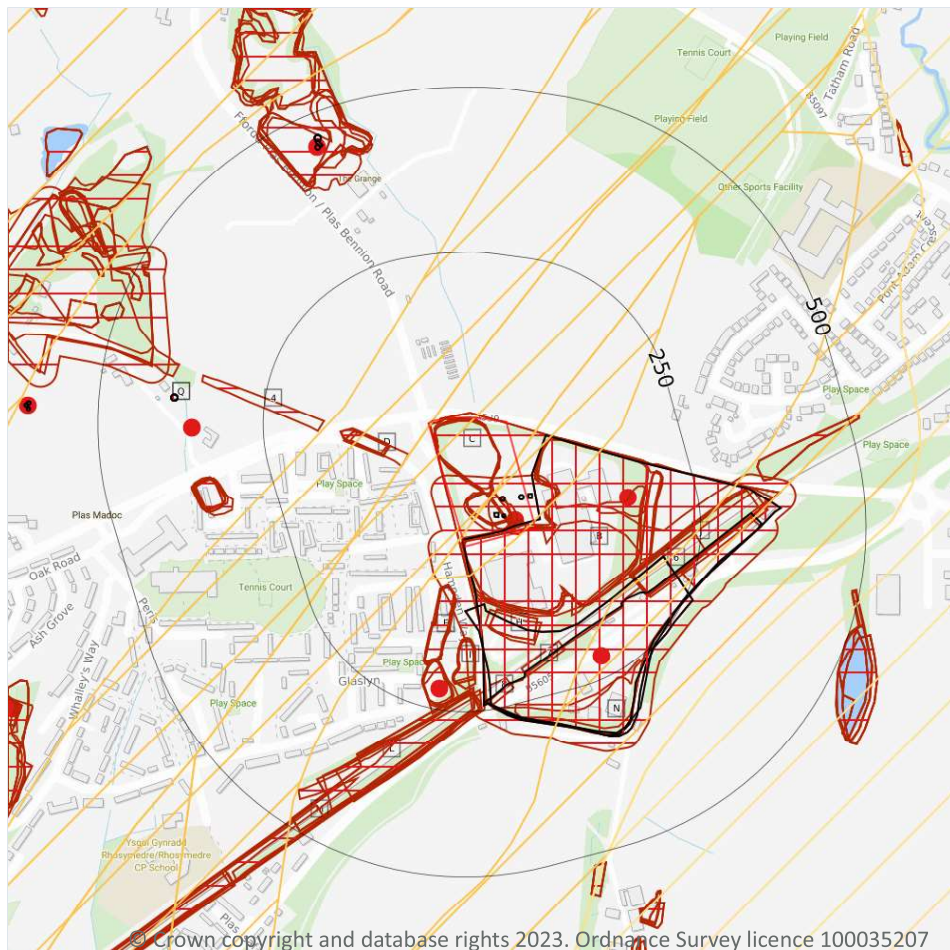


18 Mining and ground workings



- 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

6

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 104](#) >

ID	Location	Details	Description
A	On site	Name: Wynnstay Colliery, No 3 Shaft Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd 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
G	147m E	Name: Wynnstay Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd Commodity: Sandstone 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
F	217m SE	Name: Wynnstay Colliery, Nos 1 & 2 Shafts Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd 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
K	218m S	Name: Plas Madoc Lodge Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd Commodity: Sandstone 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
10	358m W	Name: Plas-yn-Wern Shaft Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd 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



ID	Location	Details	Description
R	450m NW	Name: Plas Madoc Colliery Address: Cefn-mawr, Ruabon, WREXHAM, Clwyd 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	64
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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.

Features are displayed on the Mining and ground workings map on [page 104 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Unspecified Heap	1960	1:10560
A	On site	Unspecified Heap	1873	1:10560
A	On site	Unspecified Heap	1898	1:10560
B	On site	Refuse Heap	1960	1:10560
B	On site	Unspecified Heap	1938	1:10560
B	On site	Colliery	1938	1:10560
B	On site	Unspecified Heap	1938	1:10560
B	On site	Colliery	1938	1:10560
B	On site	Unspecified Heap	1949	1:10560
B	On site	Colliery	1949	1:10560
B	On site	Unspecified Heap	1898	1:10560
B	On site	Colliery	1898	1:10560
B	On site	Unspecified Ground Workings	1910	1:10560
C	On site	Unspecified Ground Workings	1960	1:10560
C	On site	Unspecified Heaps	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Unspecified Heaps	1938	1:10560
C	On site	Unspecified Heap	1949	1:10560
D	42m W	Cuttings	1873	1:10560
E	64m S	Unspecified Heap	1938	1:10560
E	64m S	Unspecified Heap	1938	1:10560
E	65m S	Unspecified Heap	1960	1:10560
D	65m W	Cuttings	1938	1:10560
D	67m W	Cuttings	1960	1:10560
D	67m W	Cuttings	1910	1:10560
D	67m W	Cuttings	1949	1:10560
E	68m S	Unspecified Heap	1910	1:10560
E	68m S	Unspecified Heap	1949	1:10560
F	92m S	Colliery	1873	1:10560
G	97m E	Unspecified Old Quarry	1898	1:10560
H	102m S	Cuttings	1949	1:10560
H	105m S	Cuttings	1974	1:10000
H	105m S	Cuttings	1985	1:10000
I	138m S	Unspecified Heap	1960	1:10560
I	139m S	Unspecified Heap	1938	1:10560
I	139m S	Unspecified Heap	1938	1:10560
I	140m S	Unspecified Heap	1910	1:10560
I	142m S	Unspecified Heap	1949	1:10560
4	158m W	Cuttings	1873	1:10560
J	159m SE	Cuttings	1960	1:10560
J	161m SE	Cuttings	1938	1:10560
J	162m SE	Cuttings	1910	1:10560
J	163m SE	Cuttings	1949	1:10560
G	163m E	Unspecified Heap	1960	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
G	163m E	Unspecified Heap	1949	1:10560
6	165m SE	Cuttings	1898	1:10560
J	169m SE	Cuttings	1873	1:10560
F	173m SE	Colliery	1910	1:10560
7	174m SE	Cuttings	1873	1:10560
K	175m S	Unspecified Old Quarry	1960	1:10560
K	176m S	Unspecified Old Quarry	1938	1:10560
K	178m S	Unspecified Old Quarry	1910	1:10560
K	179m S	Unspecified Old Quarry	1949	1:10560
K	184m S	Unspecified Old Quarry	1898	1:10560
8	209m S	Cuttings	1873	1:10560
L	214m S	Cuttings	1994	1:10000
L	214m S	Cuttings	1974	1:10000
L	214m S	Cuttings	1985	1:10000
L	218m S	Cuttings	1898	1:10560
M	219m S	Cuttings	1938	1:10560
L	220m S	Cuttings	1873	1:10560
L	220m S	Cuttings	1960	1:10560
L	221m S	Cuttings	1949	1:10560
M	222m S	Cuttings	1910	1:10560
N	250m S	Unspecified Ground Workings	1910	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

72

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 104](#) >



ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Old Coal Shaft	1949	1:10560
A	On site	Unspecified Shaft	1873	1:10560
A	On site	Unspecified Old Shaft	1960	1:10560
A	On site	Unspecified Old Shaft	1960	1:10560
B	On site	Colliery	1949	1:10560
A	2m SE	Air Shaft	1898	1:10560
F	92m S	Colliery	1873	1:10560
F	170m SE	Unspecified Disused Mine	1960	1:10560
Q	381m W	Unspecified Disused Shaft	1994	1:10000
Q	381m W	Unspecified Disused Shaft	1974	1:10000
Q	381m W	Unspecified Disused Shaft	1985	1:10000
R	446m NW	Unspecified Old Shaft	1898	1:10560
R	449m NW	Unspecified Old Shaft	1960	1:10560
R	458m NW	Unspecified Disused Shaft	1994	1:10000
R	458m NW	Unspecified Disused Shaft	1974	1:10000
R	458m NW	Unspecified Disused Shaft	1985	1:10000
AA	603m W	Old Clay Shaft	1960	1:10560
AA	603m W	Old Clay Shaft	1960	1:10560
AA	606m W	Old Clay Shaft	1949	1:10560
-	740m N	Unspecified Old Shafts	1960	1:10560
-	755m N	Unspecified Old Shafts	1960	1:10560
-	757m N	Old Coal Shafts	1949	1:10560
-	761m N	Unspecified Disused Shaft	1994	1:10000
-	761m N	Unspecified Disused Shaft	1974	1:10000
-	761m N	Unspecified Disused Shaft	1985	1:10000
-	765m N	Unspecified Disused Shafts	1994	1:10000
-	765m N	Unspecified Disused Shafts	1974	1:10000
-	765m N	Unspecified Disused Shafts	1985	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
-	765m N	Unspecified Old Shafts	1960	1:10560
-	772m N	Old Coal Shafts	1949	1:10560
-	772m N	Unspecified Old Shafts	1898	1:10560
-	776m W	Unspecified Old Shaft	1960	1:10560
-	778m W	Old Coal Shaft	1949	1:10560
-	856m NW	Old Coal Shaft	1949	1:10560
-	859m NW	Unspecified Old Shaft	1960	1:10560
-	867m N	Old Coal Shaft	1949	1:10560
-	867m N	Unspecified Old Shafts	1898	1:10560
-	869m N	Unspecified Old Shaft	1960	1:10560
-	870m NW	Unspecified Old Shaft	1960	1:10560
-	873m NW	Old Coal Shaft	1949	1:10560
-	873m NW	Unspecified Old Shafts	1898	1:10560
-	873m N	Unspecified Disused Shaft	1994	1:10000
-	873m N	Unspecified Disused Shaft	1974	1:10000
-	873m N	Unspecified Disused Shaft	1985	1:10000
-	874m NW	Unspecified Disused Shaft	1994	1:10000
-	874m NW	Unspecified Disused Shaft	1974	1:10000
-	874m NW	Unspecified Disused Shaft	1985	1:10000
-	920m W	Old Coal Shaft	1949	1:10560
-	920m W	Unspecified Old Shaft	1898	1:10560
-	921m W	Unspecified Old Shaft	1960	1:10560
-	922m W	Unspecified Old Shafts	1960	1:10560
-	926m NW	Unspecified Old Shaft	1960	1:10560
-	927m W	Unspecified Old Shafts	1960	1:10560
-	929m NW	Old Coal Shaft	1949	1:10560
-	929m NW	Unspecified Old Shaft	1898	1:10560
-	929m W	Unspecified Disused Shafts	1974	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
-	929m W	Unspecified Disused Shafts	1985	1:10000
-	930m W	Old Coal Shafts	1949	1:10560
-	931m W	Unspecified Old Shafts	1960	1:10560
-	932m NW	Unspecified Disused Shaft	1994	1:10000
-	932m NW	Unspecified Disused Shaft	1974	1:10000
-	932m NW	Unspecified Disused Shaft	1985	1:10000
-	934m W	Old Coal Shafts	1949	1:10560
-	954m W	Unspecified Old Shafts	1960	1:10560
-	956m W	Old Coal Shafts	1949	1:10560
-	983m W	Unspecified Disused Shafts	1974	1:10000
-	983m W	Unspecified Disused Shafts	1985	1:10000
-	986m W	Unspecified Old Shafts	1960	1:10560
-	987m W	Old Coal Shafts	1949	1:10560
-	988m W	Unspecified Old Shafts	1960	1:10560
-	990m W	Old Coal Shafts	1949	1:10560
-	993m W	Unspecified Old Shaft	1898	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

11

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 104](#) >

ID	Location	Name	Commodity	Class	Likelihood
1	On site	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.
2	On site	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.
3	On site	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.
5	160m SE	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.
9	356m SE	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
12	516m SW	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.



ID	Location	Name	Commodity	Class	Likelihood
13	527m NW	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.
-	677m N	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.
-	720m E	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	930m W	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.
-	966m NW	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

0

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.

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
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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
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0
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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.

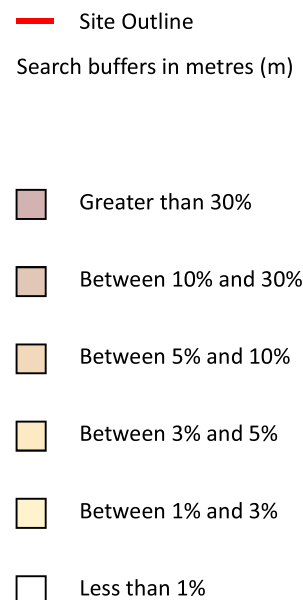
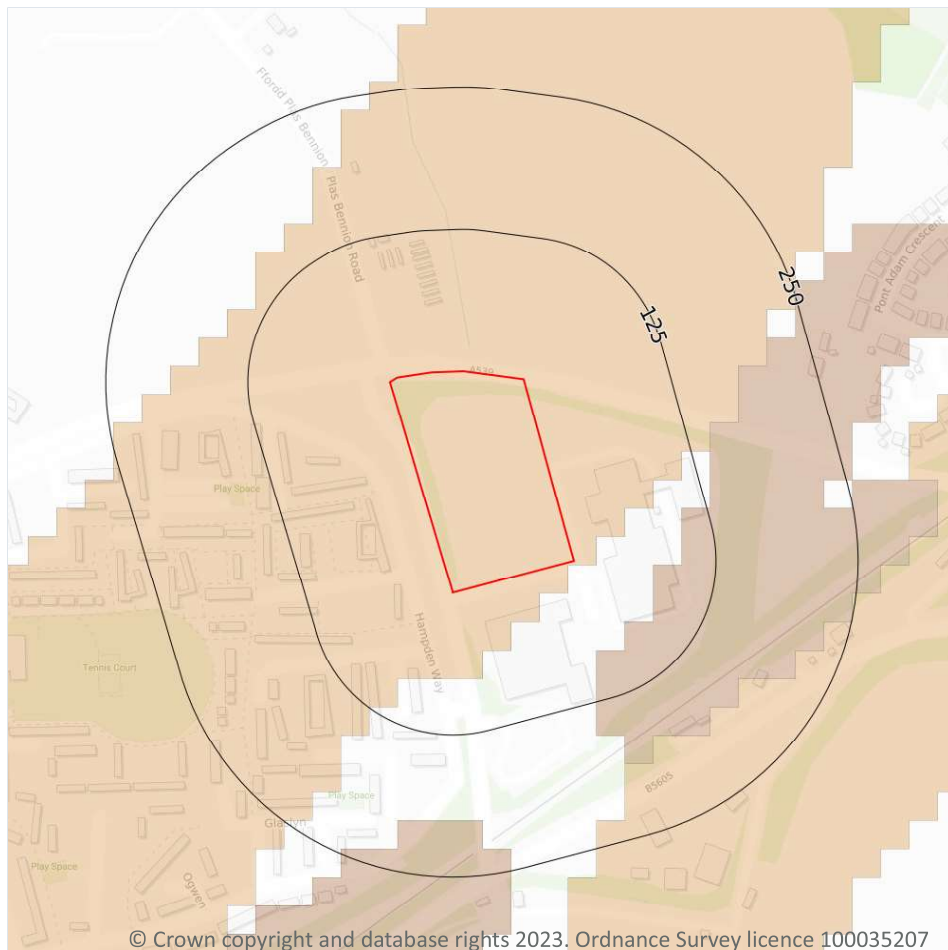
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 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 118](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 5% and 10%	Basic



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

7

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 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 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

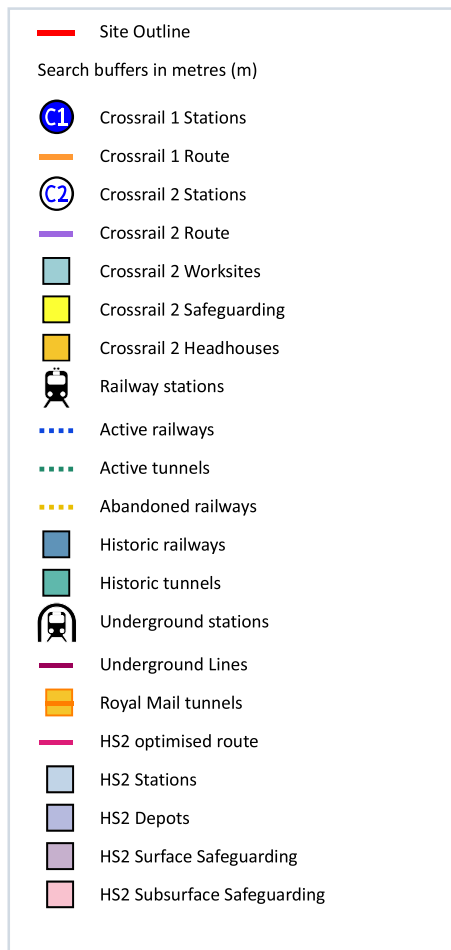
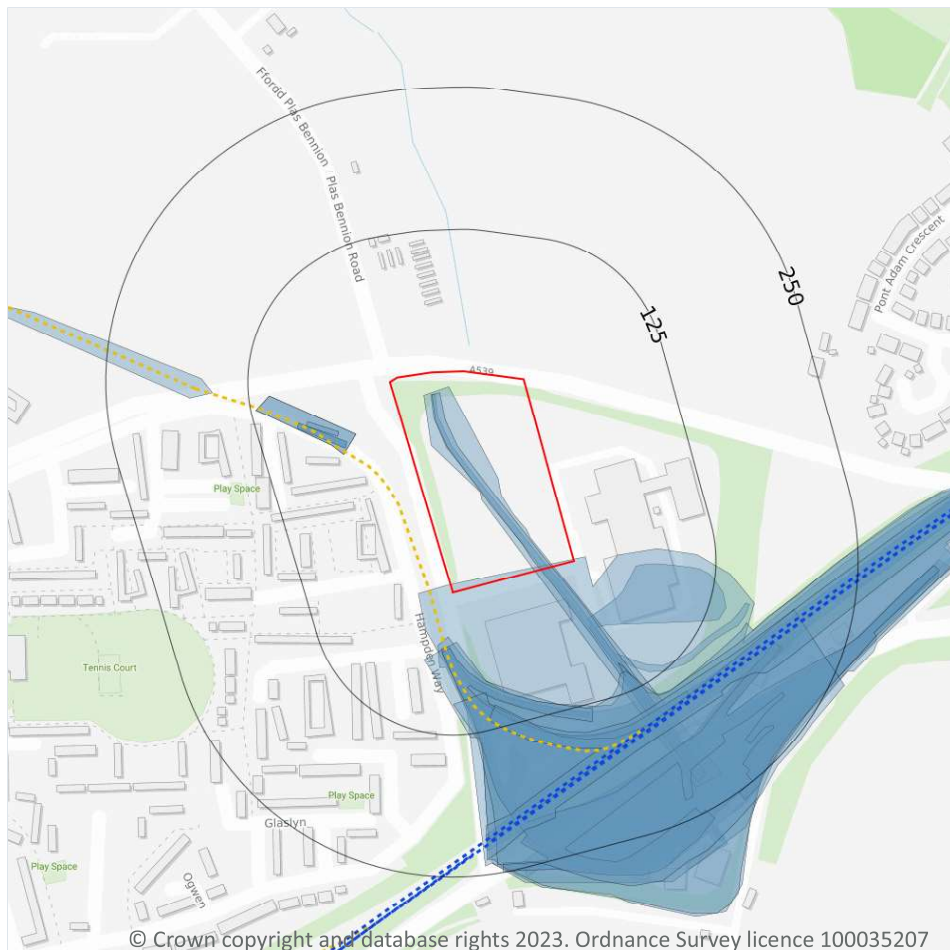
0

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



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

22

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 122](#) >

Location	Land Use	Year of mapping	Mapping scale
On site	Tramway Sidings	1912	2500
On site	Railway Sidings	1898	10560
On site	Tramway Sidings	1938	10560
On site	Tramway Sidings	1910	10560
39m S	Railway Sidings	1949	10560
42m W	Railway Sidings	1949	10560
42m W	Railway Sidings	1898	10560
43m S	Railway Sidings	1938	10560
47m S	Railway Sidings	1899	2500
47m S	Railway Sidings	1912	2500
48m S	Railway Sidings	1910	10560
51m W	Railway Sidings	1873	2500
51m W	Railway Sidings	1899	2500
51m W	Railway Sidings	1912	2500
56m W	Railway Sidings	1910	10560
80m S	Railway Sidings	1873	2500
92m S	Railway Sidings	1873	10560



Location	Land Use	Year of mapping	Mapping scale
95m S	Railway Sidings	1961	2500
97m S	Railway Sidings	1967	2500
105m S	Railway Sidings	1960	10560
156m W	Railway Sidings	1898	10560
178m SE	Railway Sidings	1912	2500

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

2

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

Features are displayed on the Railway infrastructure and projects map on [page 122 >](#)

Location	Description
20m SW	Razed
171m W	Abandoned

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

4

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

Features are displayed on the Railway infrastructure and projects map on [page 122 >](#)



Location	Name	Type
156m SE	Shrewsbury to Chester Line	rail
159m SE	Not given	Multi Track
160m SE	Shrewsbury to Chester Line	rail
230m S	Not given	Multi Track

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> ↗.

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