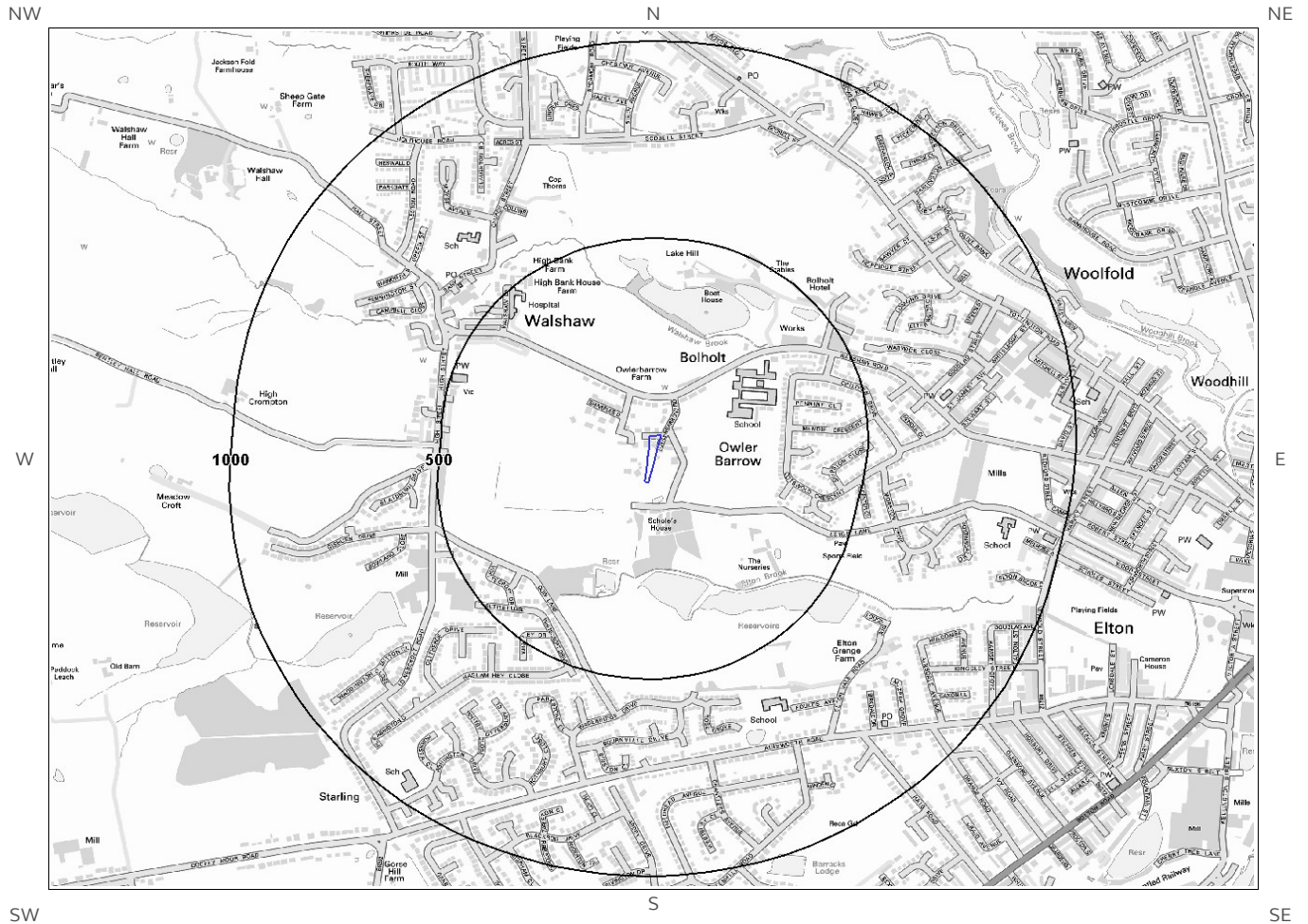
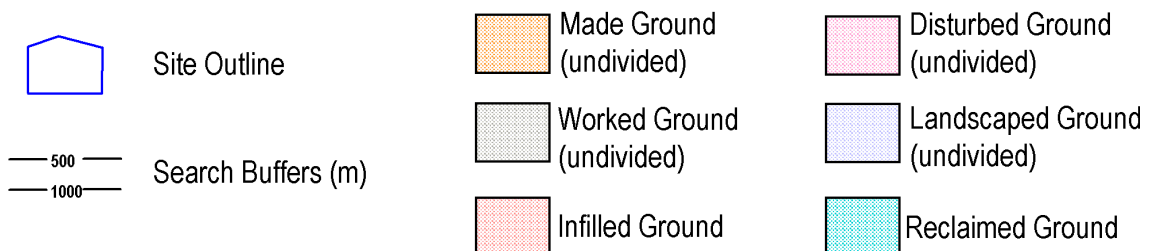


2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 085

2.1.1 Artificial/ Made Ground

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

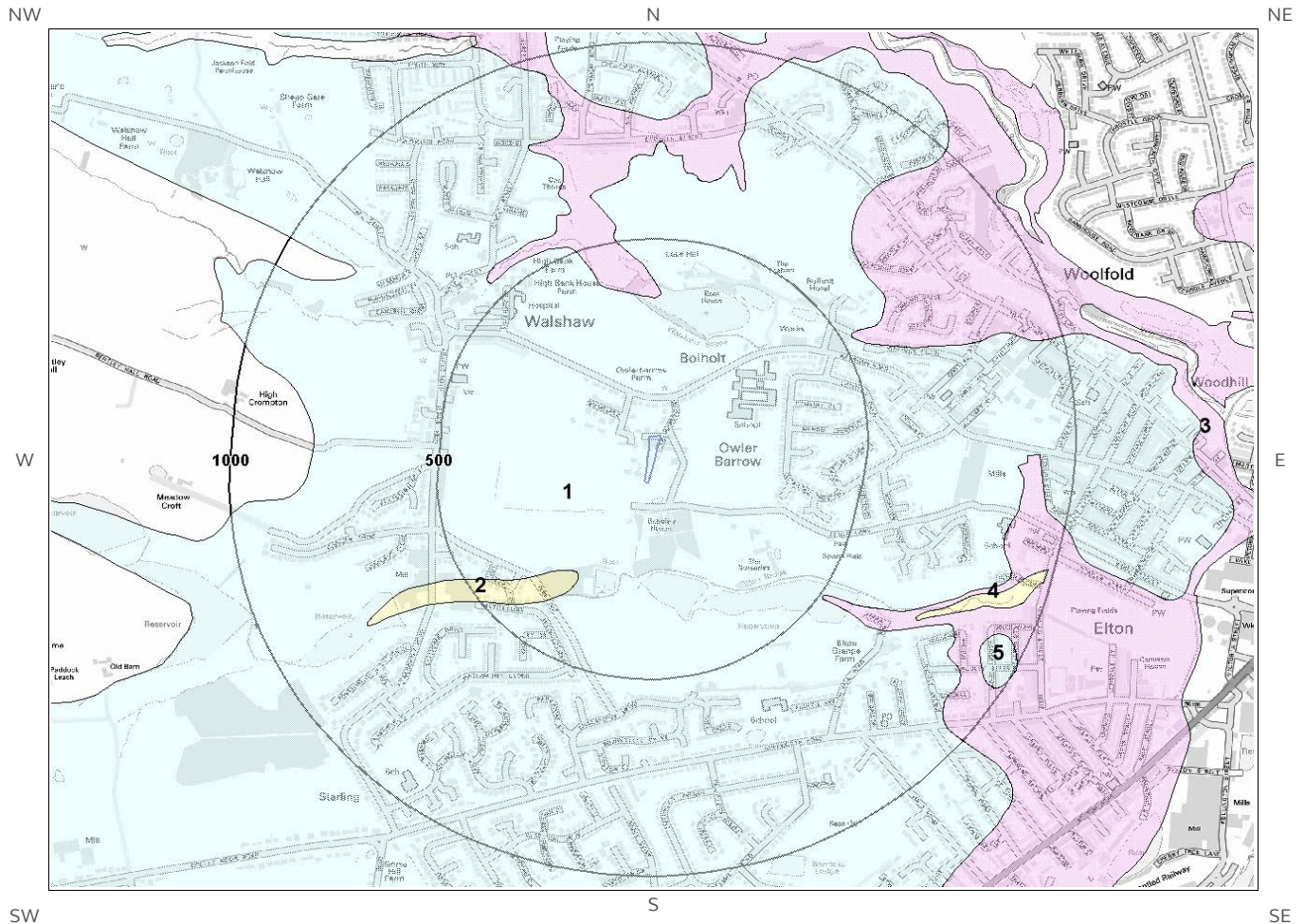
Database searched and no data found.

2.1.2 Permeability of Artificial Ground

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

Database searched and no data found.

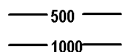
2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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Site Outline



Search Buffers (m)

2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

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

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
2	281.0	SW	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	351.0	N	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

2.2.2 Permeability of Superficial Ground

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

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	High	Low

2.2.3 Landslip

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

Database searched and no data found.

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

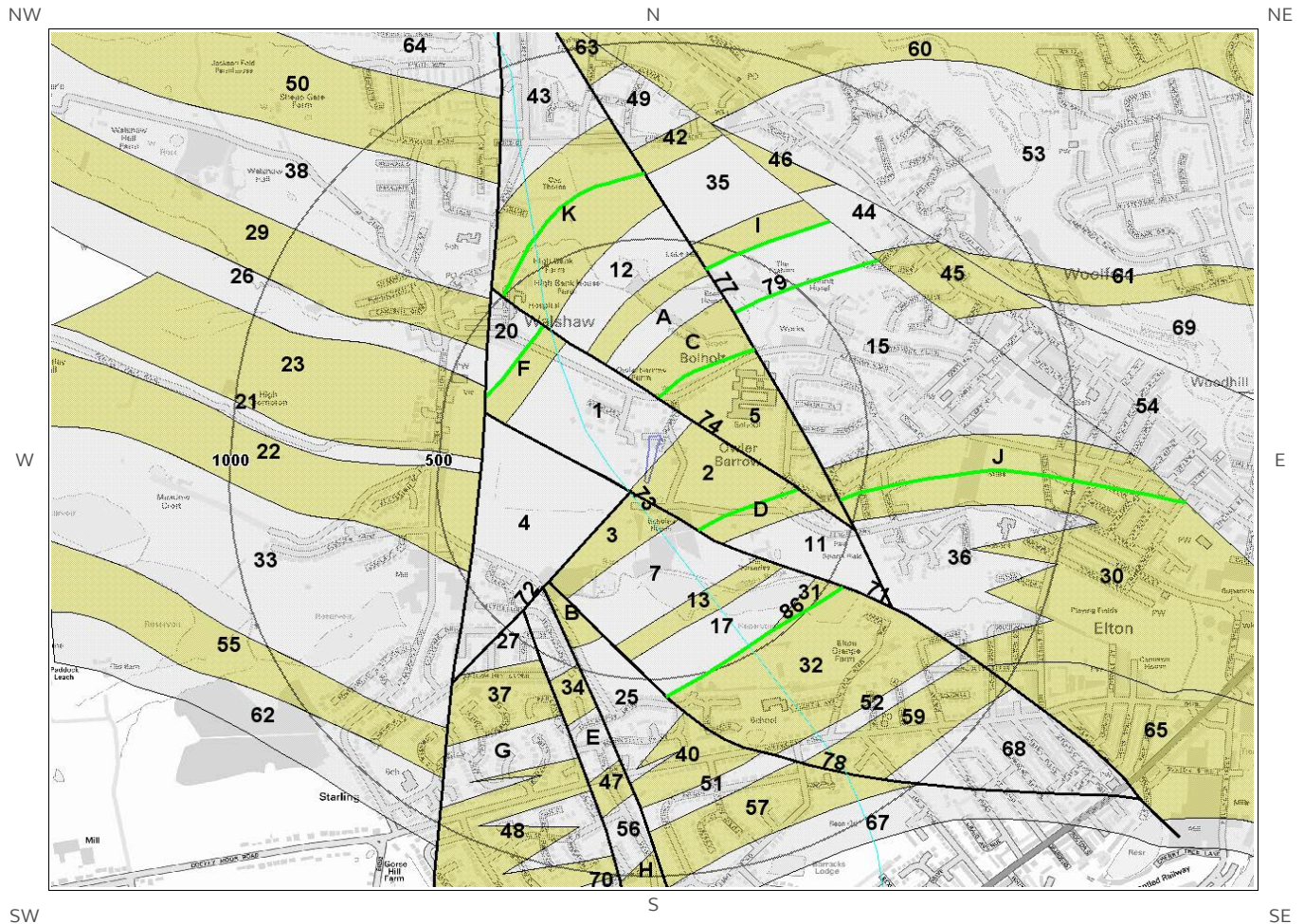
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

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

Database searched and no data found.

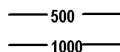
2.3 Bedrock and linear features map (1:50,000 scale)



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Site Outline



Search Buffers (m)

2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 085

2.3.1 Bedrock/Solid Geology

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

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	0.0	On Site	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
3	37.0	SW	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
4	41.0	SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
5	76.0	NE	TRBR-SDST	TRENCHBONE ROCK - SANDSTONE	WESTPHALIAN
6C	95.0	N	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
7	118.0	SE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
8A	156.0	N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
9D	171.0	SE	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
10A	211.0	NW	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
11	234.0	SE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	260.0	NW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
13	302.0	SE	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
14F	302.0	NW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
15	307.0	NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16B	344.0	SW	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
17	360.0	SE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
18K	361.0	NW	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
19B	363.0	SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
20	371.0	NW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
21	396.0	W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
22	396.0	W	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
23	397.0	W	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
24J	401.0	E	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
25	402.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
26	414.0	W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
27	438.0	SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
28I	438.0	N	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
29	448.0	NW	MLRS-SDST	MILNROW SANDSTONE - SANDSTONE	WESTPHALIAN
30	457.0	E	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
31	463.0	SE	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
32	478.0	SE	TRBR-SDST	TRENCHBONE ROCK - SANDSTONE	WESTPHALIAN
33	482.0	SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
34	490.0	S	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
35	491.0	N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
36	496.0	E	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

2.3.2 Permeability of Bedrock Ground

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

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	High	Low
0.0	On Site	Fracture	High	Low
37.0	SW	Fracture	High	Moderate

2.3.3 Linear features

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

Yes

ID	Distance	Direction	Category Description	Feature Description
71	39.0	SW	FAULT	Fault, inferred
72	40.0	SW	FAULT	Fault, inferred
73	45.0	SW	LANDFORM	Approximate margin of buried (superficial deposit-filled) channel or valley
74	76.0	NE	FAULT	Fault, inferred
75C	95.0	N	ROCK	Coal seam, inferred
76D	171.0	SE	ROCK	Coal seam, inferred
77	306.0	NE	FAULT	Fault, inferred
78	344.0	SW	FAULT	Fault, inferred
79	359.0	NE	ROCK	Coal seam, inferred
80E	363.0	SW	FAULT	Fault, inferred
81F	371.0	NW	ROCK	Coal seam, inferred
82G	396.0	W	FAULT	Fault, inferred
83H	438.0	SW	FAULT	Fault, inferred
84I	438.0	N	ROCK	Coal seam, inferred
85J	457.0	E	ROCK	Coal seam, inferred
86	478.0	SE	ROCK	Coal seam, inferred
87K	499.0	NW	ROCK	Coal seam, inferred

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

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

3 Radon Data

3.1 Radon Affected Areas

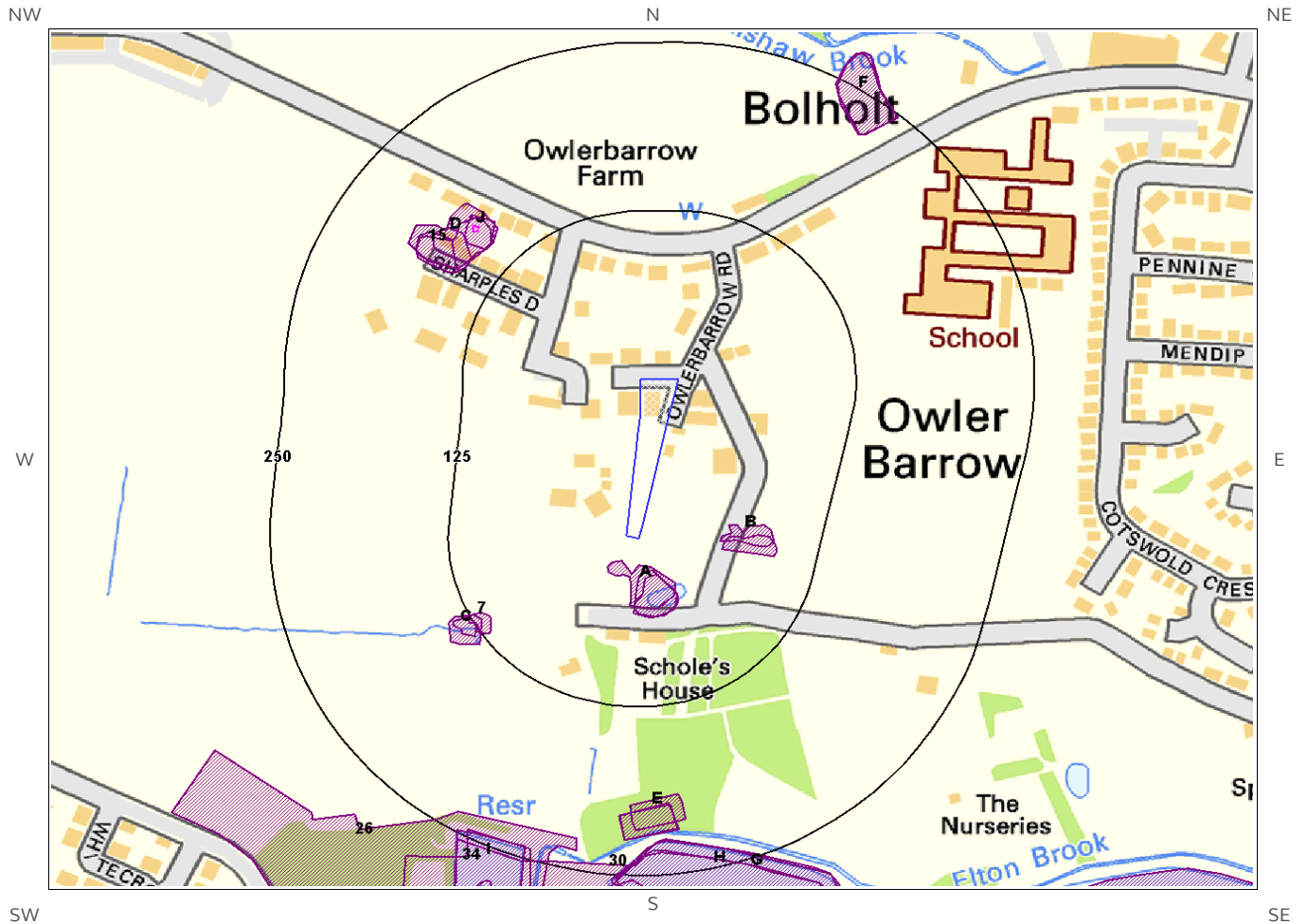
Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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

3.2 Radon Protection

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

4 Ground Workings map



Ground Workings Legend

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

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

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

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

ID	Distance (m)	Direction	NGR	Use	Date
1A	19.0	S	378123 411263	Ponds	1891
2A	25.0	S	378133 411256	Pond	1928
3A	25.0	S	378133 411256	Pond	1909
4A	29.0	S	378134 411255	Pond	1938
5B	57.0	E	378198 411300	Pond	1891
6B	59.0	E	378199 411292	Pond	1909
7	113.0	SW	378010 411235	Reservoir	1949
8C	119.0	SW	377999 411230	Reservoir	1928
9C	124.0	SW	377999 411232	Reservoir	1938
10J	145.0	NW	378010 411525	Unspecified Heap	1938
11D	145.0	NW	377991 411522	Unspecified Heap	1891
12D	146.0	NW	377991 411515	Unspecified Heap	1928
13D	146.0	NW	377991 411515	Unspecified Heap	1909
14D	149.0	NW	377990 411515	Unspecified Ground Workings	1949
15	153.0	NW	377970 411511	Unspecified Heap	1938
16E	192.0	S	378135 411095	Disused Filter Beds	1949
17E	197.0	S	378128 411088	Disused Filter Beds	1938
18E	199.0	S	378128 411087	Disused Filter Beds	1927
19E	199.0	S	378128 411087	Filter Beds	1908
20F	221.0	NE	378281 411627	Ponds	1938
21F	222.0	NE	378282 411628	Ponds	1928

ID	Distance (m)	Direction	NGR	Use	Date
22G	224.0	S	378364 411012	Ponds	1969
23G	224.0	S	378364 411012	Reservoirs	1974
24G	224.0	S	378364 411012	Reservoirs	1980
25H	225.0	S	378183 411011	Reservoir	1949
26	226.0	S	377936 411074	Sewage Works Air Compressing Station	1949
27H	232.0	S	378177 411004	Reservoir	1908
28H	232.0	S	378177 411004	Reservoir	1927
29H	232.0	S	378177 411004	Reservoir	1938
30	234.0	S	378125 411007	Reservoirs	1890
31I	241.0	S	378017 411056	Reservoir	1980
32I	241.0	S	378017 411056	Pond	1969
33I	241.0	S	378017 411056	Pond	1974
34	242.0	S	377985 411046	Reservoirs	1949

4.2 Historical Underground Working Features derived from Historical Mapping

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

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
35J	159.0	NW	378007 411528	Unspecified Old Shaft	1891
36J	159.0	NW	378007 411528	Old Coal Shaft	1909
Not shown	840.0	SE	378623 410620	Unspecified Old Shaft	1908

4.3 Current Ground Workings

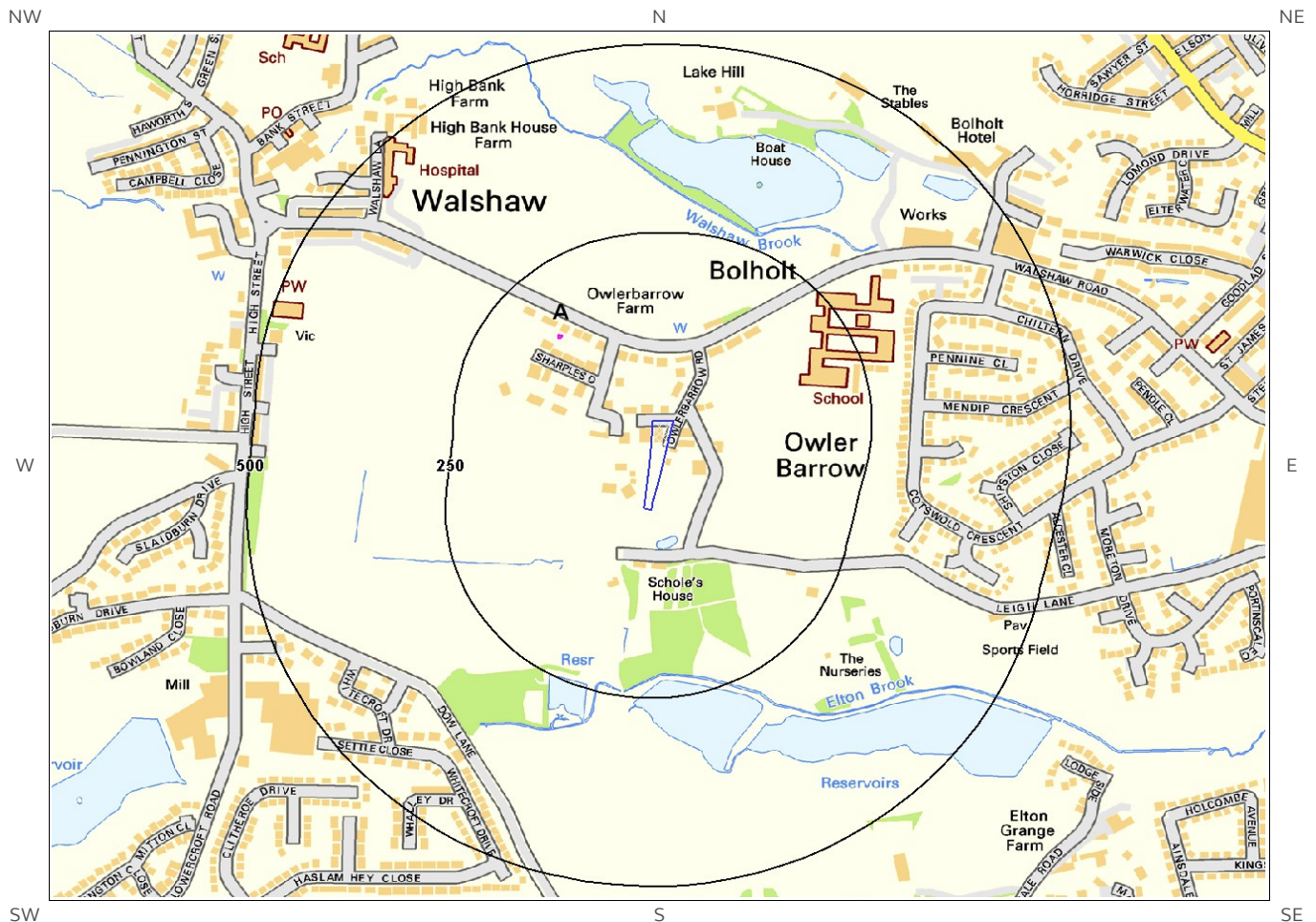
This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

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

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

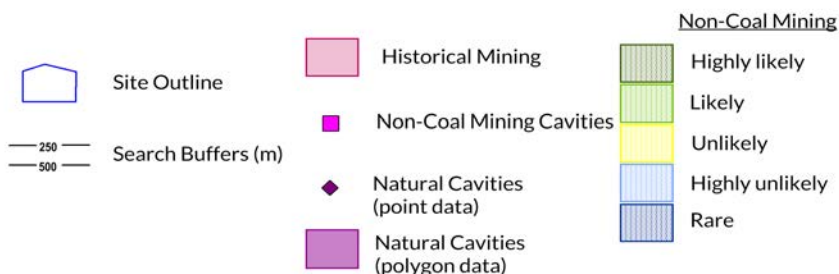
ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	735.0	N	378253 412143	Sandstone	Leemans Hill	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and
Natural Cavities Legend

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5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

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

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

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
1A	159.0	NW	378007 411528	Old Coal Shaft	1909
2A	159.0	NW	378007 411528	Unspecified Old Shaft	1891
Not shown	840.0	SE	378623 410620	Unspecified Old Shaft	1908

5.2 Coal Mining

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

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

The following Coal Mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0.0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

5.3 Johnson Poole and Bloomer

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

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

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

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

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

Database searched and no data found.

5.5 Non-Coal Mining Cavities

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

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

Database searched and no data found.

5.6 Natural Cavities

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

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

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

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

Database searched and no data found.

5.8 Gypsum Extraction

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

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

Database searched and no data found.

5.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level..

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

Database searched and no data found.

5.10 Clay Mining

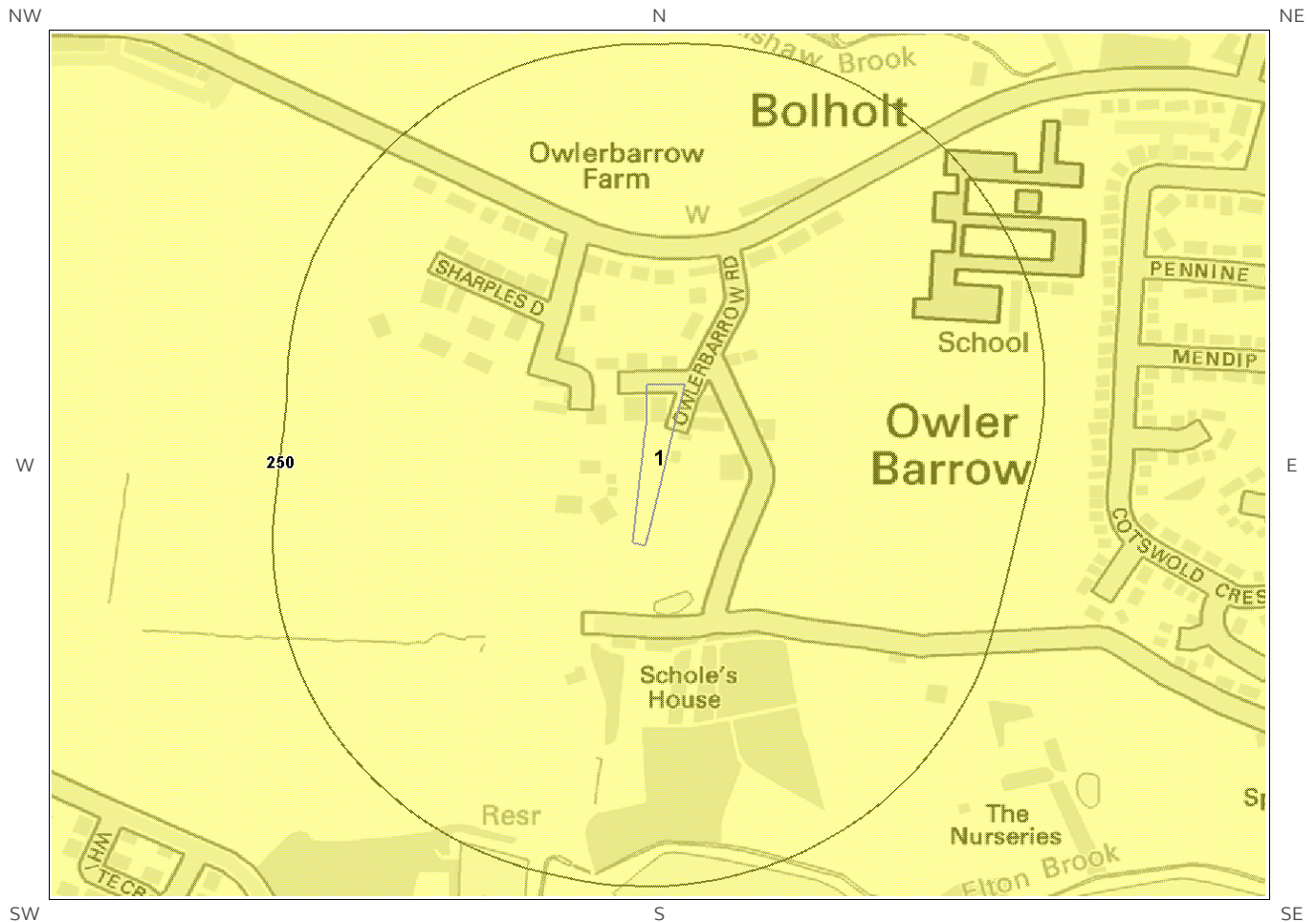
This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

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

Database searched and no data found.

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map

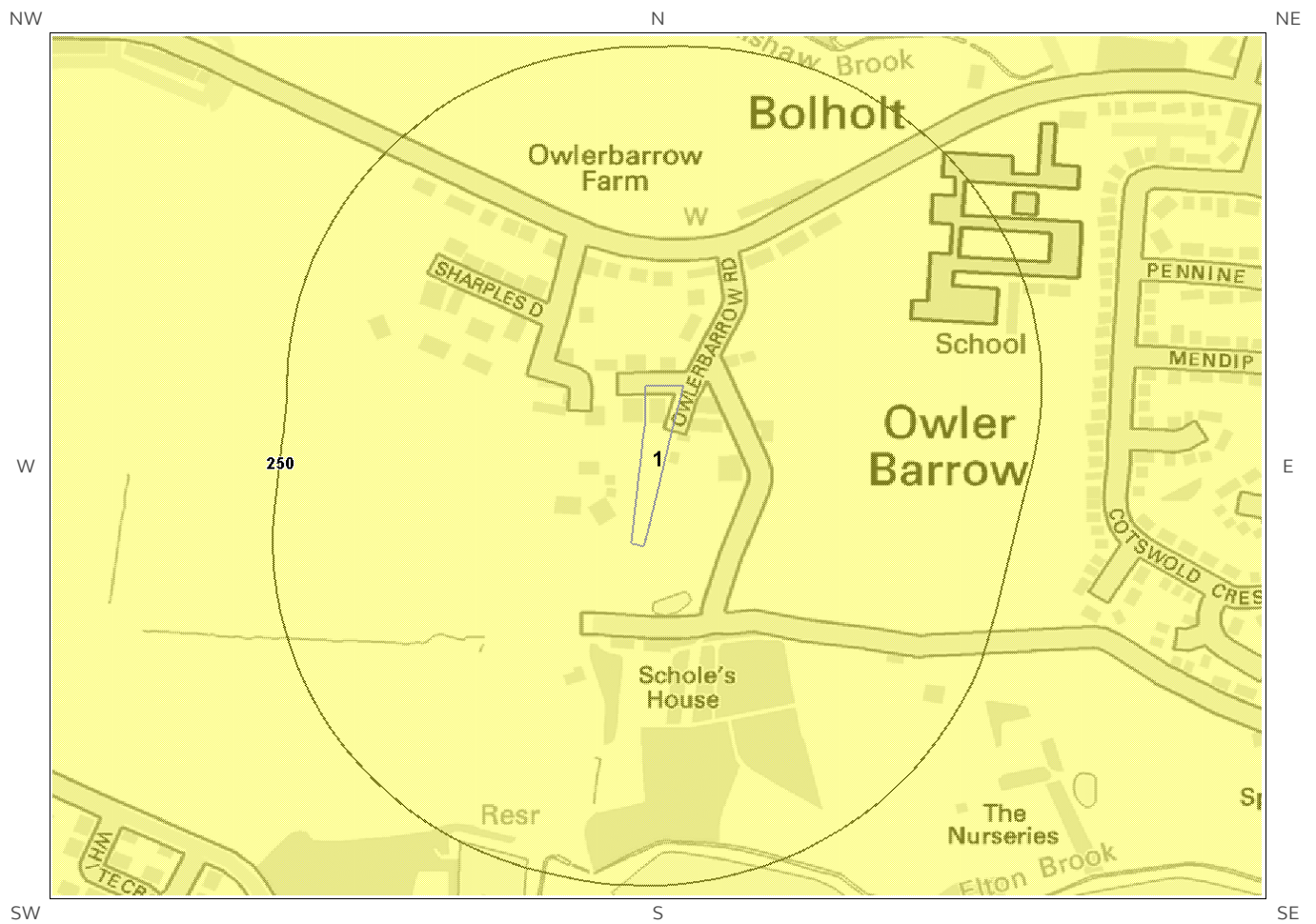


Shrink Swell Clay Legend

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6.2 Landslides map

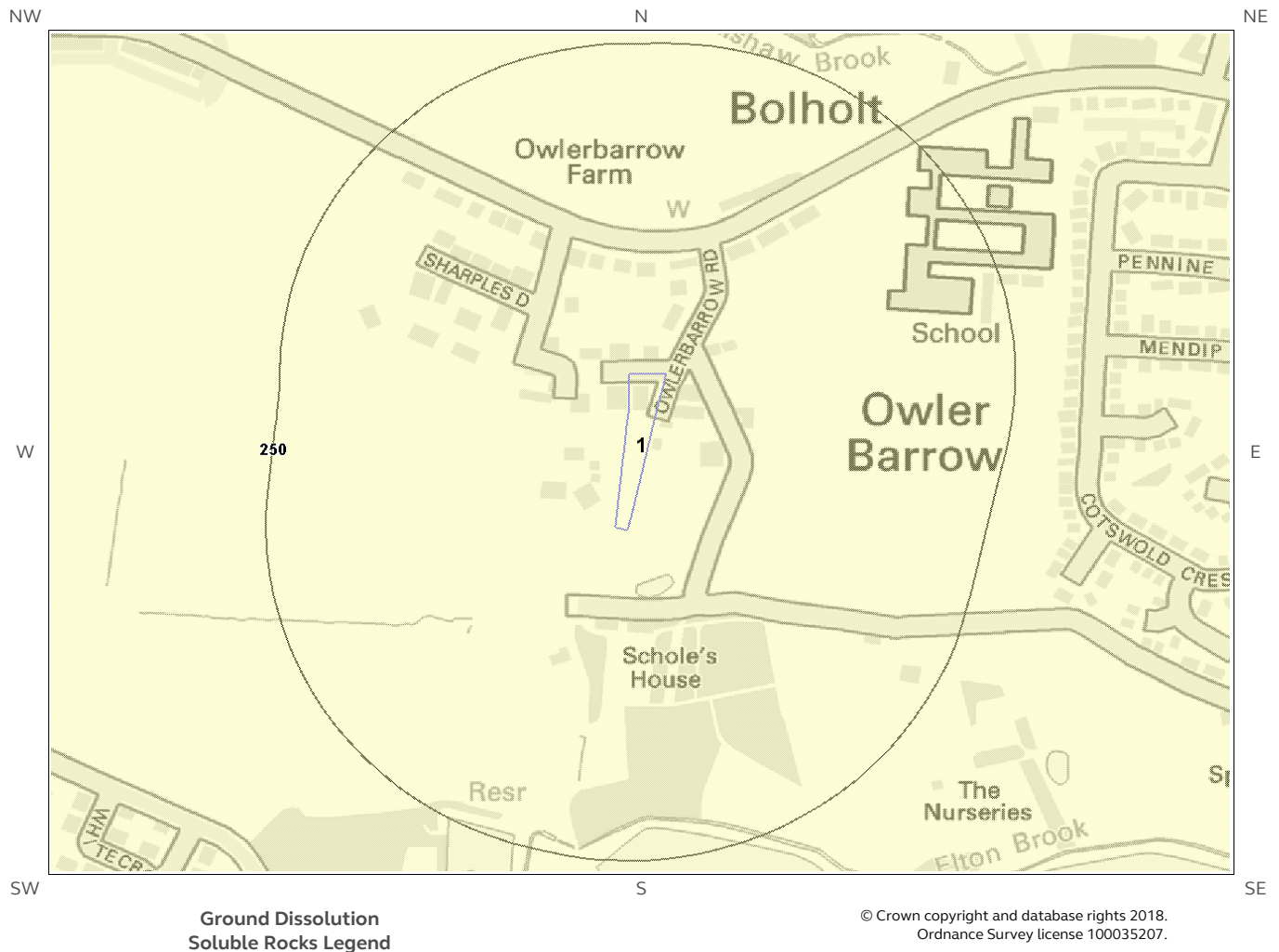


Landslides Legend

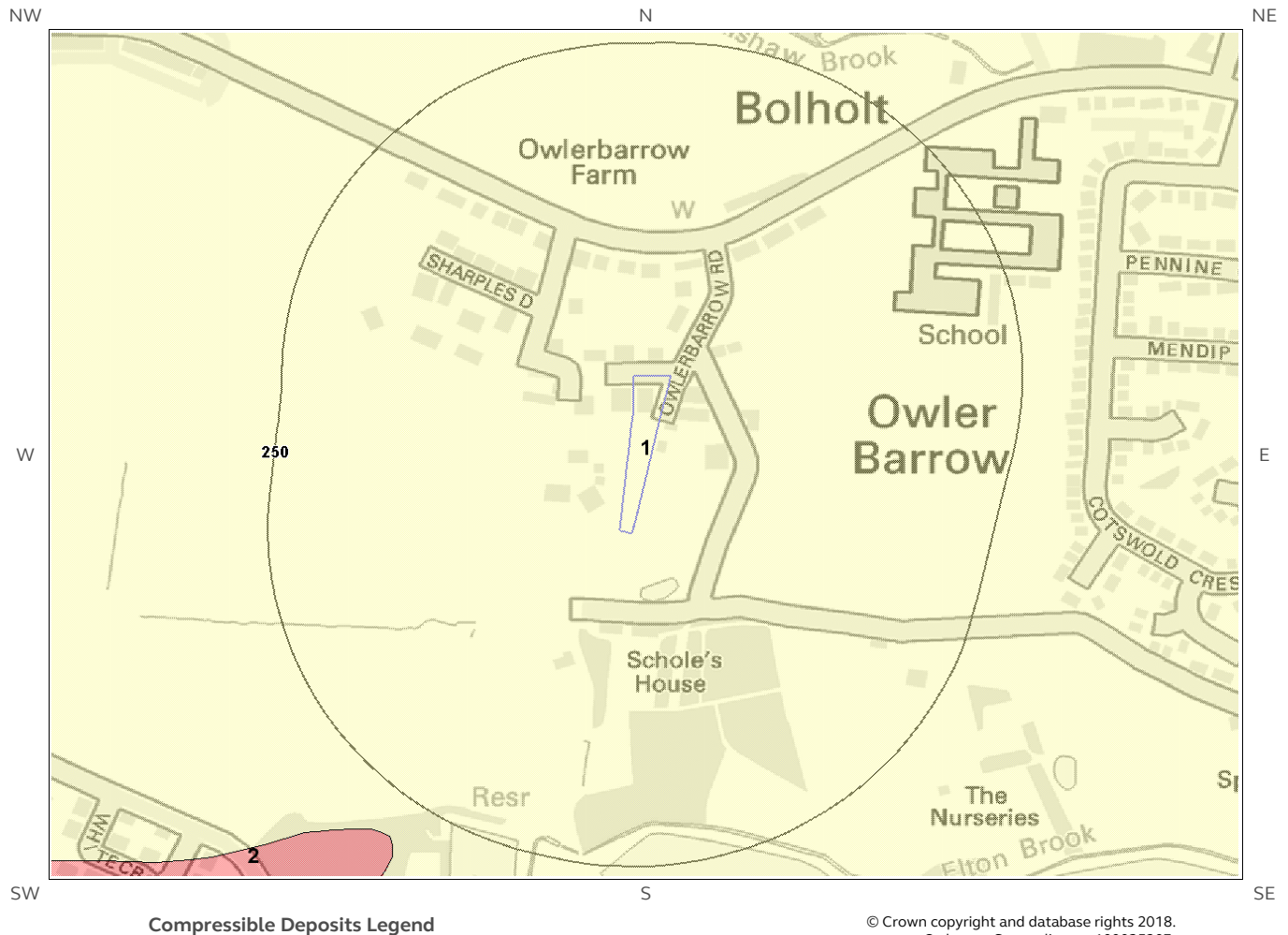
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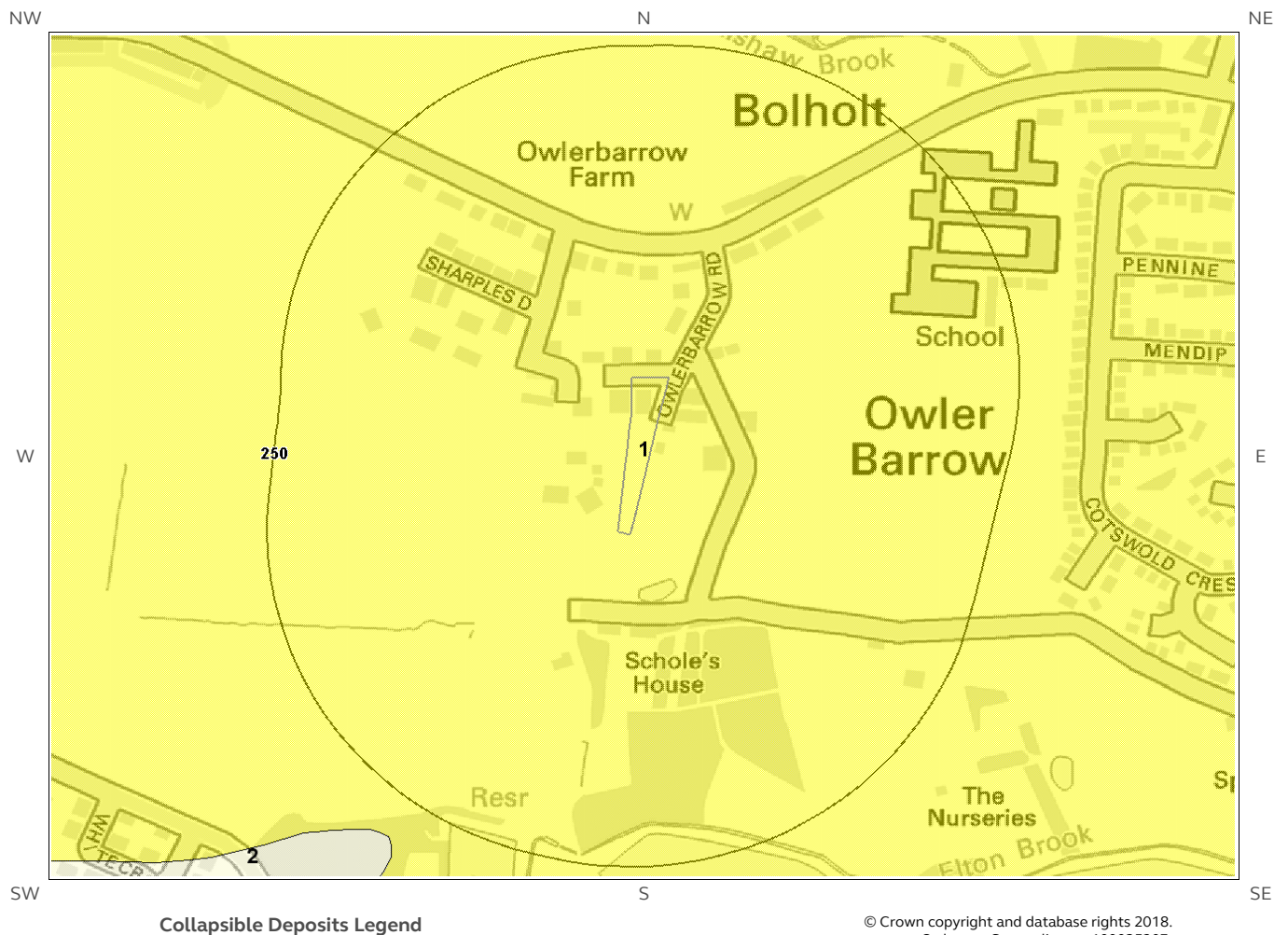
6.3 Ground Dissolution of Soluble Rocks map



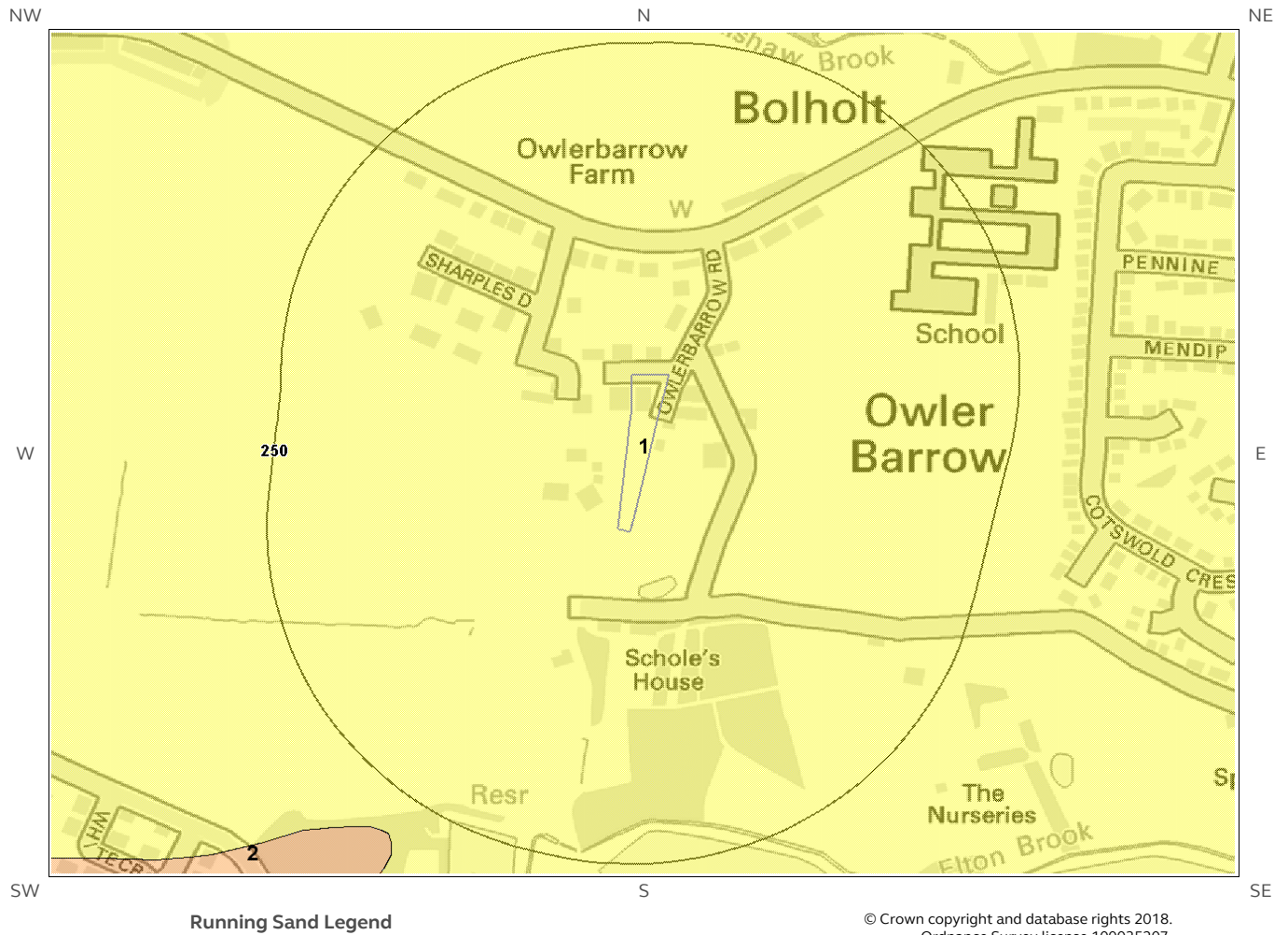
6.4 Compressible Deposits map



6.5 Collapsible Deposits map



6.6 Running Sand map



6 Natural Ground Subsidence

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

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

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

6.1 Shrink-Swell Clays

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

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

6.3 Ground Dissolution of Soluble Rocks

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

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

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

6.4 Compressible Deposits

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

6.5 Collapsible Deposits

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

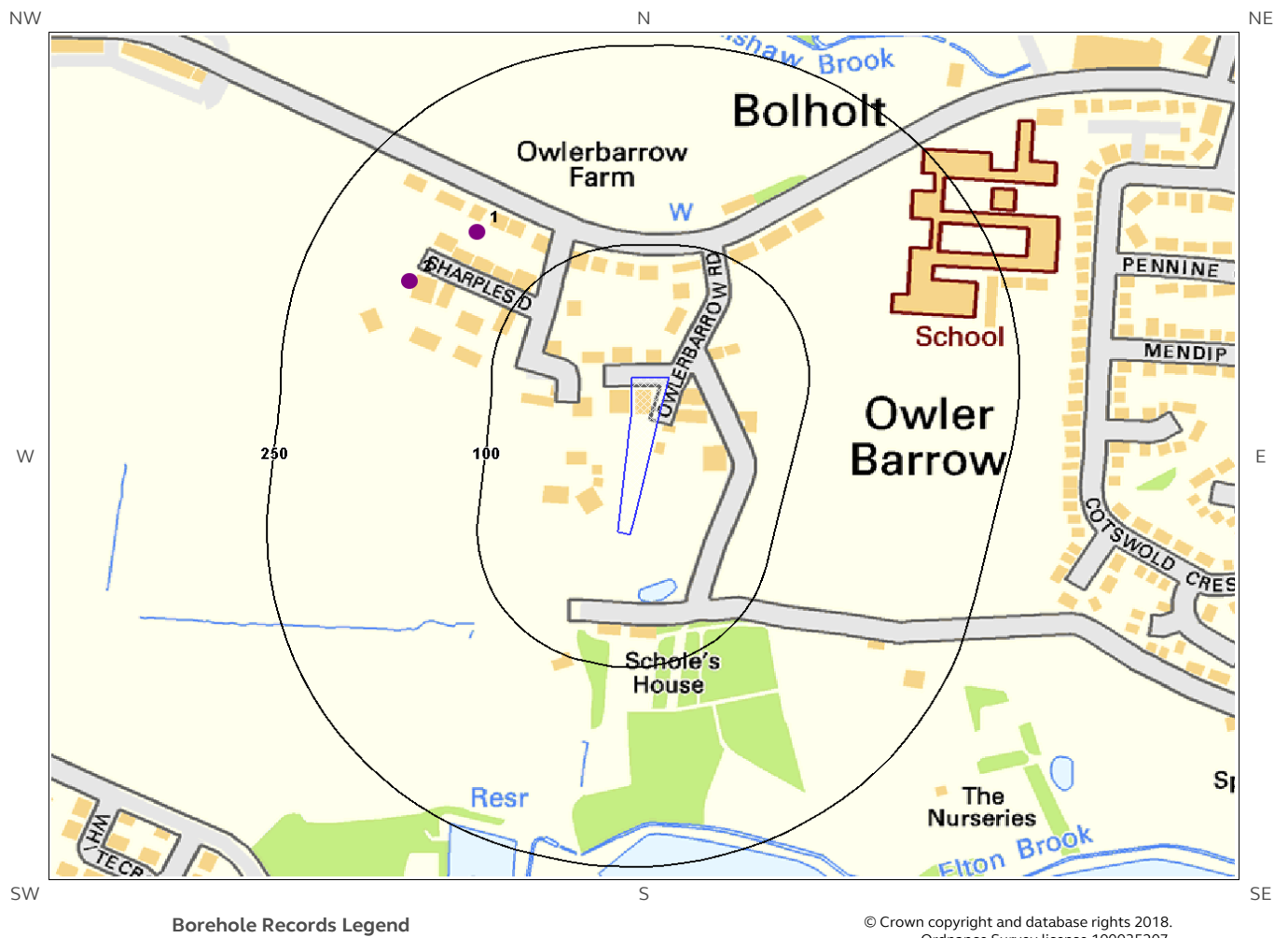
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible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

6.6 Running Sands

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

7 Borehole Records map



7 Borehole Records

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

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

2

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	156.0	NW	378012 411525	SD71SE14	92.69	OWLER BARROW PIT
2	174.0	NW	377964 411488	SD71SE13	159.23	ALDER BARROW PIT ELTON U/G

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

#1: scans.bgs.ac.uk/sobi_scans/boreholes/22772

#2: scans.bgs.ac.uk/sobi_scans/boreholes/22771

8 Estimated Background Soil Chemistry

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

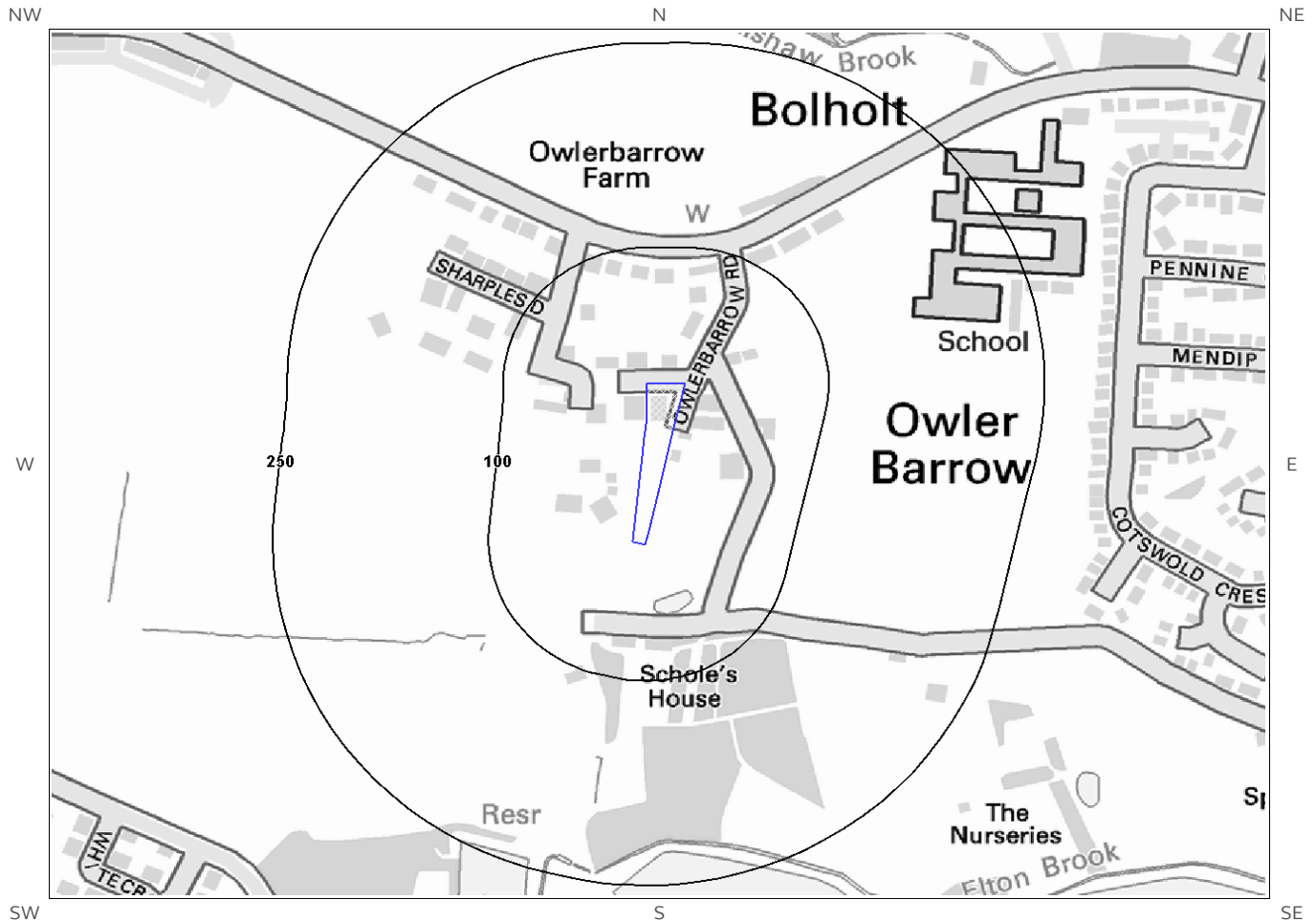
4

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

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
47.0	SW	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
50.0	SW	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg

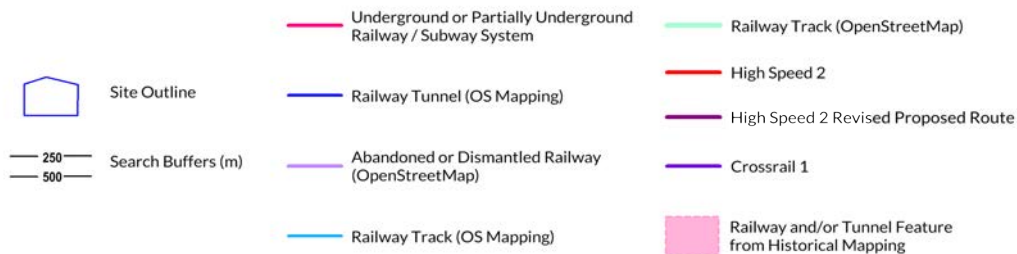
*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

9 Railways and Tunnels map



Railways and Tunnels Legend

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9 Railways and Tunnels

9.1 Tunnels

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

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

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

Database searched and no data found.

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

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

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

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

Database searched and no data found.

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

9.2 Historical Railway and Tunnel Features

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

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

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

Database searched and no data found.

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

9.3 Historical Railways

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

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

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

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.4 Active Railways

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

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

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

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.5 Railway Projects

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

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

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

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

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

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

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Standard Terms and Conditions

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

Demeter Environmental Ltd
Hanover House, Hanover Street,
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Groundsure Reference: EMS-DE-467299_627438

Your Reference: EMS_467299_627438

Report Date 14 Mar 2018

Report Delivery Method: Email - pdf

Enviro Insight

Address: ,

Dear Sir/ Madam,

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

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159 000 quoting the above Groundsure reference number.

Yours faithfully,

Demeter Environmental ltd

Enc.
Groundsure Enviroinsight

Address: ,
Date: 14 Mar 2018
Reference: EMS-DE-467299_627438
Client: Demeter Environmental Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 26-Mar-2012
Grid Reference: 378128,411367
Site Size: 0.20ha

Report Reference: EMS-DE-467299_627438
Client Reference: EMS_467299_627438

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Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	0	37	34
1.2 Additional Information – Historical Tank Database	0	0	5	8
1.3 Additional Information – Historical Energy Features Database	0	0	2	9
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Potentially Infilled Land	0	6	35	63

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	1	5	4
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	1
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	1	2	2
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	1	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	2	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section	

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified					
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	2	0	5
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	1	8	8
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	Yes	No	Yes
6.10 Detailed River Network entries within 500m of the site	0	0	6	10	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

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

Section 8: Designated Environmentally Sensitive Sites

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

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	1	0	0	0	1	8

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Radon Affected Area rating	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Radon protection measures requirements	No radon protective measures are necessary.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

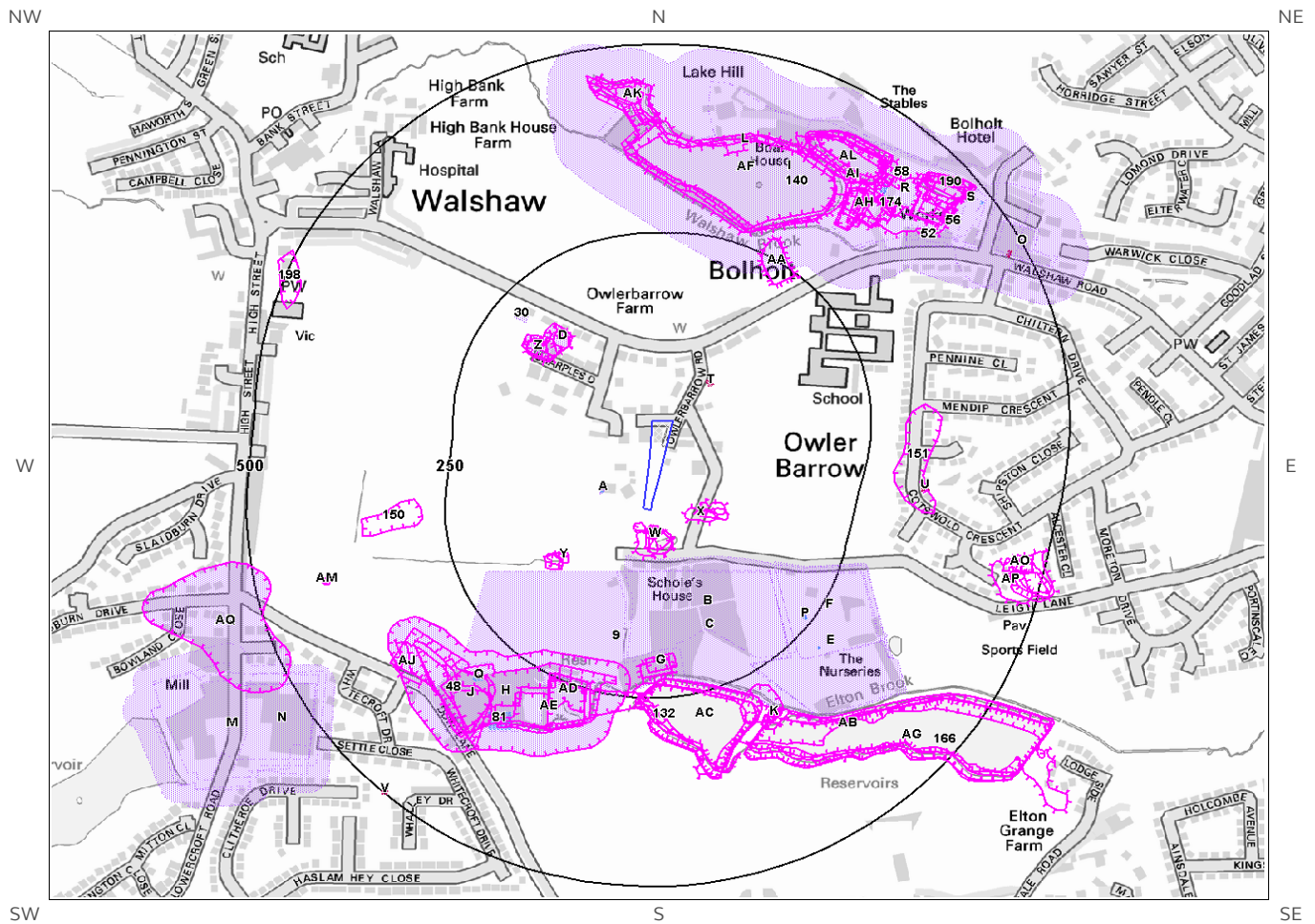
Note: Maps

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

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

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

1. Historical Land Use



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1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 71

ID	Distance [m]	Direction	Use	Date
1A	51	W	Unspecified Tank	1938
2A	53	W	Unspecified Tank	1928
3B	65	S	Nursery	1969
4B	65	S	Nursery	1956
5B	65	S	Nursery	1974
6C	81	S	Nursery	1908
7C	81	S	Nursery	1927
8C	81	S	Nursery	1938
9	82	S	Nursery	1890
10D	145	NW	Unspecified Heap	1938
11D	145	NW	Unspecified Heap	1891
12D	146	NW	Unspecified Heap	1928
13D	146	NW	Unspecified Heap	1909
14D	149	NW	Unspecified Ground Workings	1956
15Z	153	NW	Unspecified Heap	1938
16D	159	NW	Unspecified Old Shaft	1891
17D	159	NW	Old Coal Shaft	1909
18E	170	SE	Nurseries	1927
19E	170	SE	Nursery	1908
20E	170	SE	Nurseries	1938
21F	170	SE	Nurseries	1969
22F	170	SE	Nurseries	1974
23F	170	SE	Nurseries	1980
24E	171	SE	Nurseries	1890
25F	173	SE	Nurseries	1956
26G	192	S	Disused Filter Beds	1956
27G	197	S	Disused Filter Beds	1938
28G	199	S	Disused Filter Beds	1927
29G	199	S	Filter Beds	1908
30	206	NW	Pump House	1938
31H	208	S	Sewage Works	1927
32H	208	S	Sewage Works	1938
33I	214	N	Print Works	1938

34H	226	S	Sewage Works Air Compressing Station	1956
35H	227	S	Unspecified Works	1974
36H	227	S	Unspecified Works	1969
37H	227	S	Unspecified Disused Works	1980
38I	267	N	Print Works	1928
39I	267	N	Print Works	1909
40I	267	N	Print Works	1891
41J	298	SW	Unspecified Heap	1974
42J	298	SW	Unspecified Heap	1980
43J	300	SW	Unspecified Heap	1969
44K	304	SE	Filter Bed	1956
45K	308	SE	Filter Bed	1927
46K	308	SE	Filter Bed	1938
47J	312	SW	Refuse Heap	1927
48	316	SW	Unspecified Heap	1938
49R	324	NE	Unspecified Works	1969
50AJ	349	SW	Refuse Heap	1908
51AH	350	NE	Filter Beds	1909
52	374	NE	Unspecified Works	1980
53L	377	N	Boat House	1938
54L	379	N	Boat House	1909
55L	379	N	Boat House	1928
56	381	NE	Mills	1851
57L	386	N	Boat House	1956
58	400	NE	Unspecified Works	1974
59AM	406	W	Unspecified Old Shaft	1890
60O	414	NE	Print Works	1956
61M	450	SW	Unspecified Works	1938
62M	450	SW	Unspecified Works	1927
63N	454	SW	Unspecified Warehouses	1974
64N	454	SW	Unspecified Commercial/Industrial	1980
65O	459	NE	Unspecified Works	1969
66M	465	SW	Unspecified Warehouses	1969
67O	466	NE	Unspecified Works	1974
68O	466	NE	Unspecified Works	1980
69M	473	SW	Unspecified Mill	1908
70M	474	SW	Unspecified Mill	1890
71AQ	481	W	Refuse Heaps	1890

1.2 Additional Information – Historical Tank Database

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

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

13

ID	Distance (m)	Direction	Use	Date
72A	53	W	Unspecified Tank	1930
73P	236	SE	Unspecified Tank	1959
74P	241	SE	Unspecified Tank	1975
75P	241	SE	Unspecified Tank	1959
76P	241	SE	Unspecified Tank	1992
77E	279	SE	Unspecified Tank	1975
78E	279	SE	Unspecified Tank	1992
79Q	299	SW	Settling Tanks	1930
80Q	299	SW	Settling Tanks	1939
81	318	SW	Settling Tanks	1939
82R	402	NE	Tanks	1930
83S	476	NE	Unspecified Tank	1891
84S	484	NE	Unspecified Tank	1990

1.3 Additional Information – Historical Energy Features Database

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

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

11

ID	Distance (m)	Direction	Use	Date
85T	64	NE	Electricity Substation	1992
86T	65	NE	Electricity Substation	1975
87U	324	E	Electricity Substation	1992
88U	324	E	Electricity Substation	1975
89O	474	NE	Electricity Substation	1990
90O	474	NE	Electricity Substation	1993
91O	474	NE	Electricity Substation	1996
92V	494	SW	Electricity Substation	1977
93V	495	SW	Electricity Substation	1994
94V	495	SW	Electricity Substation	1993
95V	495	SW	Electricity Substation	1981

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 0

Database searched and no data found.

1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 104

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

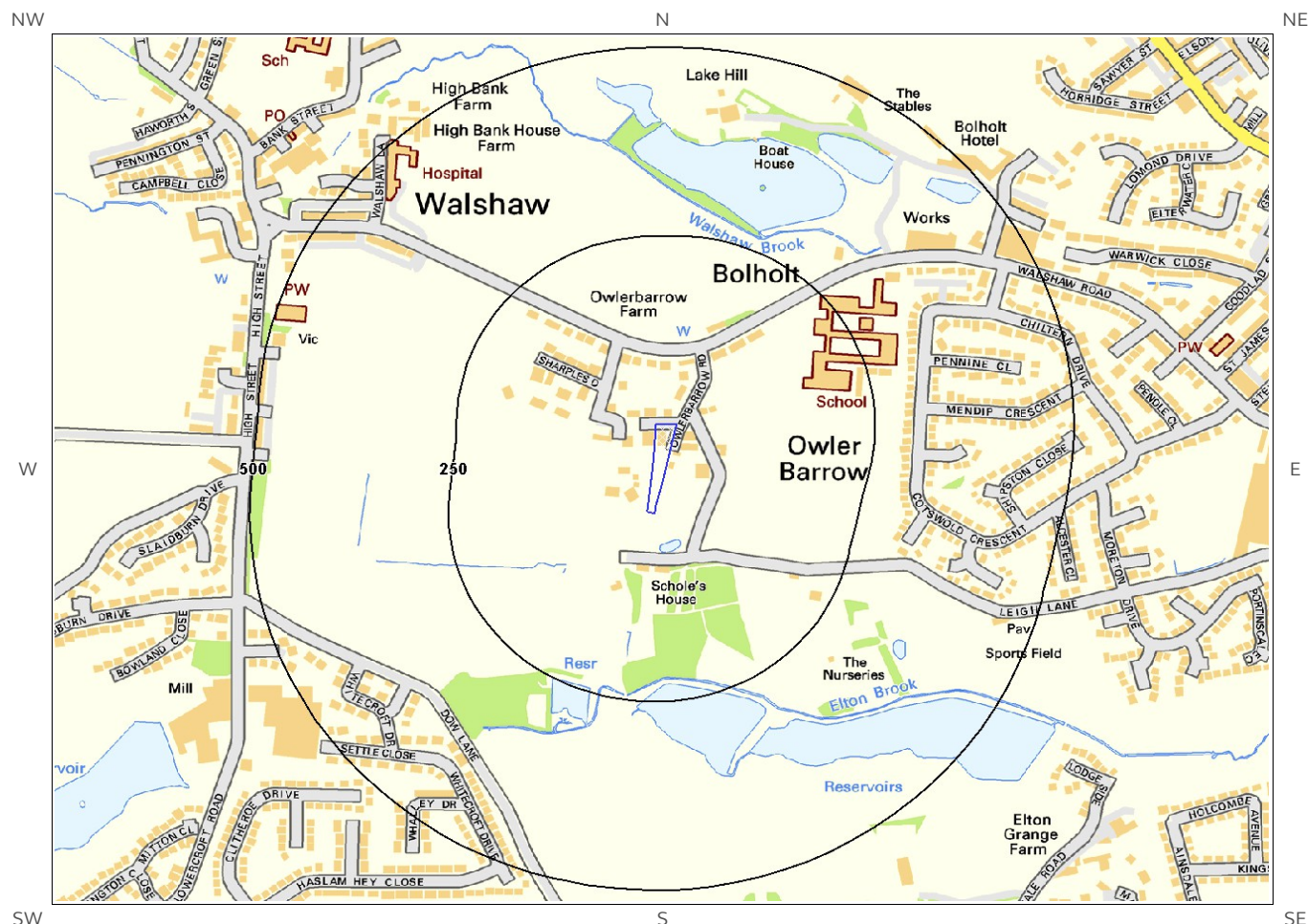
ID	Distance(m)	Direction	Use	Date
96W	19	S	Ponds	1891
97W	25	S	Pond	1928
98W	25	S	Pond	1909
99W	29	S	Pond	1938
100W	30	S	Pond	1851
101X	43	E	Pond	1851
102X	57	E	Pond	1891
103X	59	E	Pond	1909
104Y	113	SW	Reservoir	1956
105Y	119	SW	Reservoir	1928
106Y	124	SW	Reservoir	1938
107D	145	NW	Unspecified Heap	1938
108D	145	NW	Unspecified Heap	1891
109D	146	NW	Unspecified Heap	1909
110D	146	NW	Unspecified Heap	1928
111D	149	NW	Unspecified Ground Workings	1956
112Z	153	NW	Unspecified Heap	1938
113D	159	NW	Unspecified Old Shaft	1891
114D	159	NW	Old Coal Shaft	1909
115G	192	S	Disused Filter Beds	1956

116G	197	S	Disused Filter Beds	1938
117G	199	S	Filter Beds	1908
118G	199	S	Disused Filter Beds	1927
119H	208	S	Sewage Works	1927
120H	208	S	Sewage Works	1938
121AA	221	NE	Ponds	1938
122AA	222	NE	Ponds	1928
123AB	224	S	Reservoirs	1974
124AB	224	S	Ponds	1969
125AB	224	S	Reservoirs	1980
126AC	225	S	Reservoir	1956
127H	226	S	Sewage Works Air Compressing Station	1956
128AC	230	S	Pond	1851
129AC	232	S	Reservoir	1927
130AC	232	S	Reservoir	1908
131AC	232	S	Reservoir	1938
132	234	S	Reservoirs	1890
133AD	241	S	Pond	1969
134AD	241	S	Reservoir	1980
135AD	241	S	Pond	1974
136AD	242	S	Reservoirs	1956
137AE	251	S	Reservoirs	1927
138AE	251	S	Reservoirs	1938
139AE	251	S	Reservoirs	1908
140	266	N	Water Bodies	1851
141K	268	SE	Pond	1890
142AF	269	N	Reservoirs	1938
143AF	271	N	Reservoirs	1928
144AF	271	N	Reservoir	1891
145AF	271	N	Reservoirs	1909
146AF	276	N	Pond	1969
147AF	276	N	Pond	1980
148AF	276	N	Reservoirs	1956
149AF	276	N	Pond	1974
150	279	W	Pond	1890
151	286	E	Ponds	1890
152J	298	SW	Unspecified Heap	1980
153J	298	SW	Unspecified Heap	1974
154J	300	SW	Unspecified Heap	1969
155K	304	SE	Filter Bed	1956
156K	308	SE	Filter Bed	1938
157K	308	SE	Filter Bed	1927
158AG	309	SE	Reservoir	1890
159J	312	SW	Refuse Heap	1927
160J	316	SW	Unspecified Heap	1938

161AG	319	SE	Reservoir	1956
162AG	322	SE	Reservoir	1938
163AG	322	SE	Reservoir	1927
164AG	322	SE	Reservoir	1908
165AI	331	NE	Ponds	1928
166	332	SE	Water Bodies	1851
167AH	332	NE	Ponds	1938
168AI	343	NE	Reservoirs	1956
169AJ	349	SW	Refuse Heap	1908
170AH	350	NE	Filter Beds	1909
171AH	355	NE	Ponds	1938
172AI	357	NE	Ponds	1891
173AL	387	NE	Pond	1909
174	389	NE	Pond	1980
175AK	393	N	Pond	1969
176AK	393	N	Reservoirs	1956
177AK	397	N	Pond	1980
178AL	404	NE	Pond	1980
179AL	404	NE	Pond	1974
180AL	404	NE	Pond	1969
181AN	406	NE	Reservoirs	1938
182AM	406	W	Unspecified Old Shaft	1890
183AN	407	NE	Reservoirs	1909
184AN	407	NE	Reservoirs	1928
185AN	417	NE	Reservoirs	1956
186AN	428	NE	Ponds	1969
187AN	428	NE	Ponds	1974
188AP	436	E	Pond	1851
189AN	438	NE	Pond	1891
190	449	NE	Pond	1980
191AO	449	E	Pond	1928
192AO	449	E	Pond	1938
193AO	449	E	Pond	1909
194AO	449	E	Pond	1891
195AP	452	E	Pond	1890
196AO	460	E	Pond	1956
197AP	471	E	Pond	1969
198	476	W	Pond	1890
199AQ	481	W	Refuse Heaps	1890



2. Environmental Permits, Incidents and Registers Map



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

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

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

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

0

Database searched and no data found.

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

0

Database searched and no data found.

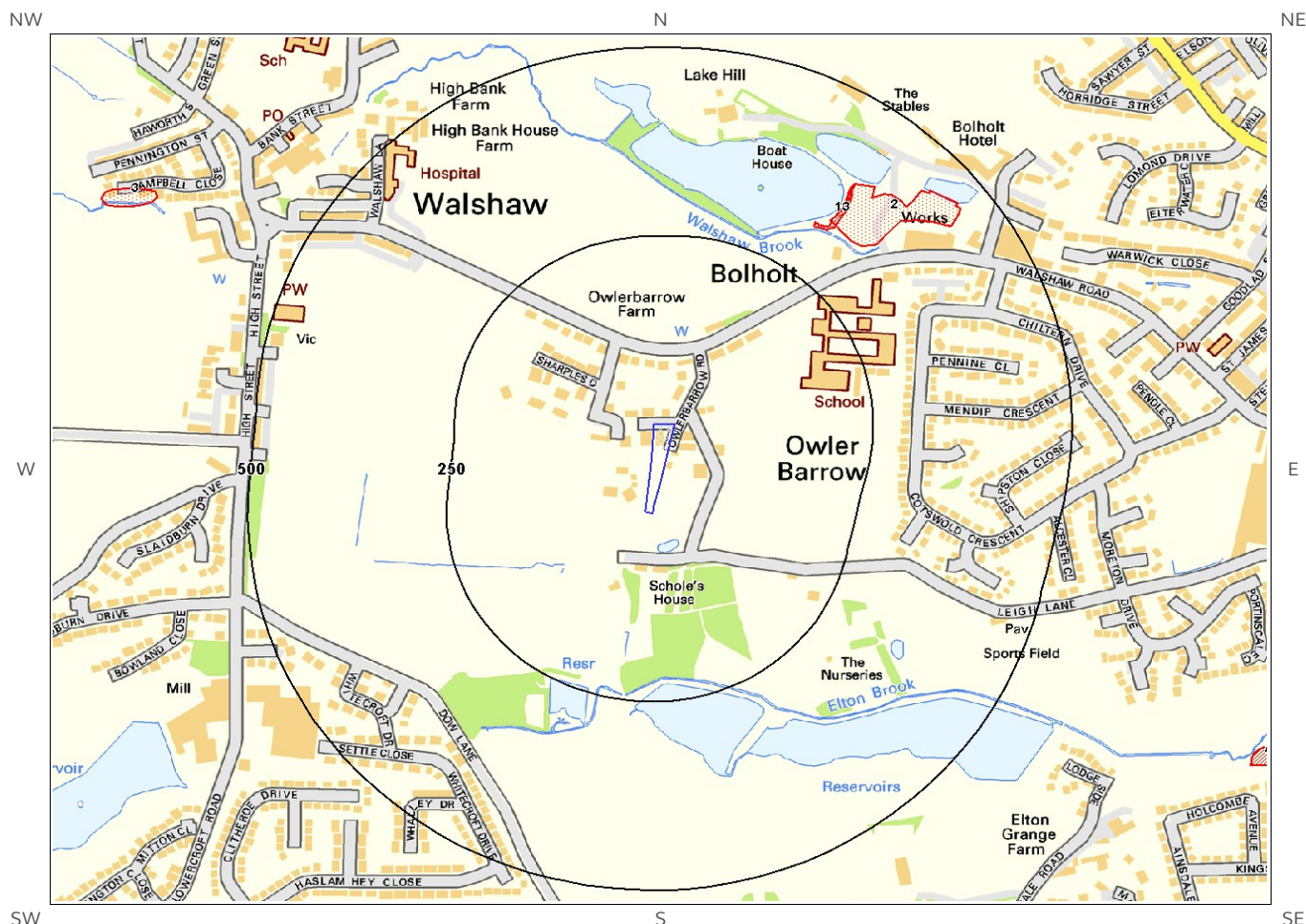
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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

Database searched and no data found.



3. Landfill and Other Waste Sites Map



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Site Outline

— 250 — Search Buffers (m)

— 500 —



EA/NRW Active Landfill



Historic and Planned Waste Sites



EA/NRW Historic Landfill



EA/NRW Licensed Waste Site



BGS / DoE Survey Landfill



Local Authority/Historical Mapping
Landfill Records

3. Landfill and Other Waste Sites

3.1 Landfill Sites

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

0

Database searched and no data found.

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

10

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

ID	Distance (m)	Direction	NGR	Details
2	330	NE	378400 411600	Site Address: Bolholt Works, Walshaw Road, Bury Waste Licence: Yes Site Reference: RD/LIC/186/79, C016 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Jan-1980 Licence Surrendered: Licence Holder Address: 11 Whitelegge Street, Bury Operator: - Licence Holder: Mancunian Waste Company First Recorded: 31-Dec-1980 Last Recorded: 31-Dec-1984
3	693	NW	377400 411700	Site Address: Newhive Works, Walshaw, Greater Manchester Waste Licence: - Site Reference: C119 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	846	NE	378800 411900	Site Address: Tottington, Bury Waste Licence: Yes Site Reference: C055, RD/LIC/208/80 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 03-Feb-1981 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: G and J Seddon Limited First Recorded: 01-Mar-1981 Last Recorded: 31-Dec-1986
Not shown	908	E	379000 411000	Site Address: Land off Newbold Street, Newbold Street, Bury Waste Licence: Yes Site Reference: RD/LIC/0752/91, C015, RD/LIC/357/84, 4200/9727 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 12-Sep-1984 Licence Surrendered: 19-Jun-1991 Licence Holder Address: 29, Pickering Close, Woolfold, Bury Operator: - Licence Holder: Cooke, Simm and Bentley First Recorded: 01-Oct-1984 Last Recorded: 31-Dec-1988

ID	Distance (m)	Direction	NGR	Details	
Not shown	915	N	378400 412300	Site Address: Bury Road, Tottington, Greater Manchester Waste Licence: - Site Reference: C121 Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1875 Last Recorded: 31-Dec-1977
Not shown	994	E	379200 410900	Site Address: King George V Playing Fields, Elton, Bury, Greater Manchester Waste Licence: Yes Site Reference: C050 Waste Type: Inert, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Jan-1974 Licence Surrendered: Licence Holder Address: - Operator: County Borough of Bury Cleansing Department Licence Holder: Bury Metropolitan Borough Council First Recorded: 31-Dec-1967 Last Recorded: 01-Jun-1974
Not shown	1153	E	379300 411600	Site Address: Woolfold paper Mills, Tottington Road, Bury Waste Licence: Yes Site Reference: 0226, RD/LIC/080/77 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 06-Nov-1979 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded: 31-Dec-1950 Last Recorded: 02-Apr-1986
Not shown	1298	E	379400 411500	Site Address: Woolfold Paper Mills, Tottington, Bury Waste Licence: Yes Site Reference: C005b, RD/LIC/080/77 , 0226 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 06-Nov-1979 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded: 31-Dec-1950 Last Recorded: 02-Apr-1986
Not shown	1337	E	379300 410800	Site Address: Ainsworth Road, Gasworks, off Ainsworth Road, Bury Waste Licence: Yes Site Reference: RD/LIC/158/78, C001 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 14-Dec-1978 Licence Surrendered: Licence Holder Address: British Gas Corporation, North West Region Operator: - Licence Holder: P R Smith First Recorded: 31-Dec-1976 Last Recorded: 31-Dec-1990
Not shown	1381	SE	379300 410600	Site Address: Elton Works, Victoria Street, Bury Waste Licence: Yes Site Reference: RD/LIC/345/84, C058 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Oct-1984 Licence Surrendered: 01-Apr-1985 Licence Holder Address: Regional Solicitor, Welman House, Altrincham Operator: - Licence Holder: British Gas Corporation First Recorded: 01-Nov-1984 Last Recorded: 01-Apr-1985

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

1

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1188	SE	379200.0 410800.0	Address: King George V Playing Fields, Ainsworth Rd, Bury BGS Number: 1085.0 Risk: Risk to minor aquifer Waste Type: N/A

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

5

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

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
13	316	NE	378365 411704	Refuse Tip	1974 mapping	Polygon
14A	820	SE	378892 410976	Refuse Tip	1968 mapping	Polygon
15A	820	SE	378891 410975	Refuse Tip	1963 mapping	Polygon
Not shown	1121	E	379290 410889	Refuse Tip	1974 mapping	Polygon
Not shown	1331	E	379488 411486	Refuse Tip	1995 mapping	Polygon

3.2 Other Waste Sites

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

0

Database searched and no data found.

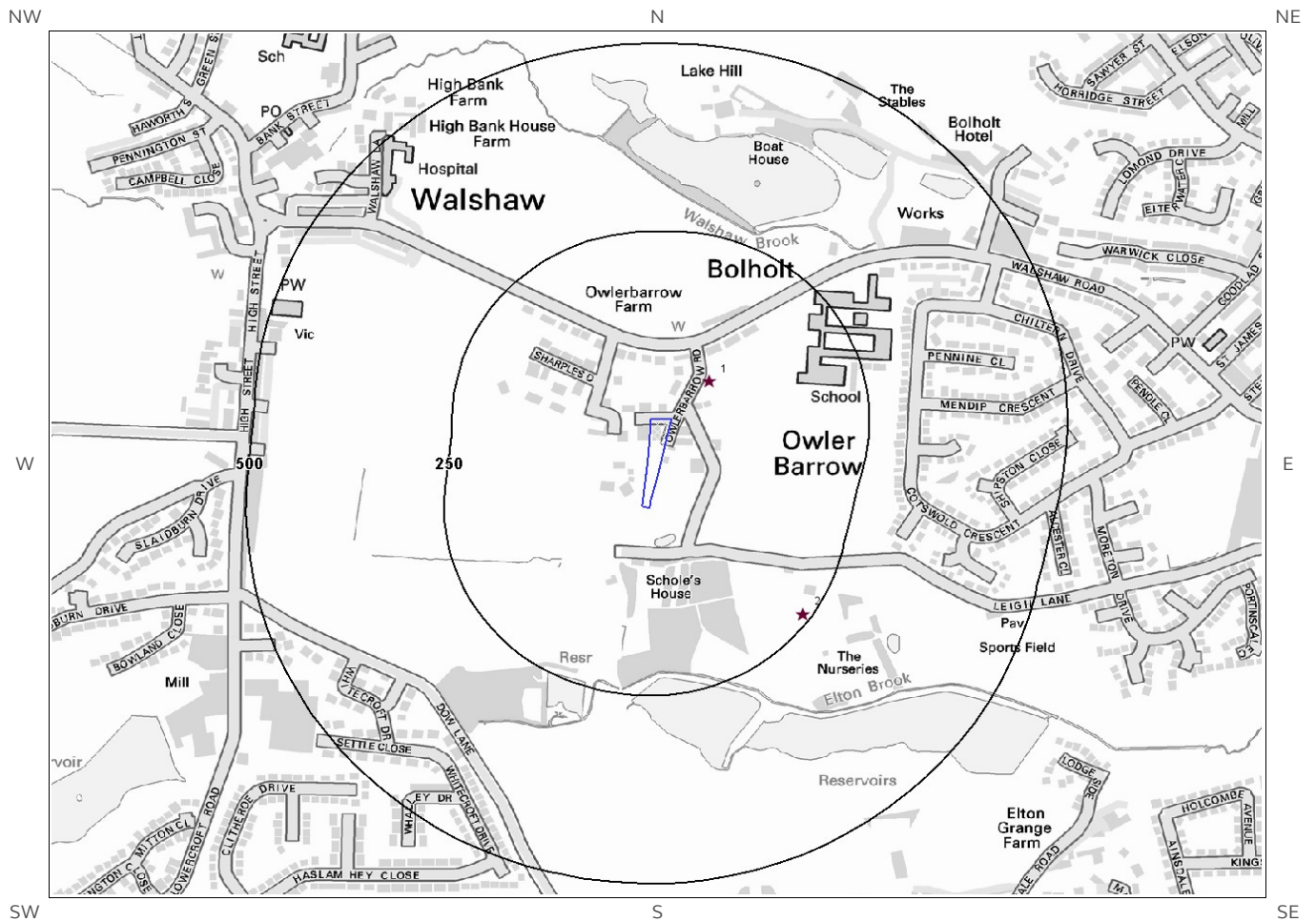
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

1

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

ID	Distance (m)	Direction	NGR	Details
Not shown	965	E	379089 411195	Site Address: Unit F Bonmore Industrial Centre, Leigh Lane, Bury, Lancashire, BL8 1NR Type: Vehicle Depollution Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CLU002 EPR reference: EA/EPR/EB3009CB/A001 Operator: Club 500 Italia Limited Waste Management licence No: 403221 Annual Tonnage: 4999.0 Issue Date: 25/08/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Club 500 Italia Limited Correspondence Address: Unit F Bonmore Industrial Centre, Leigh Lane, Bury, Lancashire, BL8

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 2

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	70	NE	Electricity Sub Station	378196 411467	BL8	Electrical Features	Infrastructure and Facilities
2	239	SE	Tank	378315 411157	BL8	Tanks (Generic)	Industrial Features

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

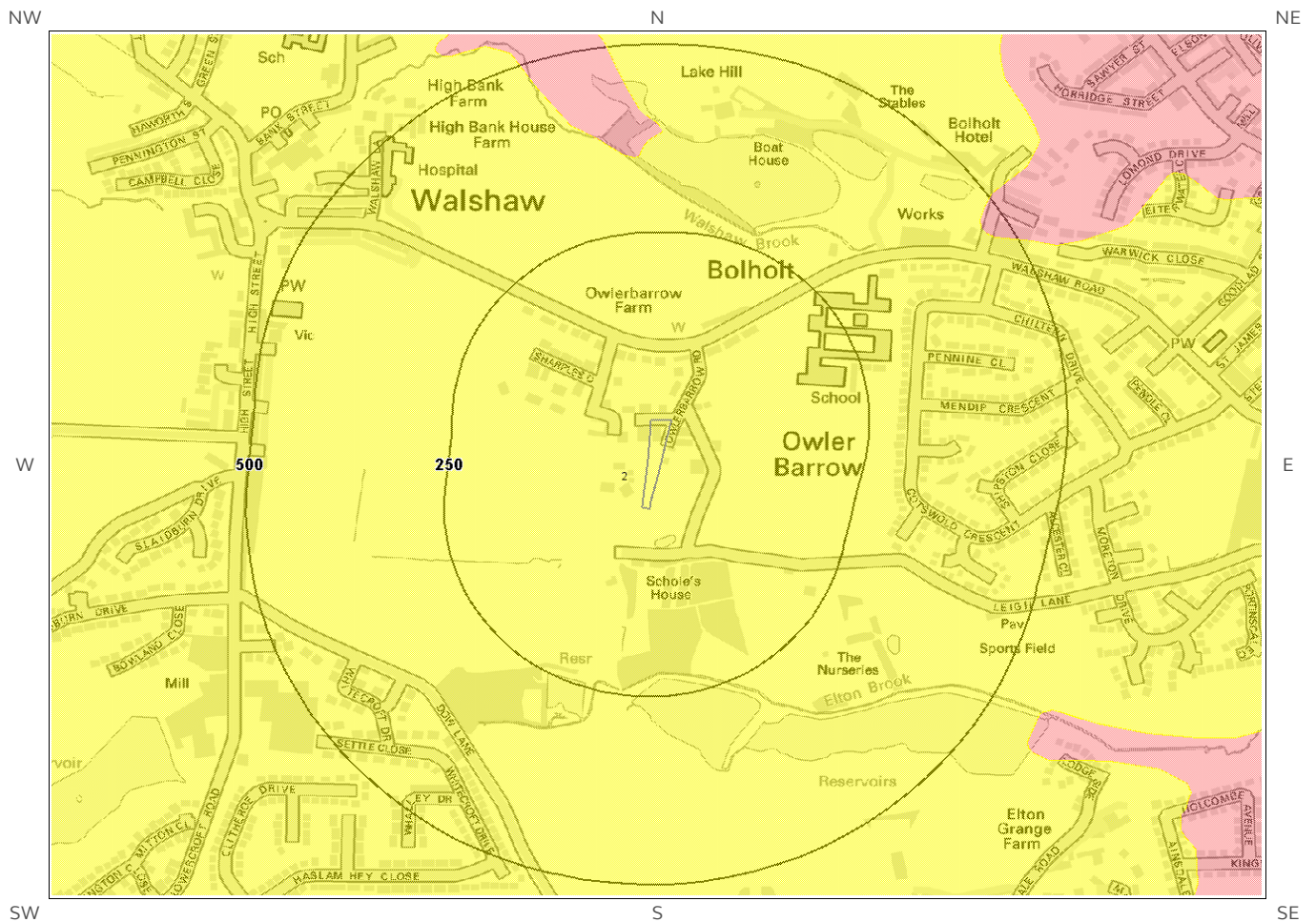
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE)	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE

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

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



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