. This report or any part of it is not permitted to be reproduced, copied, altered or in any other way distributed by any other person or organisation.

Additional mine entry assessment is based on and limited to the data supplied by the Coal Authority at the time of production. In order to determine whether a property is within the likely zone of influence of a disused coal mine entry the following is considered: the actual or plotted position of the mine entry, its known or assumed diameter and the thickness of superficial deposits above rockhead. Where these figures are not known, assumptions based on established estimations have been made.



CON29M report licensing

This report contains Data provided by the Coal Authority. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure Limited and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure Limited prior to any re-use. Due to data collection methods and processing time, there may be a period of up to 2 weeks between the Coal Authority updating their data and it appearing within the Groundsure report.

The Law Society CON29M Coal Mining search enquiries are protected by copyright owned by The Law Society of 113 Chancery Lane, London WC2A 1PL.

© Crown Copyright (2023) Ordnance Survey Licence Number 0100035207. May contain British Geological Survey materials © NERC (2023).

This report may contain public sector information licensed under the Open Government Licence v3.0.

This report may contain plans and records held by the Coal Authority and made publicly available at the time of inspection which may include British Geological Survey and Ordnance Survey data.



Conveyancing Information Executive and our terms & conditions

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Groundsure Ltd, Nile House, Nile Street, Brighton, BN1 1HW. Tel: 01273 257 755. Email: info@groundsure.com ↗. Groundsure adheres to the Conveyancing Information Executive Standards.

The Standards

- Conveyancing Information Executive Members shall act in a professional and honest manner at all times in line with the Conveyancing Information Executive Standards and carry out the delivery of the Search with integrity and due care and skill.
- Compliance with the Conveyancing Information Executive Standards will be a condition within the Conveyancing Information Executive Member's Terms and Conditions.
- Conveyancing Information Executive Members will promote the benefits of and deliver the Search to the agreed standards and in the best interests of the customer and associated parties.

Complaints Advice

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 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 Standards.

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

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
- liaise, at your request, with anyone acting formally on your behalf

Complaints should be sent to:

Operations Director, Groundsure Ltd, Nile House, Nile Street, Brighton, BN1 1HW. Tel: 01273 257 755. 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.

Groundsure's Terms and Conditions can be viewed online at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗

Important consumer protection information

All of the advice and reports that Groundsure produces are covered by a comprehensive Remediation Contribution policy to ensure customers are protected, see www.groundsure.com/remediation ↗ for full details.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information in your report. To find out who they are and their areas of expertise see www.groundsure.com/sources-reference ↗.



Coal Mining Report Insurance Policy



Coal Mining Report Insurance Policy

The Schedule

Policy Number: The Reference contained in the **Coal Mining Search Report**

Premium: £1.40 inclusive of Insurance Premium Tax at 12%

Property: The property which is the subject of the **Coal Mining Search Report**

Limit of Indemnity: £100,000 increasing by 10% compound per annum on each anniversary of and for the first 10 years following the **Commencement Date**

Commencement Date: The date of the **Coal Mining Search Report**

You/Your:

1. A purchaser of the **Property**
2. A lender providing a **Mortgage** in connection with a purchase of the **Property**
3. A lender providing a **Mortgage** by way of a re-mortgage of the **Property**

Definitions

Where a word is defined below or in the schedule it shall carry the same meaning wherever it appears in bold text in this policy

Insured Use: The continued use of the **Property** as a single house or flat or a single commercial premises

Market Value: The value as determined by a surveyor appointed by agreement between **You** and **Us** or (in default of agreement) the President for the time being of the Royal Institution of Chartered Surveyors

Mortgage: A mortgage or charge secured on the **Property** by an institutional mortgage lender

Coal Mining Search Report: The coal mining search report attached to this policy

Search: An official search comprising a search in form CON29M (2018) being mining searches relating to coal and brine in the area in which the **Property** is situated

We/Our/Us:

Zurich Insurance plc. A public limited company incorporated in Ireland. Registration No. 13460. Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland. UK Branch registered in England and Wales Registration No. BR7985. UK Branch Head Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire PO15 7JZ.

Zurich Insurance plc is authorised by the Central Bank of Ireland and authorised and subject to limited regulation by the Financial Conduct Authority. Details about the extent of our authorisation by the Financial Conduct Authority are available from us on request. Our FCA Firm Reference Number is 203093.

Communications may be monitored or recorded to improve our service and for security and regulatory purposes.

© Copyright – Zurich Insurance plc 2018. All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited except as allowed under copyright laws.



Your Policy

This is a legal document and should be kept in a safe place.

This policy is an agreement between **You** and **Us** and cover is provided subject to the payment of the **Premium**.

You must read this policy and its conditions, exclusions, schedule and any endorsements as one contract. Please read all of them to make sure that they provide the cover **You** require. If they do not, please contact **Us** or **Your** insurance adviser who arranged the policy for **You**.

When **You** take out and make changes to the cover provided by this policy, **You** must take reasonable care to ensure that **You** accurately answer any questions which **We** ask of **You** and that any information **You** give **Us** is accurate. If **You** are taking out this policy for purposes which are mainly related to **Your** trade, business or profession, **You** must also let **Us** know about all facts which are material to **Our** decision to provide **You** with insurance. Failure to meet these obligations could result in this policy being invalidated, a claim not being paid, or an additional premium being charged.

Fair presentation of the risk

a) At inception of this policy and also whenever changes are made to it at **Your** request **You** must:

- i) where **You** have taken out this policy for purposes which are wholly or mainly related to **Your** trade, business or profession, disclose to **Us** all material facts in a clear and accessible manner and not misrepresent any material facts, and
- ii) where **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, take reasonable care not to misrepresent any material facts.

b) If **You** do not comply with clause a) of this condition **We** may:

- i) avoid this policy which means that **We** will treat it as if it had never existed and refuse all claims where any non-disclosure or misrepresentation by **You** is proven by **Us** to be deliberate or reckless in which case **We** will not return the premium paid by **You**; and
- ii) recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred.

c) If **You** do not comply with clause a) of this condition and the non-disclosure or misrepresentation is not deliberate or reckless this policy may be affected in one or more of the following ways depending on what **We** would have done if **We** had known about the facts which **You** failed to disclose or misrepresented:

- i) if **We** would not have provided **You** with any cover **We** will have the option to:
 1. avoid the policy which means that **We** will treat it as if it had never existed and repay the premium paid; and
 2. recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred
- ii) if **We** would have applied different terms to the cover **We** will have the option to treat this policy as if those different terms apply. **We** may recover any payments made by **Us** on claims which have already been paid to the extent that such claims would not have been payable had such additional terms been applied
- iii) if **We** would have charged **You** a higher premium for providing the cover **We** will charge **You** the additional premium which **You** must pay in full.

d) If any insured person, other than **You**, is responsible for a misrepresentation or failure to make a fair presentation of the risk, **We** will invoke the remedies available to **Us** under this condition as against that particular person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

NB: For the purposes of the duty of disclosure stated in paragraphs a) i) and ii) above the content of the **Coal Mining Search Report** will be deemed to satisfy **Your** disclosure obligations.

Cover

1. **You** are in the process of purchasing the **Property** relying on the **Coal Mining Search Report** and/or
2. **You** (being a lender) have agreed to provide a **Mortgage** in connection with **Your** borrower's purchase or re-mortgage of the **Property** relying on the **Coal Mining Search Report**.

We will pay the following losses sustained by **You** arising out of the **Property** being affected by any matter which would have been revealed by a **Search** had one been carried out on the date of the **Coal Mining Search Report** but which was not revealed by the **Coal Mining Search Report**:



1. any reduction in **Market Value** of the **Property** calculated at the date **You** become aware of the matter(s) and/or loss in connection with a **Mortgage** as a result of such reduction.
2. all other costs and expenses including out of court settlement costs incurred by **Us** or by **You** with **Our** prior written agreement.

Waiver of Breach of Policy Condition

We will not exercise **Our** right to avoid **Our** liability to **You** in respect of loss where **You** have inadvertently breached any term or condition of the policy provided that such breach does not prejudice **Our** rights and remedies under the policy or otherwise directly or indirectly result in or increase the amount of any loss.

Protection for Mortgagees and Successors in Title

We will not avoid **Our** liability to make a payment to **You** solely because another person breaches the terms and conditions of this policy, provided such breach was not committed on **Your** behalf or with **Your** agreement, and **We** will invoke the remedies available to **Us** under the Policy as against that other person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

Joint Insured

Any party insured under this policy standing in the relation of parent company, subsidiary company, associated company, branch office or joint venture partner to each other will be deemed to be joint insured for the purposes of this policy and jointly liable and responsible for any breach of any terms and conditions of this policy. If there is any inconsistency between this clause and any other term of this policy, this clause shall prevail.

Exclusions

We will not pay for any:

1. amount in excess of the **Limit of Indemnity**.
2. loss which would be recoverable under a household buildings insurance policy.
3. loss arising from any matter that **You** were aware of at the **Commencement Date**.
4. loss if the **Property** is used for any purpose other than the **Insured Use**.

Claims Conditions and How to Claim

1. **You** must:

- i) give **Us** written notice as soon as possible of any potential or actual claim or any circumstances likely to result in a claim. Please provide the policy number, **Your** name, the full address of the **Property** and a brief description of the incident that has occurred. Notifications should be sent to: Speciality Lines Claims Team, Zurich Insurance, 8th Floor, 70 Mark Lane, London, EC3R 7NQ. Email: claims@uk.zurich.com ↗, Enquiry line: telephone 0207 648 3523
- ii) pass all court documents and/or other communications to **Us** as soon as possible after receipt
- iii) not deal with, make any admission of liability or attempt to settle a claim without **Our** prior written agreement.
- iv) agree to and carry out at **Our** expense all things necessary to minimise any loss.
- v) provide all information and assistance that **We** may require to help defend and settle the claim.

2. **We** are entitled to:

- i) decide how to settle or defend a claim and may carry out proceedings in the name of any person insured under this policy, including proceedings for recovering any claim.
- ii) pay to **You** at any time, an amount equal to the **Limit of Indemnity** or any lower amount for which the claim can be settled, after deduction of any sum already paid. **We** may then give up control of and have no further liability in connection with the claim.

3. If **We** admit liability for a claim but there is a dispute as to the amount to be paid the dispute will be referred to an arbitrator. The arbitrator will be appointed jointly by **You** and **Us** in accordance with the law at the time. **You** may not take any legal action against **Us** over the dispute before the arbitrator has reached a decision.

4. If **You** or anyone acting on Your behalf:



- a) makes a fraudulent or exaggerated claim under this policy; or
- b) uses fraudulent means or devices including the submission of false or forged documents in support of a claim whether or not the claim is itself genuine; or
- c) makes a false statement in support of a claim whether or not the claim is itself genuine; or
- d) submits a claim under this policy for loss or damage which **You** or anyone acting on **Your** behalf or in connivance with **You** deliberately caused; or
- e) realises after submitting what **You** reasonably believed was a genuine claim under this policy and then fails to tell **Us** that **You** have not suffered any loss or damage; or
- f) suppresses information which **You** know would otherwise enable **Us** to refuse to pay a claim under this policy

We will be entitled to refuse to pay the whole of the claim and recover any sums that **We** have already paid in respect of the claim.

If any fraud is perpetrated by or on behalf of an insured person and not on behalf of **You** this condition should be read as if it applies only to that insured person's claim and references to this policy should be read as if they were references to the cover effected for that person alone and not to the policy as a whole.

5. If any claim is covered by any other insurance, **We** will not pay for more than **Our** share of that claim.

6. The most **We** will pay for any loss (or all losses in the aggregate), including costs and expenses agreed by **Us** is the **Limit of Indemnity**. Once **We** have paid a loss or losses equal to the amount of the **Limit of Indemnity**, **We** will have no further liability under this policy.

General Conditions

1. Neither **You** (nor anyone acting on **Your** behalf) must disclose the existence of this policy to any other party except **Your** legal and other professional advisers, prospective purchasers, lessees and tenants of the **Property**, their respective mortgagees, legal and other professional advisers.
2. In the UK the law allows both **You** and **Us** to choose the law applicable to the contract. This contract will be subject to the relevant law of England and Wales, Scotland, Northern Ireland, the Isle of Man or the Channel Islands depending upon the Property address stated in the Schedule. If there is any dispute as to which law applies it will be English law. The parties agree to submit to the exclusive jurisdiction of the English courts.
3. Notwithstanding any other terms of this policy **We** will be deemed not to provide cover nor will **We** make any payment or provide any service or benefit to **You** or any other party to the extent that such cover, payment, service, benefit and/or any business or activity of **Yours** would violate any applicable trade or economic sanctions law or regulation.

Cancellation Clause

If **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, **You** may cancel this policy within 14 days of receiving the policy by writing to **Us** and in such event **We** may, at **Our** discretion, charge **You** for the time that **You** have been on cover. Any refund will be made to the party who paid the premium. If **You** do cancel, **You** may be in breach of the terms of **Your** mortgage or the terms of the contract for the sale of **Your** property. If **You** are in doubt, **You** may wish to seek legal advice prior to cancellation.

Fair Processing and Complaints Procedure

Our Complaints Procedure

Our commitment to customer service

We are committed to providing a high level of customer service. If you feel we have not delivered this, we would welcome the opportunity to put things right for you.

Who to contact in the first instance

Many concerns can be resolved straight away. Therefore in the first instance, please get in touch with your usual contact at Zurich or your broker or insurance intermediary, as they will generally be able to provide you with a prompt response to your satisfaction.

Contact details will be provided on correspondence that we or our representatives have sent you.

Many complaints can be resolved within a few days of receipt

If we can resolve your complaint to your satisfaction within the first few days of receipt, we will do so. Otherwise, we will keep you



updated with progress and will provide you with our decision as quickly as possible.

Next steps if you are still unhappy

If you are not happy with the outcome of your complaint, you may be able to ask the Financial Ombudsman Service to review your case.

We will let you know if we believe the ombudsman service can consider your complaint when we provide you with our decision. The service they provide is free and impartial, but you would need to contact them within 6 months of the date of our decision.

More information about the ombudsman and the type of complaints they can review is available via their website www.financial-ombudsman.org.uk ↗.

You can also contact them as follows:

Post: Financial Ombudsman Service, Exchange Tower, London, E14 9SR

Telephone: 08000 234567 (free on mobile phones and landlines)

Email: complaint.info@financial-ombudsman.org.uk ↗

If the Financial Ombudsman Service is unable to consider your complaint, you may wish to obtain advice from the Citizens Advice Bureau or seek legal advice.

The Financial Services Compensation Scheme (FSCS)

We are covered by the Financial Services Compensation Scheme (FSCS) which means that you may be entitled to compensation if we are unable to meet our obligations to you. Further information is available on www.fscs.org.uk ↗ or by contacting the FSCS directly on 0800 678 1100.

How we use your information

Who controls your personal information

This notice tells you how Zurich Insurance plc ('Zurich'), as data controller, will deal with your personal information. Where Zurich introduces you to a company outside the group, that company will tell you how your personal information will be used.

You can ask for further information about our use of your personal information or complain about its use in the first instance, by contacting our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com ↗.

If you have any concerns regarding our processing of your personal information, or are not satisfied with our handling of any request by you in relation to your rights, you also have the right to make a complaint to the Information Commissioner's Office. Their address is: First Contact Team, Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, SK9 5AF.

What personal information we collect about you

We will collect and process the personal information that you give us by phone, e-mail, filling in forms, including on our website, and when you report a problem with our website. We also collect personal information from your appointed agent such as your trustee, broker, intermediary or financial adviser in order to provide you with the services you have requested and from other sources, such as credit reference agencies and other insurance companies, for verification purposes. We will also collect information you have volunteered to be in the public domain and other industry-wide sources. We will only collect personal information that we require to fulfil our contractual or legal requirements unless you consent to provide additional information. The type of personal information we will collect includes; basic personal information (i.e. name, address and date of birth), occupation and financial details, health and family information, claims and convictions information and where you have requested other individuals be included in the arrangement, personal information about those individuals.

If you give us personal information on other individuals, this will be used to provide you with a quotation and/or contract of insurance and/or provision of financial services. You agree you have their permission to do so. Except where you are managing the contract on another's behalf, please ensure that the individual knows how their personal information will be used by Zurich. More information about this can be found in the 'How we use your personal information' section.

How we use your personal information

We and our selected third parties will only collect and use your personal information (i) where the processing is necessary in connection with providing you with a quotation and/or contract of insurance and/or provision of financial services that you have requested; (ii) to meet our legal or regulatory obligations; or (iii) for our 'legitimate interests'. It is in our legitimate interests to collect



your personal information as it provides us with the information that we need to provide our services to you more effectively including providing you with information about our products and services. We will always ensure that we keep the amount of information collected and the extent of any processing to the absolute minimum to meet this legitimate interest. Examples of the purposes for which we will collect and use your personal information are:

1. to provide you with a quotation and/or contract of insurance;
2. to identify you when you contact us;
3. to deal with administration and assess claims;
4. to make and receive payments;
5. to obtain feedback on the service we provide to you;
6. to administer our site and for internal operations including troubleshooting, data analysis, testing, research, statistical and survey purposes;
7. for fraud prevention and detection purposes.

We will contact you to obtain consent prior to processing your personal information for any other purpose, including for the purposes of targeted marketing unless we already have consent to do so.

Who we share your personal information with

Where necessary, we will share the personal information you gave us for the purposes of providing you with the goods and services you requested with the types of organisations described below:

associated companies including reinsurers, suppliers and service providers;
introducers and professional advisers;
regulatory and legal bodies;
survey and research organisations;
credit reference agencies;
healthcare professionals, social and welfare organisations; and
other insurance companies

Or, in order to meet our legal or regulatory requirements, with the types of organisations described below:

regulatory and legal bodies;
central government or local councils;
law enforcement bodies, including investigators;
credit reference agencies; and
other insurance companies

How we use your personal information for websites and email communications

When you visit one of our websites we may collect information from you such as your email address or IP address. This helps us to track unique visits and monitor patterns of customer website traffic, such as who visits and why they visit.

We use cookies and/or pixel tags on some pages of our website. A cookie is a small text file sent to your computer. A pixel tag is an invisible tag placed on certain pages of our website but not on your computer. Pixel tags usually work together with cookies to assist us to provide you with a more tailored service. This allows us to monitor and improve our email communications and website. Useful information about cookies, including how to remove them, can be found on our websites.

How we transfer your personal information to other countries

Where we transfer your personal information to countries that are outside of the UK and the European Union (EU) we will ensure that it is protected and that the transfer is lawful. We will do this by ensuring that the personal information is given adequate safeguards by using 'standard contractual clauses' which have been adopted or approved by the UK and the EU, or other solutions that are in line with the requirements of European data protection laws.

A copy of our security measures for personal information transfers can be obtained from our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN, or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com ↗.

How long we keep your personal information for

We will retain and process your personal information for as long as necessary to meet the purposes for which it was originally



collected. These periods of time are subject to legal, tax and regulatory requirements or to enable us to manage our business.

Your data protection rights

You have a number of rights under the data protection laws, namely:

- to access your data (by way of a subject access request);
 - to have your data rectified if it is inaccurate or incomplete;
 - in certain circumstances, to have your data deleted or removed;
 - in certain circumstances, to restrict the processing of your data;
 - a right of data portability, namely to obtain and reuse your data for your own purposes across different services;
 - to object to direct marketing;
 - not to be subject to automated decision making (including profiling), where it produces a legal effect or a similarly significant effect on you;
 - to claim compensation for damages caused by a breach of the data protection legislation.
- if we are processing your personal information with your consent, you have the right to withdraw your consent at any time.

We will, for the purposes of providing you with a contract of insurance, processing claims, reinsurance and targeted marketing, process your personal information by means of automated decision making and profiling where we have a legitimate interest or you have consented to this.

What happens if you fail to provide your personal information to us

If you do not provide us with your personal information, we will not be able to provide you with a contract or assess future claims for the service you have requested.

Fraud prevention and detection

In order to prevent and detect fraud we may at any time:

- check your personal data against counter fraud systems
- use your information to search against various publicly available and third party resources
- use industry fraud tools including undertaking credit searches and to review your claims history
- share information about you with other organisations including but not limited to the police, the Insurance Fraud Bureau (IFB), other insurers and other interested parties.

If you provide false or inaccurate information and fraud is identified, the matter will be investigated and appropriate action taken. This may result in your case being referred to the Insurance Fraud Enforcement Department (IFED) or other police forces and fraud prevention agencies. You may face fines or criminal prosecution. In addition, Zurich may register your name on the Insurance Fraud Register, an industry-wide fraud database.

Claims history

We may pass information relating to claims or potential claims to any relevant database. We and other insurers may search these databases when you apply for insurance, when claims or potential claims are notified to us or at time of renewal to validate your claims history or that of any other person or property likely to be involved in the policy or claim.

This helps to check information provided and prevent fraudulent claims.

