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Report Ref: EMS-DE-509766_686090
Grid Ref: 430524, 406291

Map Name: National Grid

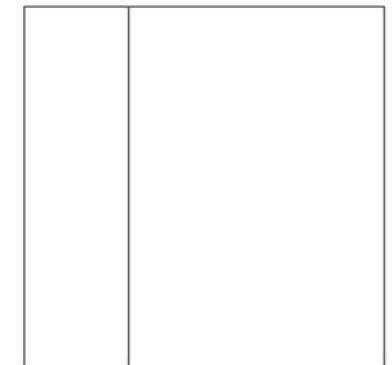
Map date: 1993

Scale: 1:10,000

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Surveyed 1992
 Revised 1993
 Edition N/A
 Copyright N/A
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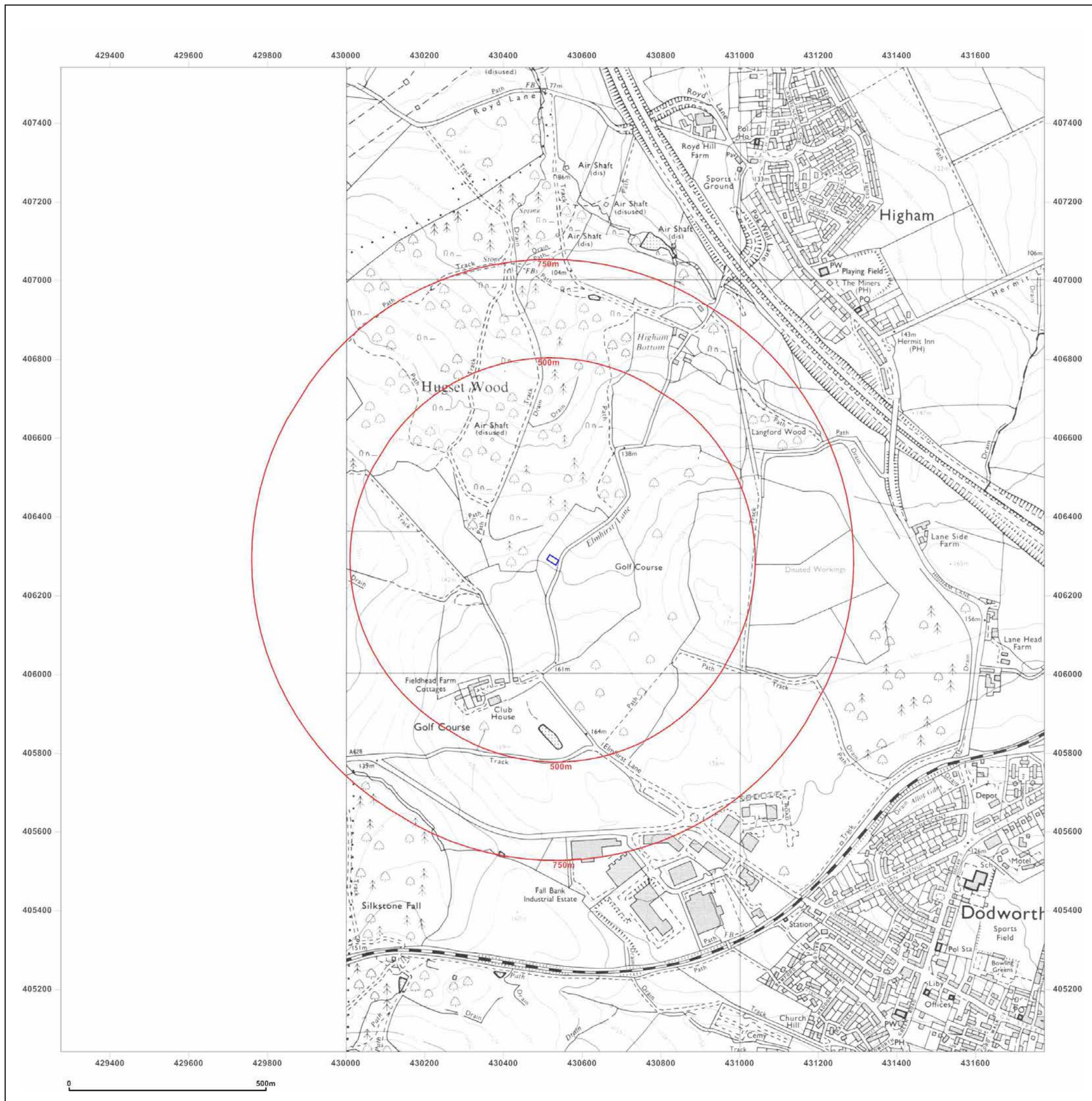


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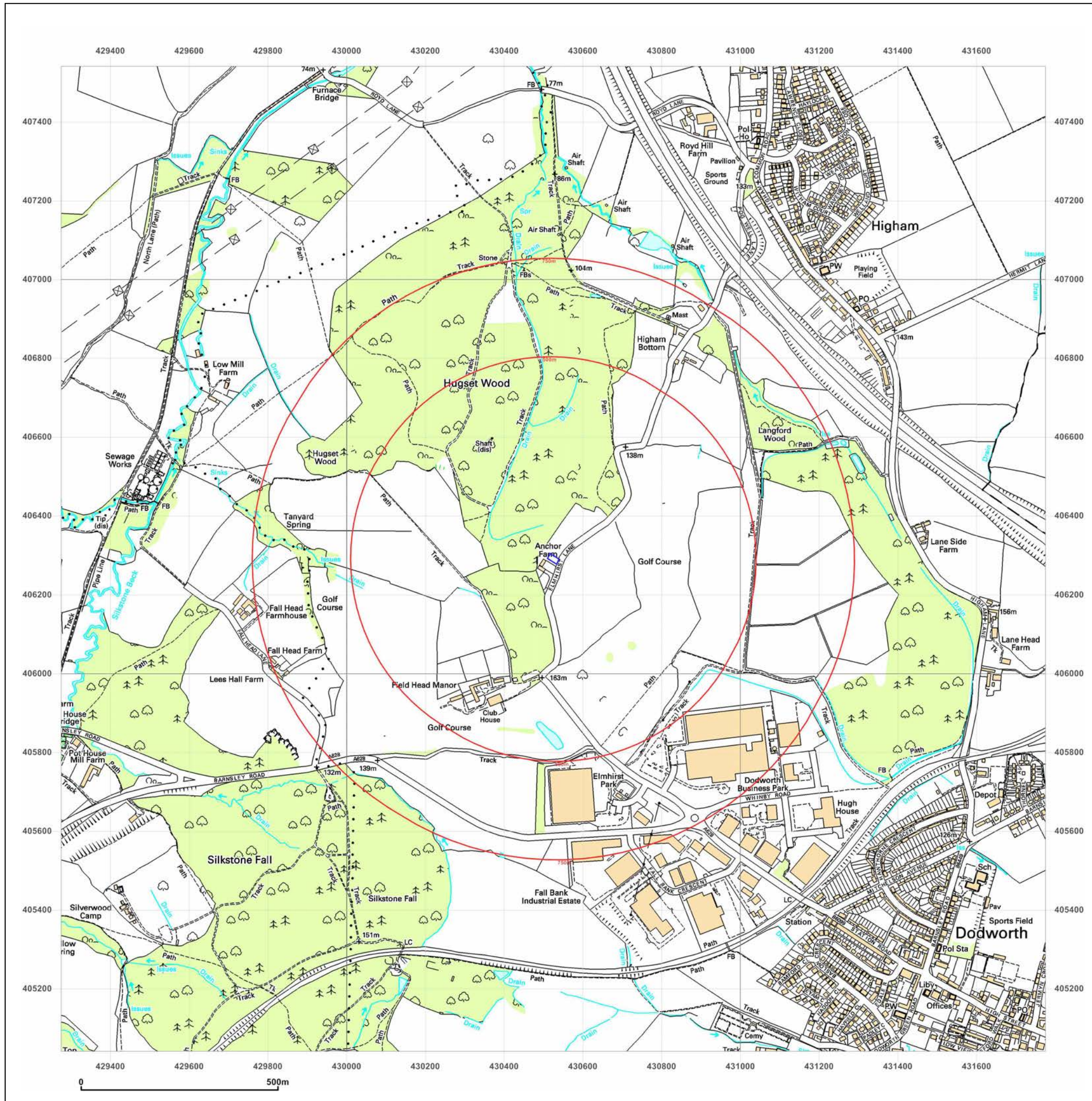
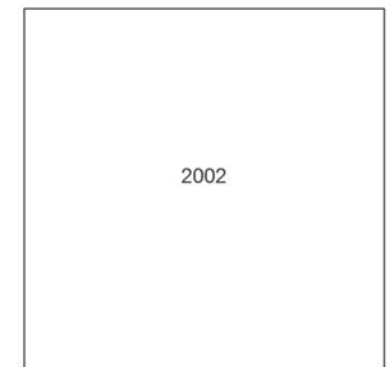
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 Grid Ref: 430524, 406291

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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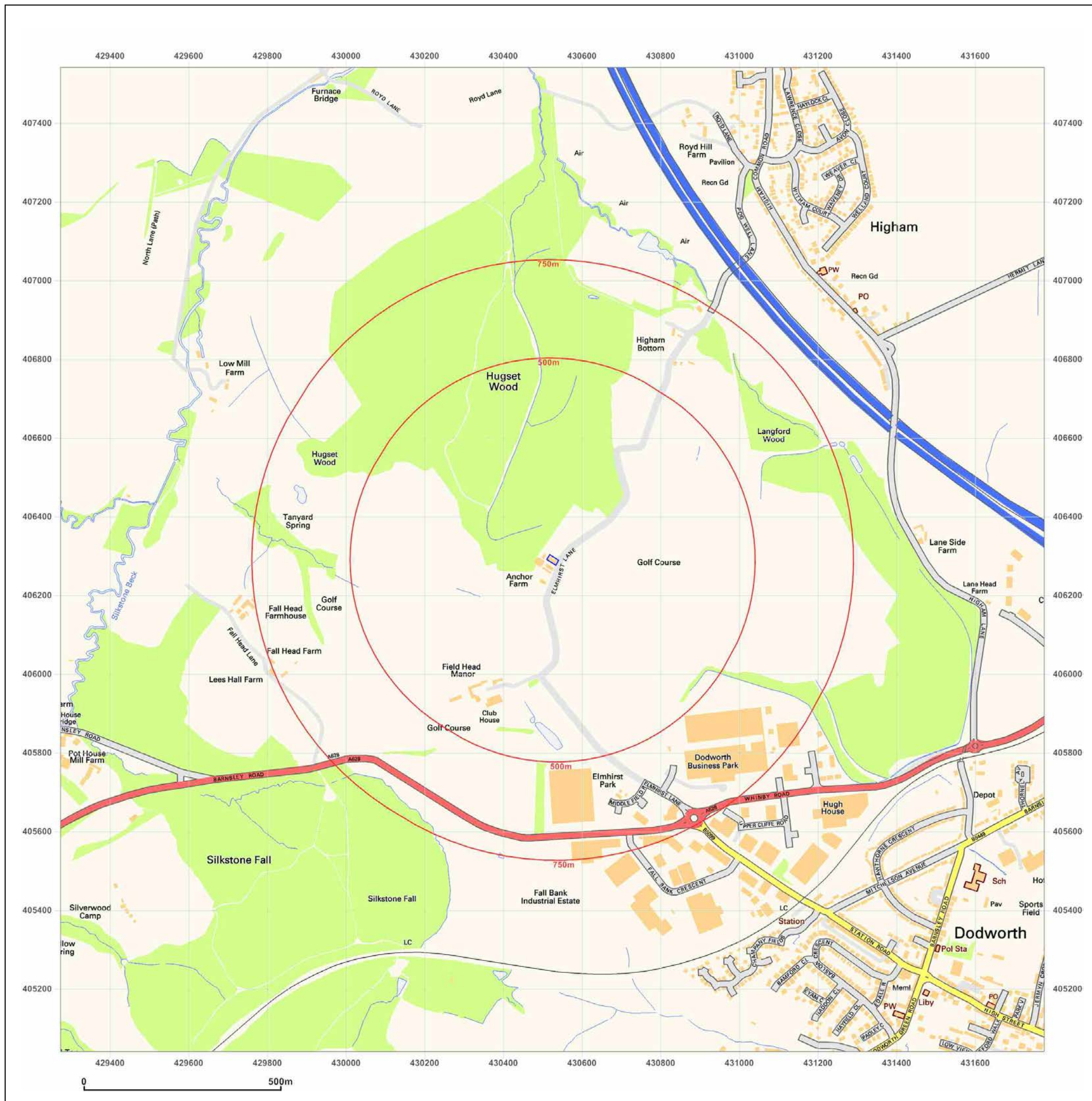
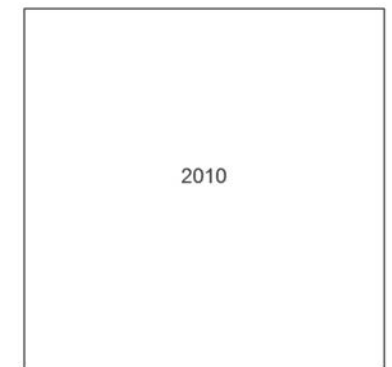
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 Report Ref: EMS-DE-509766_686090
 Grid Ref: 430524, 406291

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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Site Details:

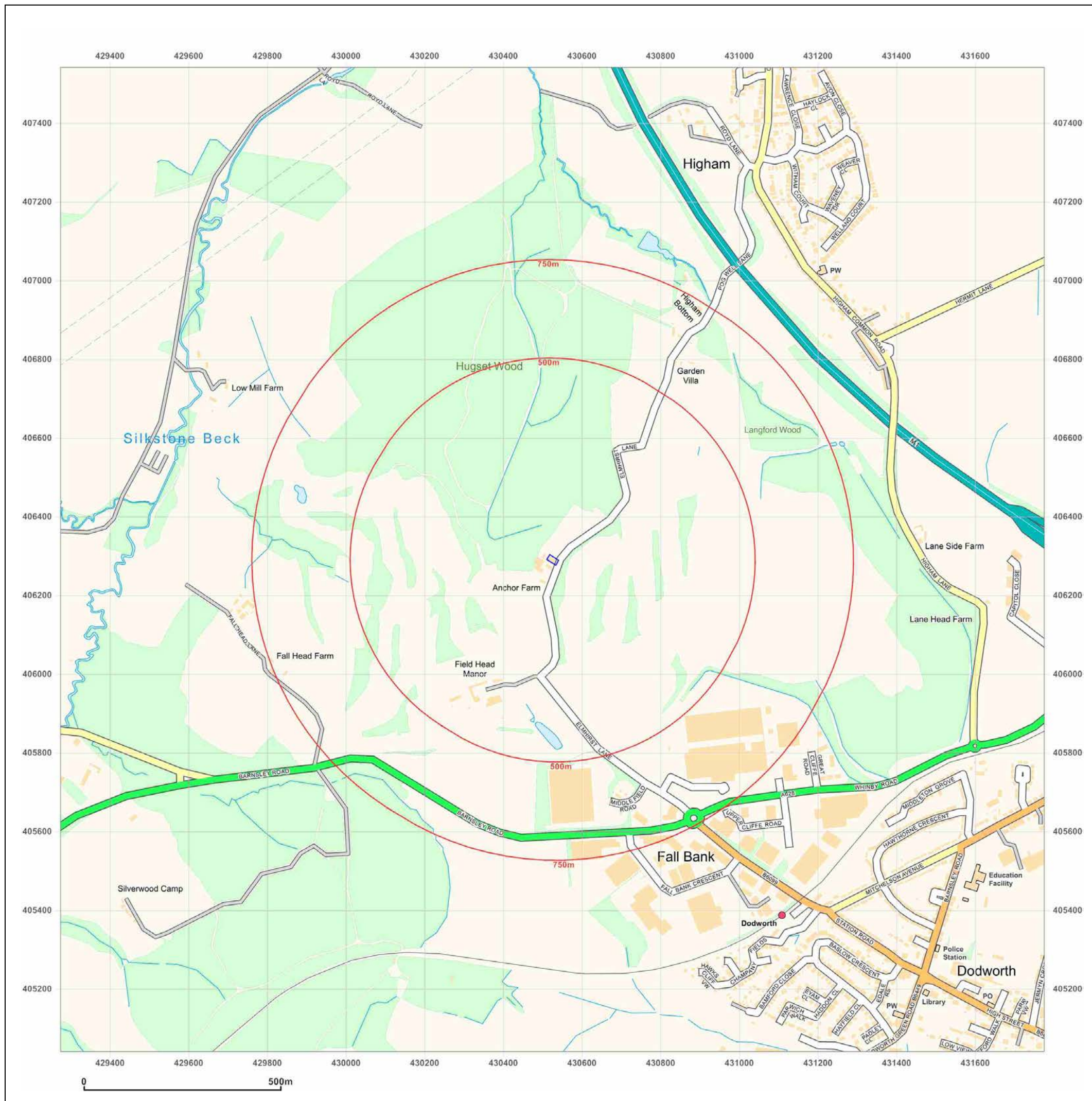
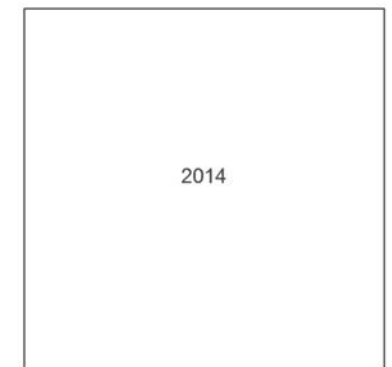
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 Grid Ref: 430524, 406291

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000



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Production date: 02 November 2018

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APPENDIX G: GROUNDSURE REPORTS

Demeter Environmental Ltd
Hanover House, Hanover Street,
Liverpool, L3 3DZ

Report Reference: EMS-DE-509766_686091

Your Reference: EMS_509766_686091

Report Date 2 Nov 2018

Report Delivery Method: Email - pdf

Geo Insight

Address: ,

Dear Sir/ Madam,

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

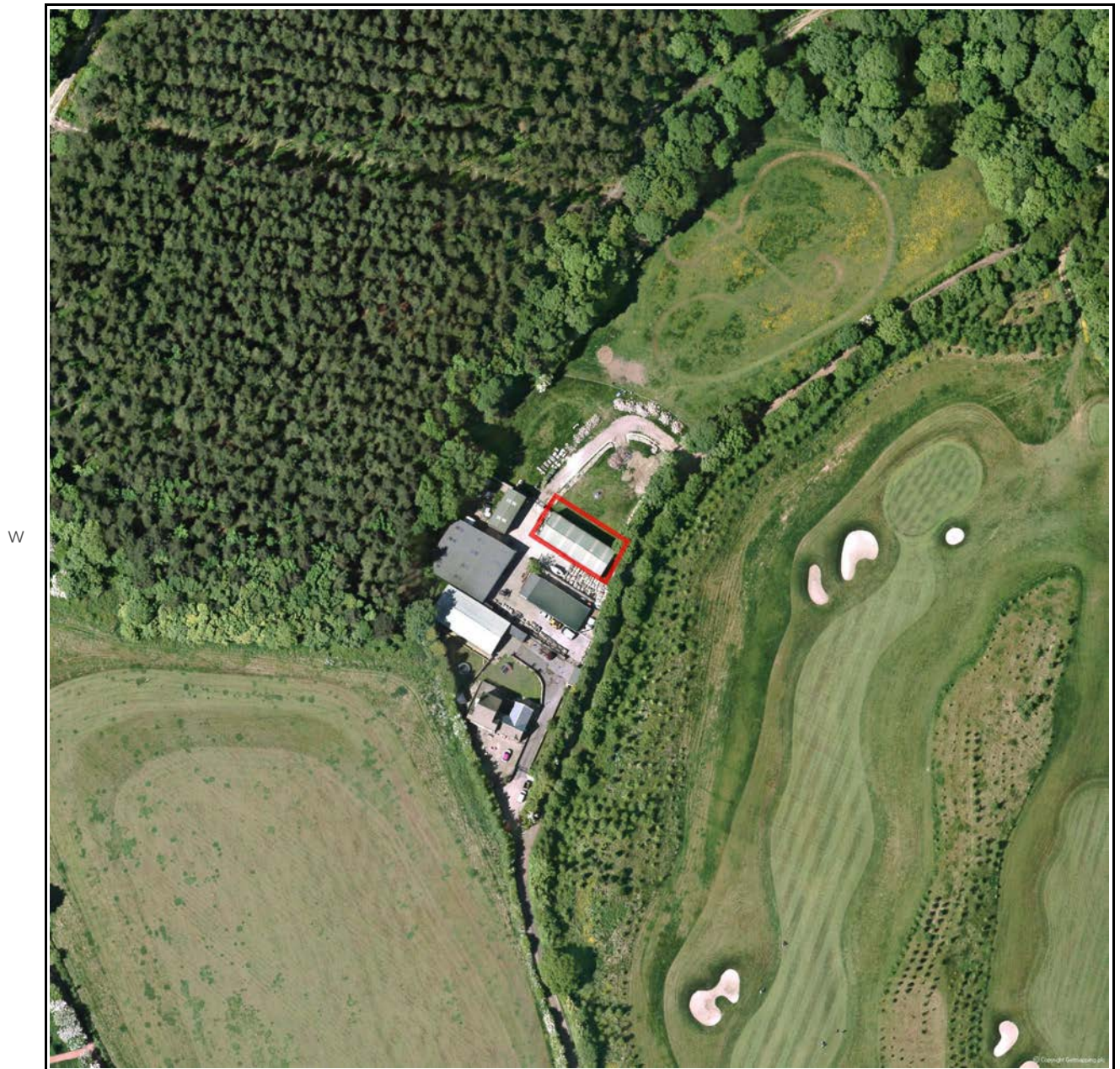
Yours faithfully,

Demeter Environmental ltd

Enc.
Groundsure Geo Insight

Address: ,
Date: 2 Nov 2018
Reference: EMS-DE-509766_686091
Client: Demeter Environmental Ltd

NW N NE



SW S SE

Aerial Photograph Capture date: 07-Jun-2013
Grid Reference: 430524,406291
Site Size: 0.04ha



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Overview of Findings

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

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

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

Section 1: Geology 1:10,000 Scale		
1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	Yes
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	Yes
Section 2: Geology 1:50,000 Scale		
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	Yes
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	Yes
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	No
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	No
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

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

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

Yes

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

Yes

Section 3: Radon

3. Radon

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

The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

Section 4: Ground Workings

	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	0	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	8	44
4.3 Current Ground Workings	0	0	0	1	7

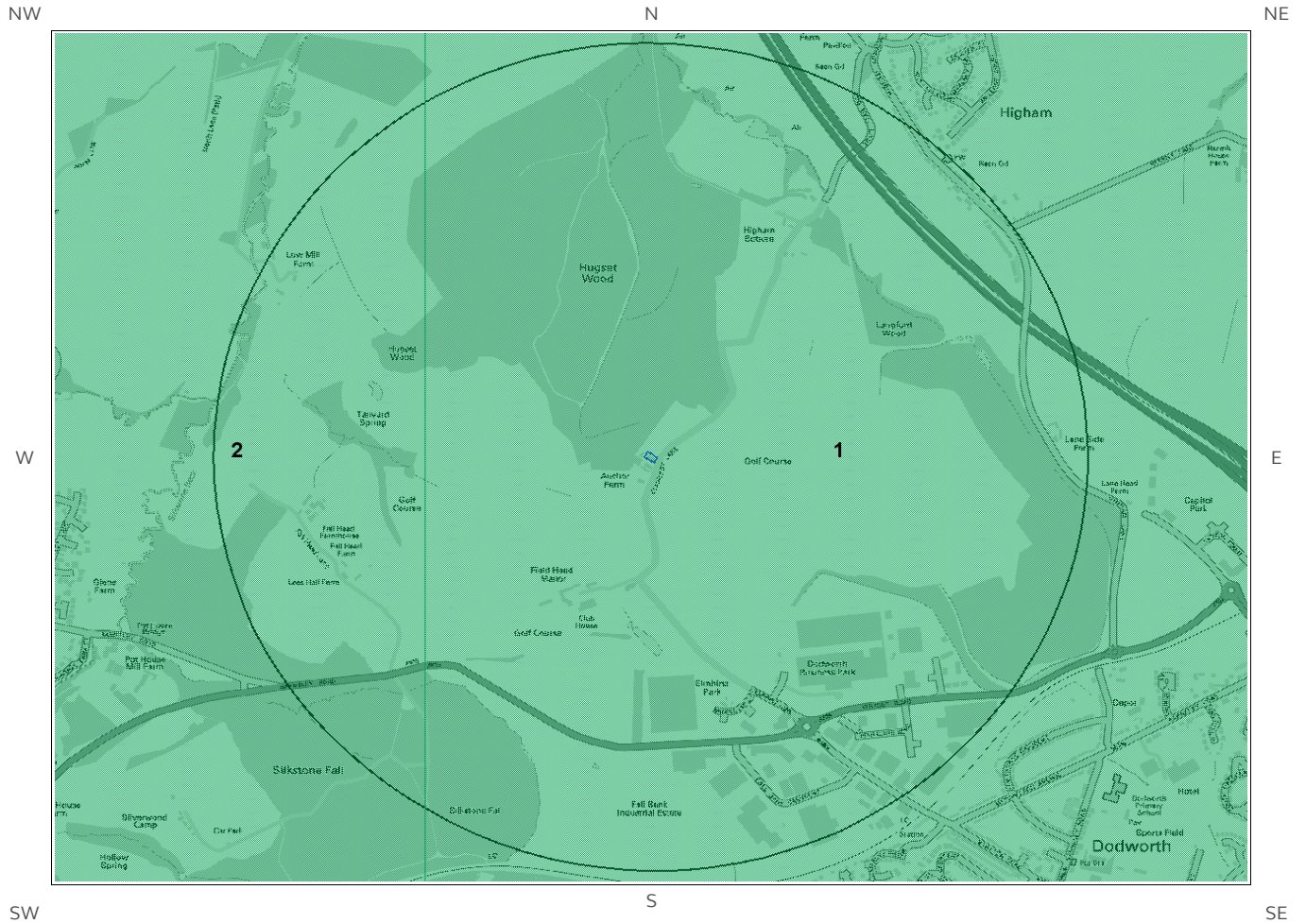
Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	8	44
5.2 Coal Mining	1	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	1	0	1	0	1
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Very Low				
6.2 Landslides	Very Low				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Moderate				
6.5 Collapsible Deposits	Very Low				
6.5 Running Sand	Very Low				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	0	0	0		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	1	2	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	0	0	0	Not Searched	
9.3 Historical Railways	0	0	0	Not Searched	
9.4 Active Railways	0	0	0	Not Searched	
9.5 Railway Projects	0	0	0	0	

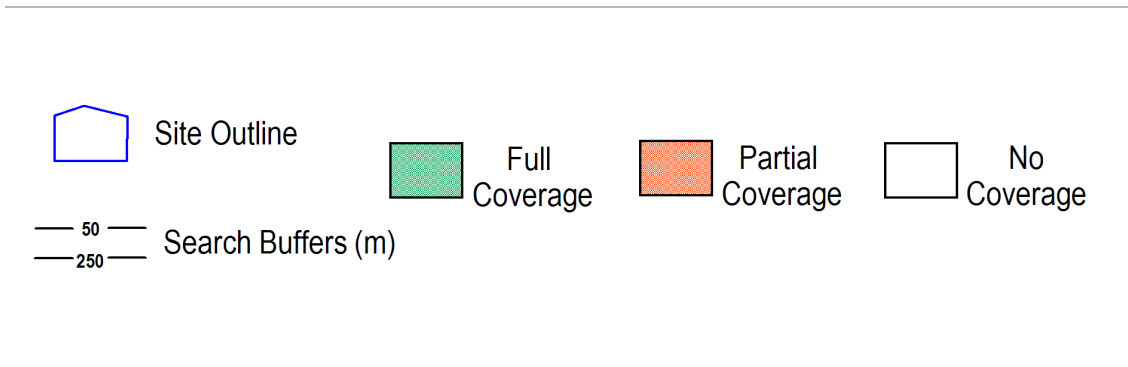


1:10,000 Scale Availability



1_10,000 Availability Legend

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Availability of 1:10,000 Scale Geology Mapping

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

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	Some deposits are mapped
2	509.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N3	1277.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N4	1384.0	Some deposits are mapped	Full	Full	Some deposits are mapped

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

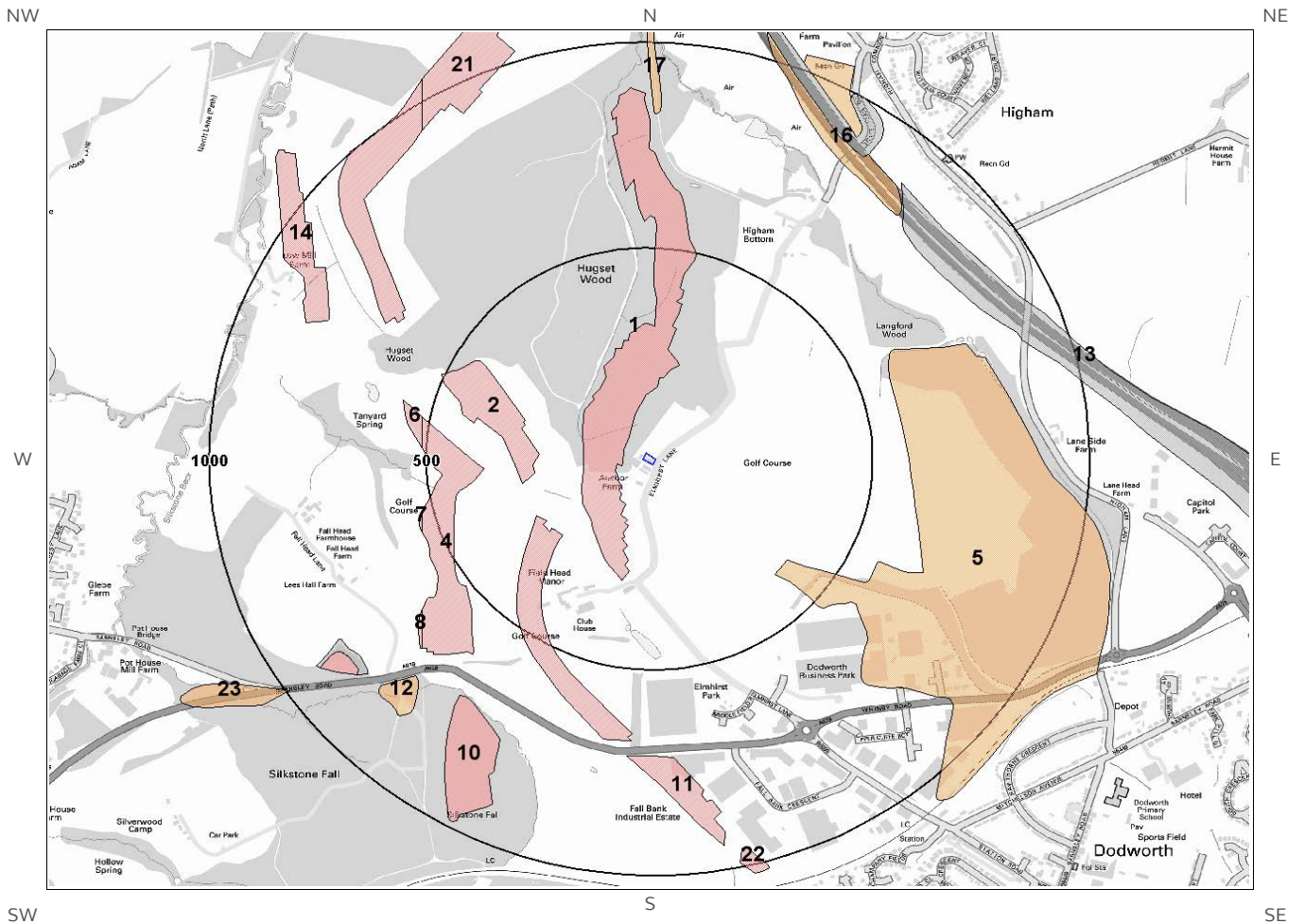
The definitions of coverage are as follows:

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



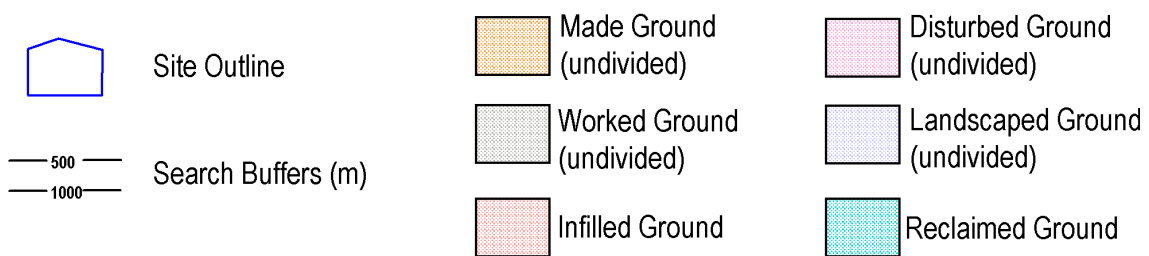
1 Geology (1:10,000 scale).

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



Artificial Ground Legend

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1. Geology 1:10,000 scale

1.1 Artificial Ground

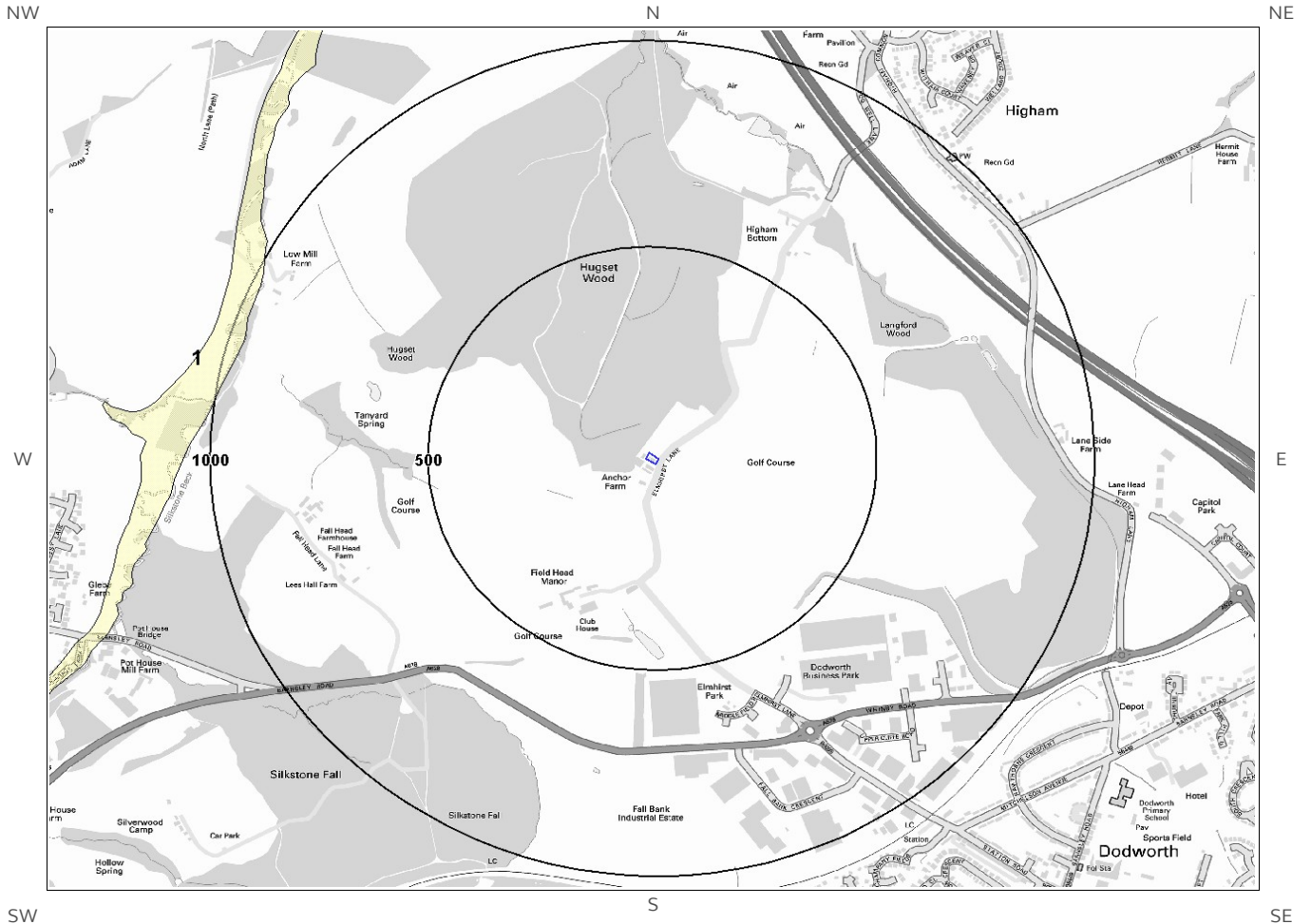
The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	46.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	239.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	263.0	SW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	367.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
5	386.0	SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit






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



Artificial Ground Legend

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



1.2 Superficial Deposits and Landslips

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

1.2.1 Superficial Deposits/ Drift Geology

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

Database searched and no data found.

1.2.2 Landslip

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

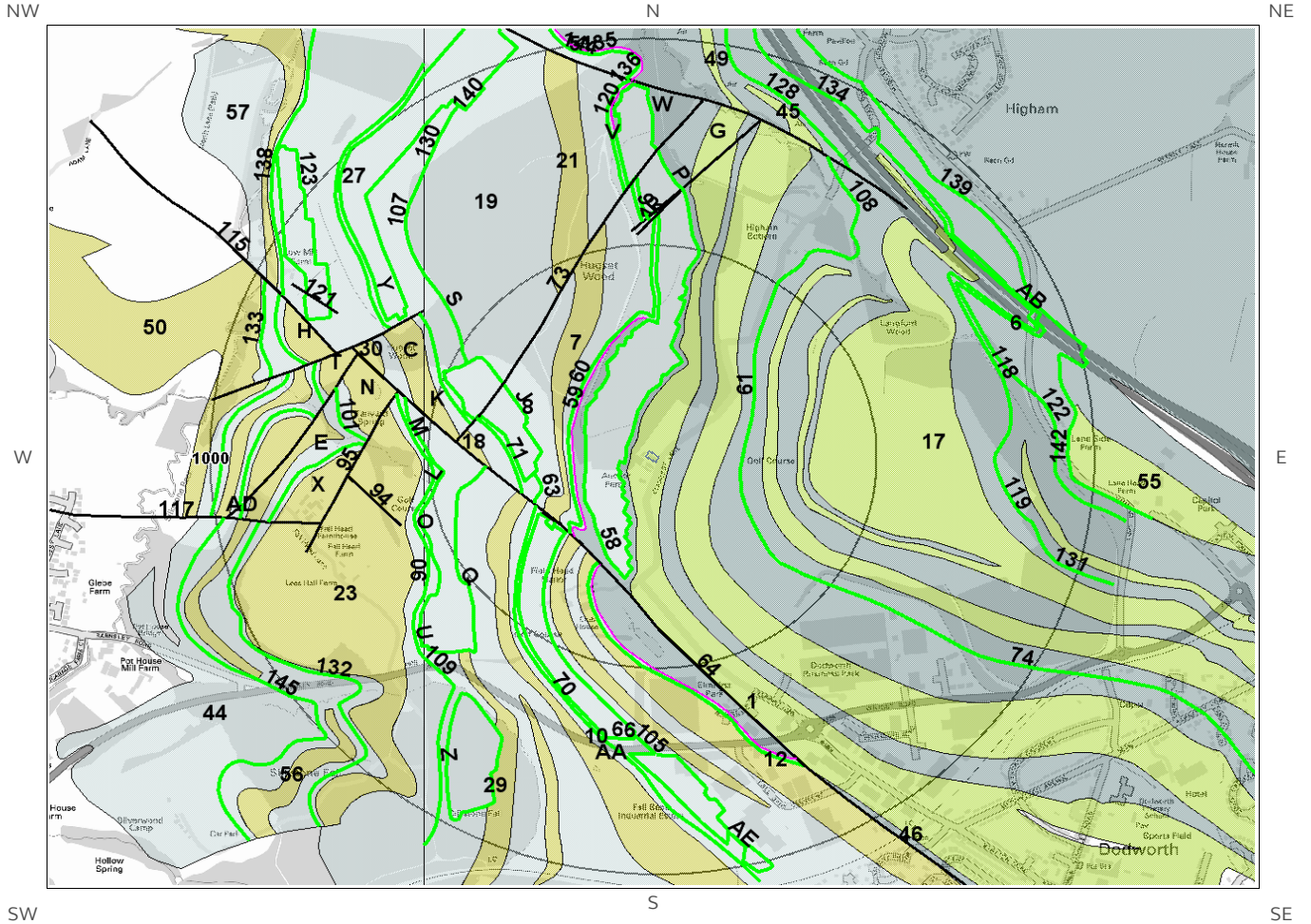
Database searched and no data found.

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

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






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



Bedrock and linear features Legend

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

1.3 Bedrock and linear features

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

1.3.1 Bedrock/ Solid Geology

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

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
2	28.0	E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
3A	35.0	W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
4A	46.0	W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
5	71.0	E	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
6	141.0	E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
7	186.0	W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
8	202.0	W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
9	239.0	E	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
10	256.0	SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
11	256.0	SW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
12	264.0	SW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
13B	274.0	SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
14B	277.0	SW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
15AA	289.0	W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
16D	307.0	W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
17	317.0	E	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
18	353.0	W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
19	370.0	NW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
20K	428.0	W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
21	431.0	NW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? **Yes**

ID	Distance (m)	Direction	Category Description	Feature Description
58	46.0	W	ROCK	Coal seam, observed
59	167.0	W	FOSSIL_HORIZON	Fossil horizon, marine band
60	175.0	W	ROCK	Coal seam, observed
61	190.0	E	ROCK	Coal seam, observed
62J	239.0	W	ROCK	Coal seam, observed
63	251.0	W	ROCK	Ironstone bed, inferred
64	256.0	SW	FAULT	Normal fault, inferred
65I	258.0	SW	ROCK	Ironstone bed, inferred
66	263.0	SW	ROCK	Coal seam, observed
67I	268.0	SW	ROCK	Coal seam, observed
68B	274.0	SW	ROCK	Coal seam, inferred
69B	277.0	SW	FOSSIL_HORIZON	Fossil horizon, marine band
70	278.0	SW	ROCK	Coal seam, observed
71	297.0	W	ROCK	Coal seam, observed
72Q	367.0	W	ROCK	Coal seam, observed
73	370.0	NW	FAULT	Normal fault, inferred
74	387.0	SE	ROCK	Coal seam, inferred
75J	398.0	W	ROCK	Coal seam, observed
76K	407.0	W	ROCK	Coal seam, observed
77P	444.0	N	ROCK	Coal seam, observed
78L	465.0	W	ROCK	Coal seam, observed
79S	468.0	NW	ROCK	Ironstone bed, inferred
80L	491.0	W	ROCK	Coal seam, observed

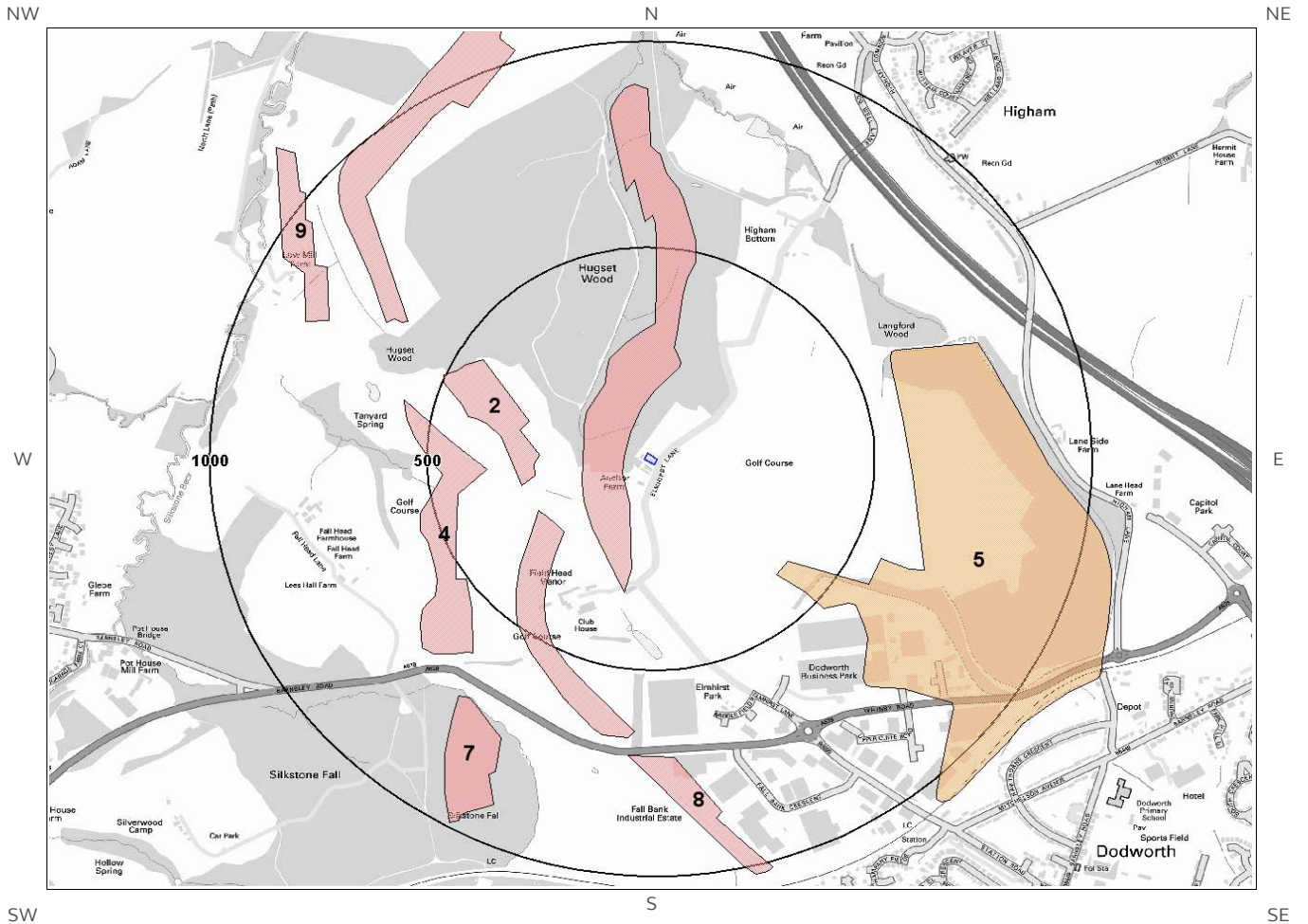
The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale.

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

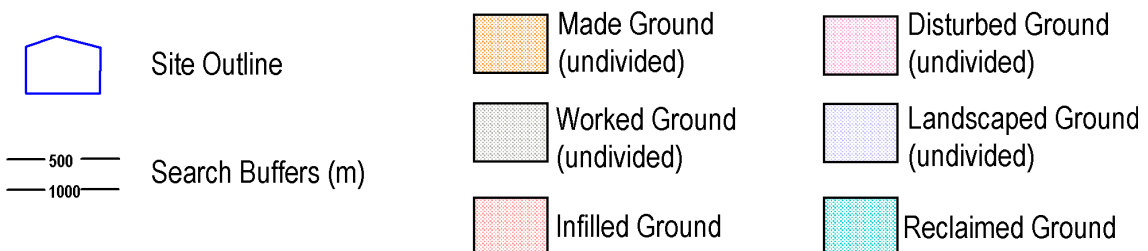


2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 087

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	47.0	W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	241.0	W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	256.0	SW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	363.0	W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
5	385.0	SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

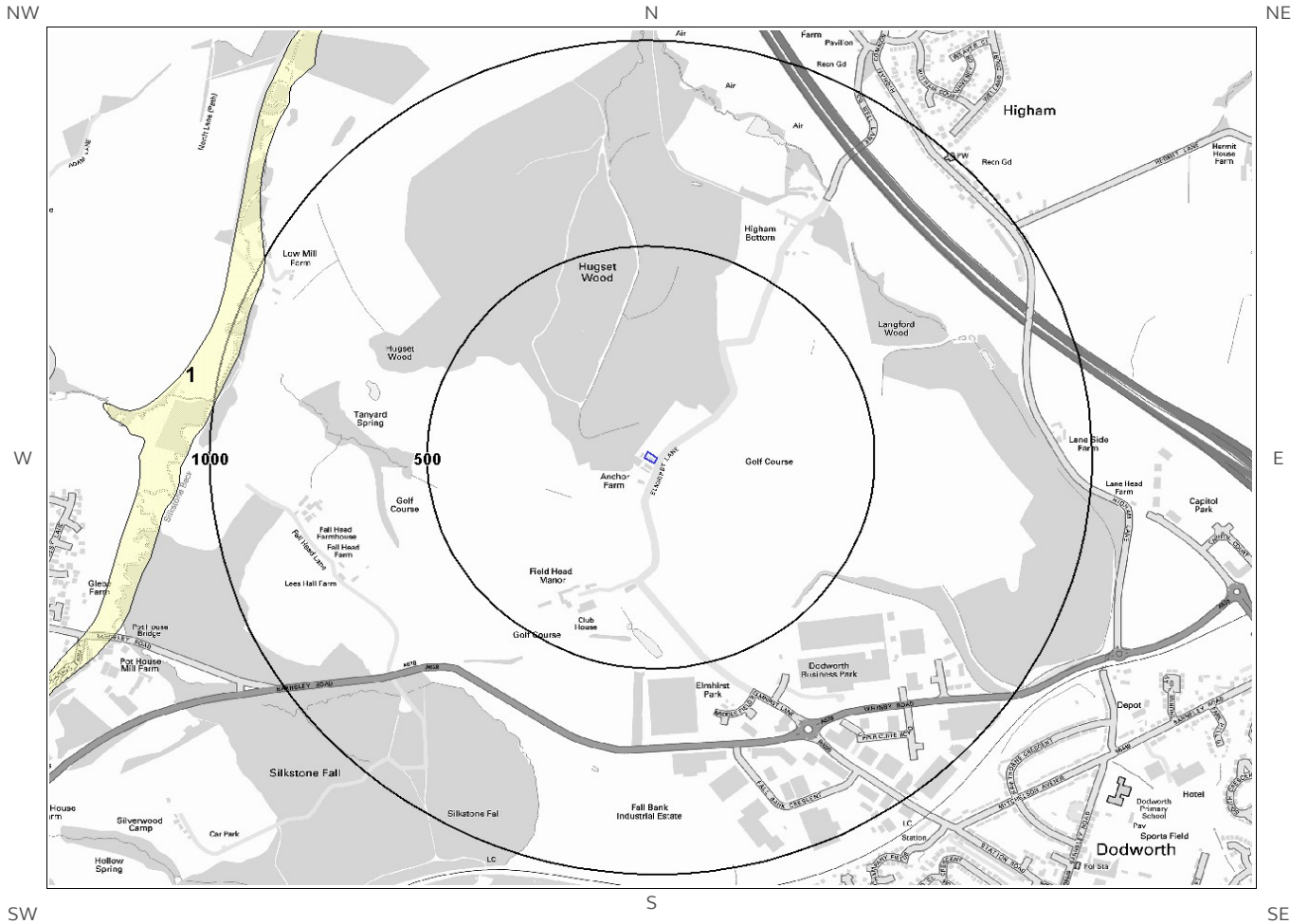
2.1.2 Permeability of Artificial Ground

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

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
47.0	W	Mixed	Very High	Low



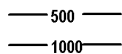
2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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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? No

Database searched and no data found.

2.2.2 Permeability of Superficial Ground

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

Database searched and no data found.

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.

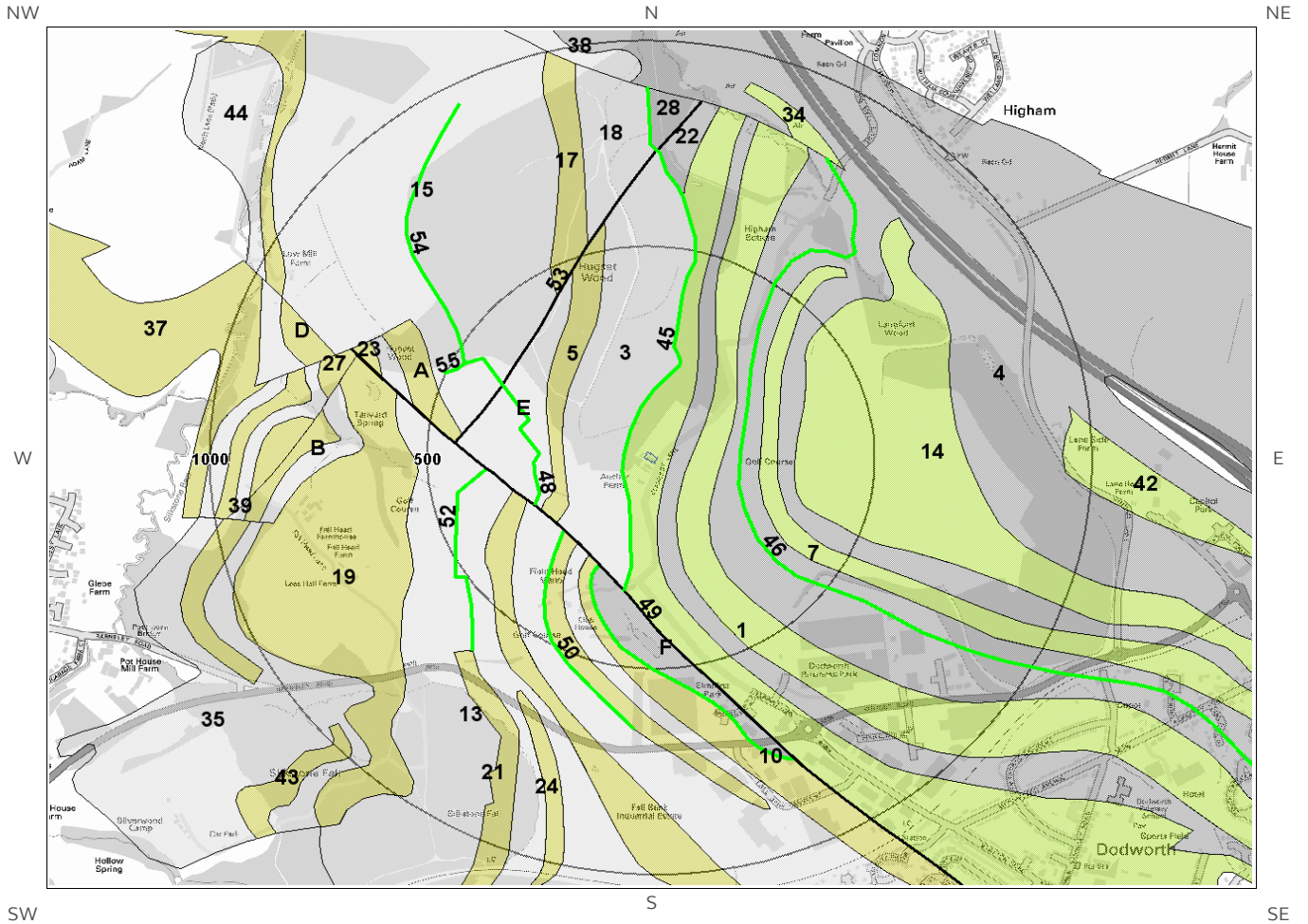
2.2.4 Landslip Permeability

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

Database searched and no data found.



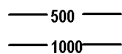
2.3 Bedrock and linear features map (1:50,000 scale)



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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: 087

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	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
2	30.0	E	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
3	47.0	W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
4	143.0	E	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
5	185.0	W	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
6E	215.0	W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
7	235.0	E	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
8	256.0	SW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
9	256.0	SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
10	267.0	SW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
11F	277.0	SW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	290.0	W	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
13	312.0	W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
14	315.0	E	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
15	370.0	NW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16A	423.0	W	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
17	432.0	NW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - 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	Moderate
30.0	E	Fracture	Moderate	Low
47.0	W	Fracture	High	Low

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
45	47.0	W	ROCK	Coal seam, inferred
46	191.0	E	ROCK	Coal seam, inferred
47E	241.0	W	ROCK	Coal seam, inferred
48	255.0	W	ROCK	Coal seam, inferred
49	256.0	SW	FAULT	Fault, inferred
50	256.0	SW	ROCK	Coal seam, inferred
51F	277.0	SW	ROCK	Coal seam, inferred
52	363.0	W	ROCK	Coal seam, inferred
53	370.0	NW	FAULT	Fault, inferred, displacement unknown
54	473.0	NW	ROCK	Ironstone bed, inferred
55	473.0	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 in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

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

3.2 Radon Protection

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





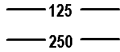


4 Ground Workings map



Ground Workings Legend

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

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

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

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? No

Database searched and no data found.

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
1	294.0	NW	430258 406451	Air Shaft	1904
Not shown	324.0	NW	430363 406593	Air Shaft	1929
Not shown	324.0	NW	430363 406593	Air Shaft	1904
Not shown	328.0	NW	430362 406597	Disused Air Shaft	1982
Not shown	328.0	NW	430362 406597	Disused Air Shaft	1966
Not shown	328.0	NW	430362 406597	Disused Air Shaft	1973
Not shown	328.0	NW	430362 406597	Disused Air Shaft	1993
Not shown	328.0	NW	430362 406597	Air Shaft	1951
Not shown	571.0	NE	430901 406870	Colliery	1891
Not shown	582.0	NE	430901 406870	Disused Colliery	1904
Not shown	671.0	N	430541 406977	Air Shaft	1929
Not shown	676.0	N	430540 406983	Air Shaft	1951
Not shown	683.0	SE	431192 405676	Unspecified Mine	1973

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	684.0	SE	431305 405736	Collieries	1951
Not shown	684.0	SE	431266 405723	Old Collieries	1938
Not shown	686.0	SE	431125 405693	Unspecified Mine	1966
Not shown	702.0	SE	431271 405714	Old Collieries	1904
Not shown	702.0	SE	431271 405714	Colliery	1891
Not shown	737.0	NE	430984 406948	Unspecified Mine	1973
Not shown	737.0	NE	430984 406948	Unspecified Mine	1966
Not shown	746.0	NE	430865 406967	Unspecified Shafts	1929
Not shown	749.0	NE	430864 406971	Unspecified Shafts	1951
Not shown	753.0	NE	430851 406982	Unspecified Shafts	1929
Not shown	755.0	NE	430848 406986	Unspecified Shafts	1951
Not shown	809.0	N	430531 407117	Disused Air Shaft	1993
Not shown	809.0	N	430531 407117	Disused Air Shaft	1973
Not shown	809.0	N	430531 407117	Disused Air Shaft	1966
Not shown	809.0	N	430531 407117	Disused Air Shaft	1982
Not shown	809.0	N	430531 407117	Air Shafts	1951
Not shown	836.0	N	430821 407085	Air Shaft	1929
Not shown	836.0	N	430821 407085	Air Shaft	1904
Not shown	836.0	N	430820 407087	Air Shaft	1951
Not shown	837.0	N	430830 407087	Disused Air Shaft	1993
Not shown	837.0	N	430830 407087	Disused Air Shaft	1966
Not shown	837.0	N	430830 407087	Disused Air Shaft	1973
Not shown	837.0	N	430830 407087	Disused Air Shaft	1982
Not shown	861.0	N	430561 407167	Air Shafts	1929
Not shown	863.0	N	430560 407171	Air Shafts	1951
Not shown	891.0	N	430656 407191	Disused Air Shaft	1993
Not shown	891.0	N	430656 407191	Disused Air Shaft	1982
Not shown	891.0	N	430656 407191	Disused Air Shaft	1973
Not shown	891.0	N	430656 407191	Disused Air Shaft	1966

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	895.0	N	430652 407192	Air Shaft	1904
Not shown	895.0	N	430652 407192	Air Shafts	1929
Not shown	913.0	SE	431188 405636	Unspecified Shaft	1951
Not shown	914.0	SE	431188 405633	Unspecified Shaft	1938
Not shown	974.0	N	430553 407281	Air Shaft	1929
Not shown	975.0	N	430558 407285	Disused Air Shaft	1973
Not shown	975.0	N	430558 407285	Disused Air Shaft	1966
Not shown	975.0	N	430558 407285	Disused Air Shaft	1993
Not shown	975.0	N	430558 407285	Disused Air Shaft	1982
Not shown	978.0	N	430552 407285	Air Shaft	1951

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

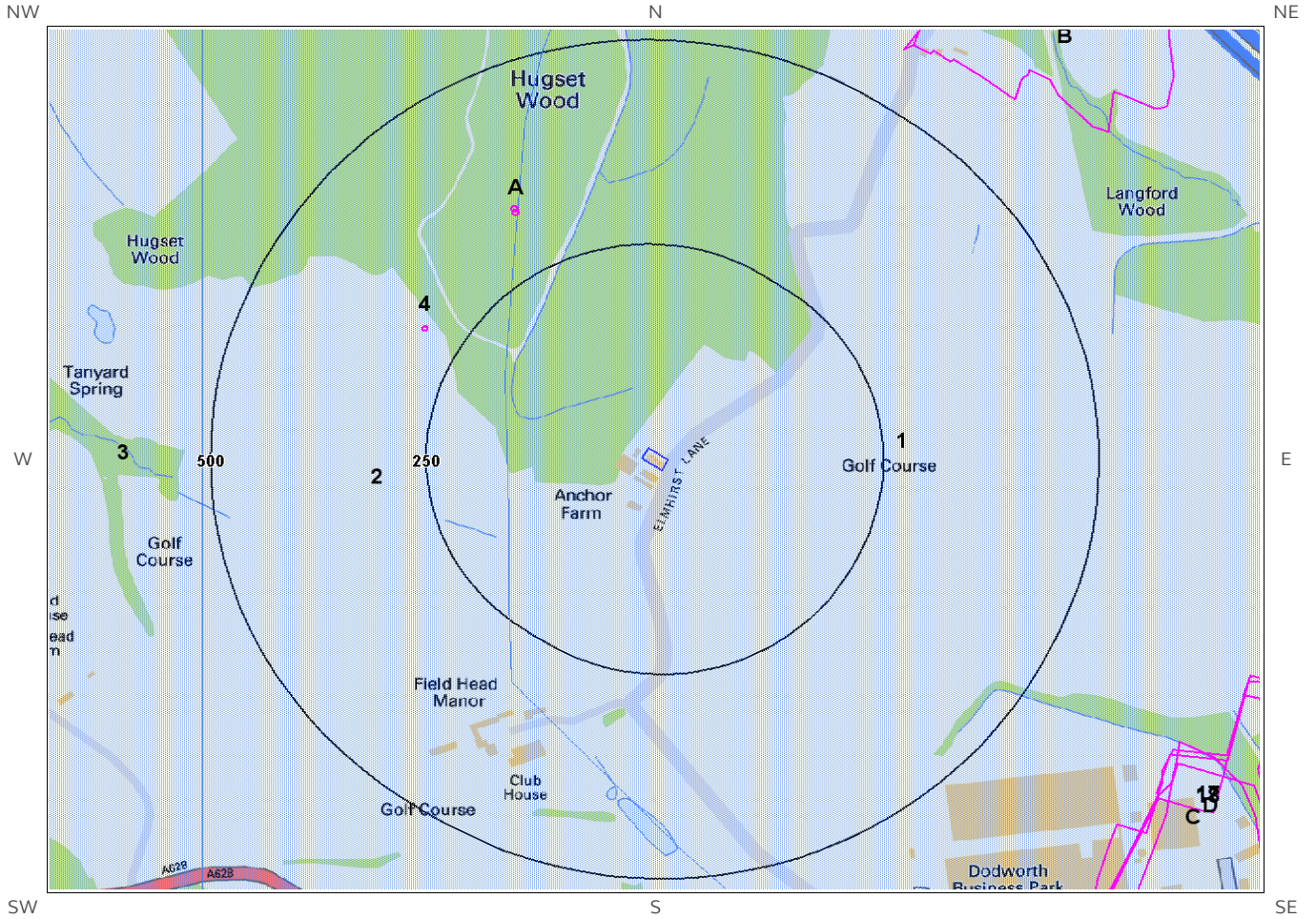
The following Current Ground Workings information is provided by British Geological Survey:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
53	320.0	NW	430241 406467	Coal, Deep	Elmhirst Pits	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)	Ceased
Not shown	551.0	NE	430823 406762	Sandstone	Higham Bottom	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	599.0	N	430688 406878	Clay & Shale	Higham Bottom Brick Field	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	689.0	NW	429963 406714	Ironstone	Hugset Wood Pits	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)	Ceased
Not shown	693.0	NE	430935 406859	Coal, Deep	Silksone New Colliery	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)	Ceased

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	754.0	NE	430870 406970	Coal, Deep	Higham Colliery	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)	Ceased
Not shown	784.0	W	429739 406436	Coal, Deep	Pall Mall Engine Shaft	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)	Ceased
Not shown	861.0	SE	431185 405715	Coal, Deep	Old Silkstone Collieries	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)	Ceased

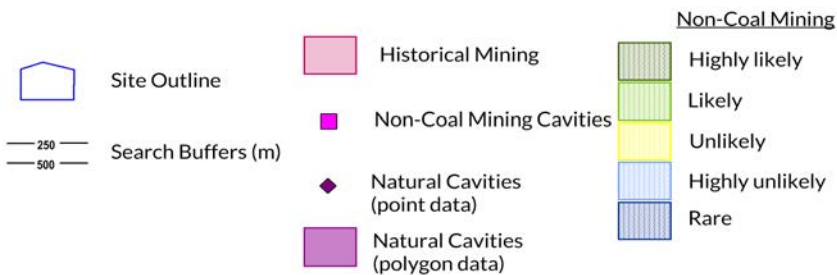


5 Mining, Extraction & Natural Cavities map



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
4	294.0	NW	430258 406451	Air Shaft	1904
5A	324.0	NW	430363 406593	Air Shaft	1904
6A	324.0	NW	430363 406593	Air Shaft	1929
7A	328.0	NW	430362 406597	Disused Air Shaft	1966
8A	328.0	NW	430362 406597	Disused Air Shaft	1973
9A	328.0	NW	430362 406597	Disused Air Shaft	1993
10A	328.0	NW	430362 406597	Disused Air Shaft	1982
11A	328.0	NW	430362 406597	Air Shaft	1951
12B	571.0	NE	430901 406870	Colliery	1891
13B	582.0	NE	430901 406870	Disused Colliery	1904
Not shown	671.0	N	430541 406977	Air Shaft	1929
Not shown	676.0	N	430540 406983	Air Shaft	1951
16C	683.0	SE	431192 405676	Unspecified Mine	1973
17	684.0	SE	431305 405736	Collieries	1951
18	684.0	SE	431266 405723	Old Collieries	1938
19C	686.0	SE	431125 405693	Unspecified Mine	1966
20D	702.0	SE	431271 405714	Colliery	1891
21D	702.0	SE	431271 405714	Old Collieries	1904
Not shown	737.0	NE	430984 406948	Unspecified Mine	1966
Not shown	737.0	NE	430984 406948	Unspecified Mine	1973

ID	Distance (m)	Direction	NGR	Details	Date
Not shown	746.0	NE	430865 406967	Unspecified Shafts	1929
Not shown	749.0	NE	430864 406971	Unspecified Shafts	1951
Not shown	753.0	NE	430851 406982	Unspecified Shafts	1929
Not shown	755.0	NE	430848 406986	Unspecified Shafts	1951
Not shown	809.0	N	430531 407117	Air Shafts	1951
Not shown	809.0	N	430531 407117	Disused Air Shaft	1966
Not shown	809.0	N	430531 407117	Disused Air Shaft	1982
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Not shown	836.0	N	430821 407085	Air Shaft	1929
Not shown	836.0	N	430820 407087	Air Shaft	1951
Not shown	837.0	N	430830 407087	Disused Air Shaft	1973
Not shown	837.0	N	430830 407087	Disused Air Shaft	1993
Not shown	837.0	N	430830 407087	Disused Air Shaft	1982
Not shown	837.0	N	430830 407087	Disused Air Shaft	1966
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Not shown	891.0	N	430656 407191	Disused Air Shaft	1966
Not shown	891.0	N	430656 407191	Disused Air Shaft	1982
Not shown	895.0	N	430652 407192	Air Shafts	1929
Not shown	895.0	N	430652 407192	Air Shaft	1904
Not shown	913.0	SE	431188 405636	Unspecified Shaft	1951
Not shown	914.0	SE	431188 405633	Unspecified Shaft	1938
Not shown	974.0	N	430553 407281	Air Shaft	1929
Not shown	975.0	N	430558 407285	Disused Air Shaft	1966
Not shown	975.0	N	430558 407285	Disused Air Shaft	1973

ID	Distance (m)	Direction	NGR	Details	Date
Not shown	975.0	N	430558 407285	Disused Air Shaft	1993
Not shown	975.0	N	430558 407285	Disused Air Shaft	1982
Not shown	978.0	N	430552 407285	Air Shaft	1951

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.

5.4 Non-Coal Mining

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

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

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Not available	Iron Ore (Bedded)	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
2	156.0	W	Sheffield Area	Vein Mineral/Iron ore	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
3	509.0	W	Sheffield Area	Vein Mineral/Iron ore	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

5.5 Non-Coal Mining Cavities

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

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

Database searched and no data found.

5.6 Natural Cavities

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

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

Database searched and no data found.

5.7 Brine Extraction

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

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

Database searched and no data found.

5.8 Gypsum Extraction

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

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

Database searched and no data found.

5.9 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.

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?

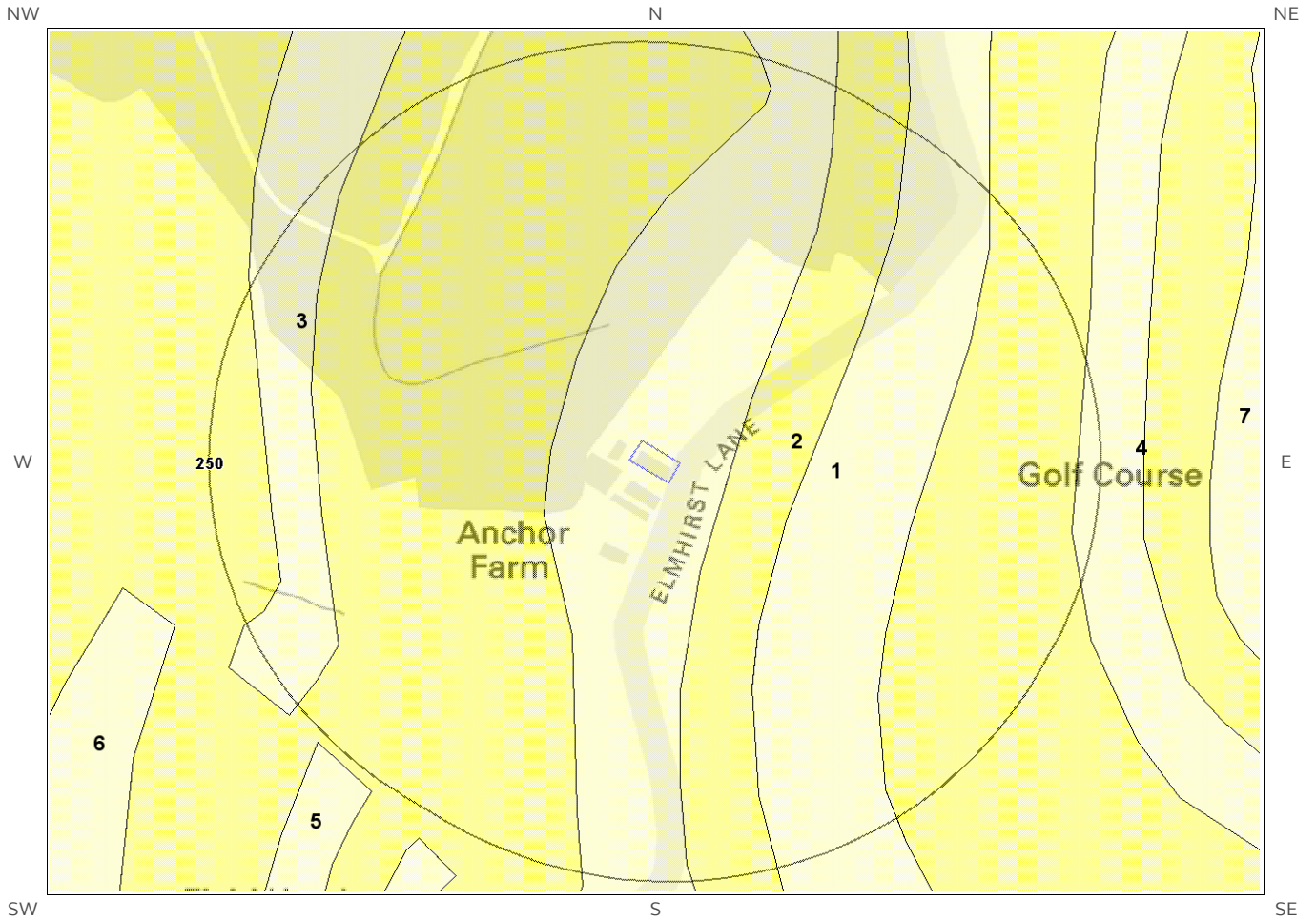
No

Database searched and no data found.



6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map



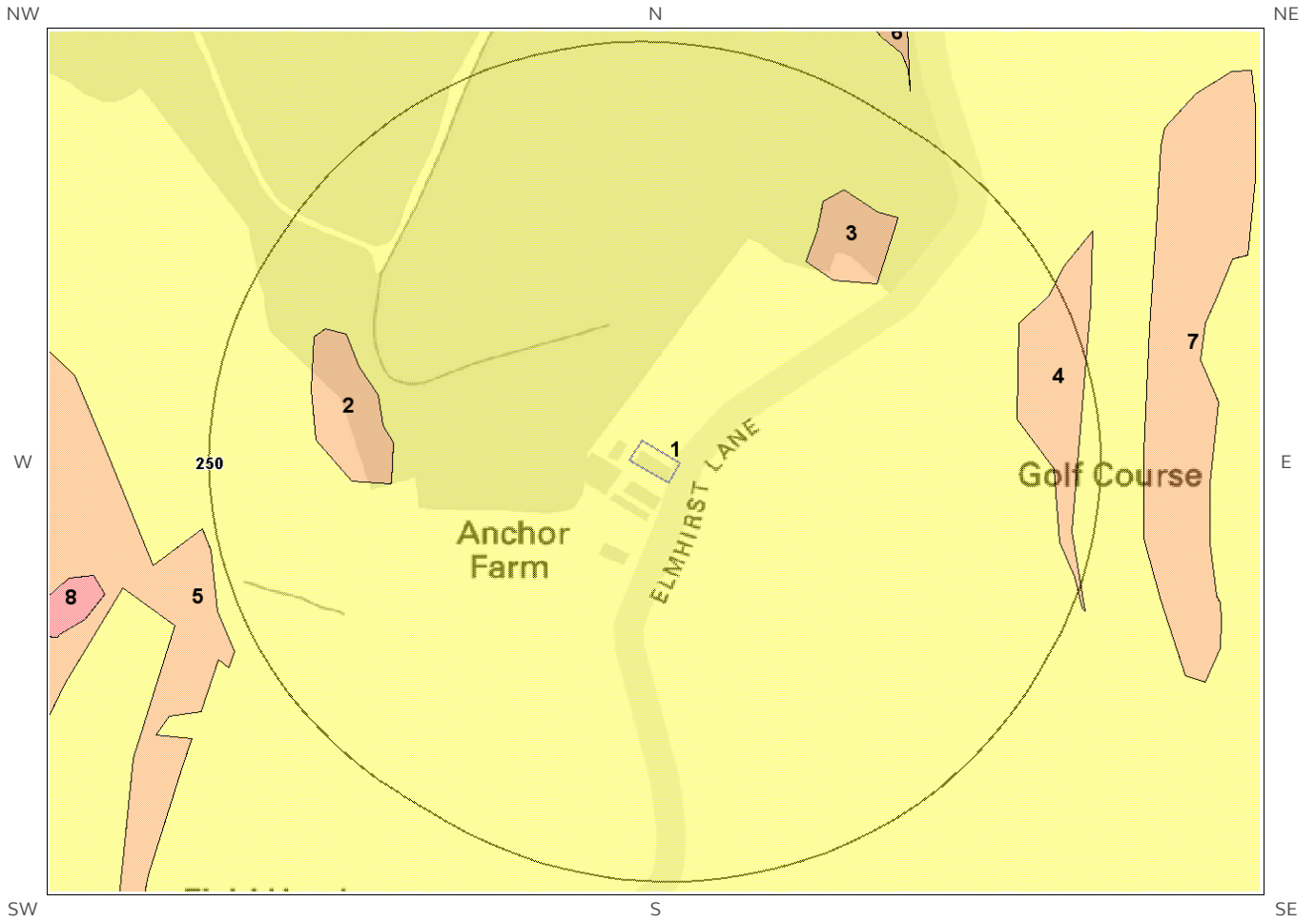
Shrink Swell Clay Legend

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6.2 Landslides map



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6.3 Ground Dissolution of Soluble Rocks map



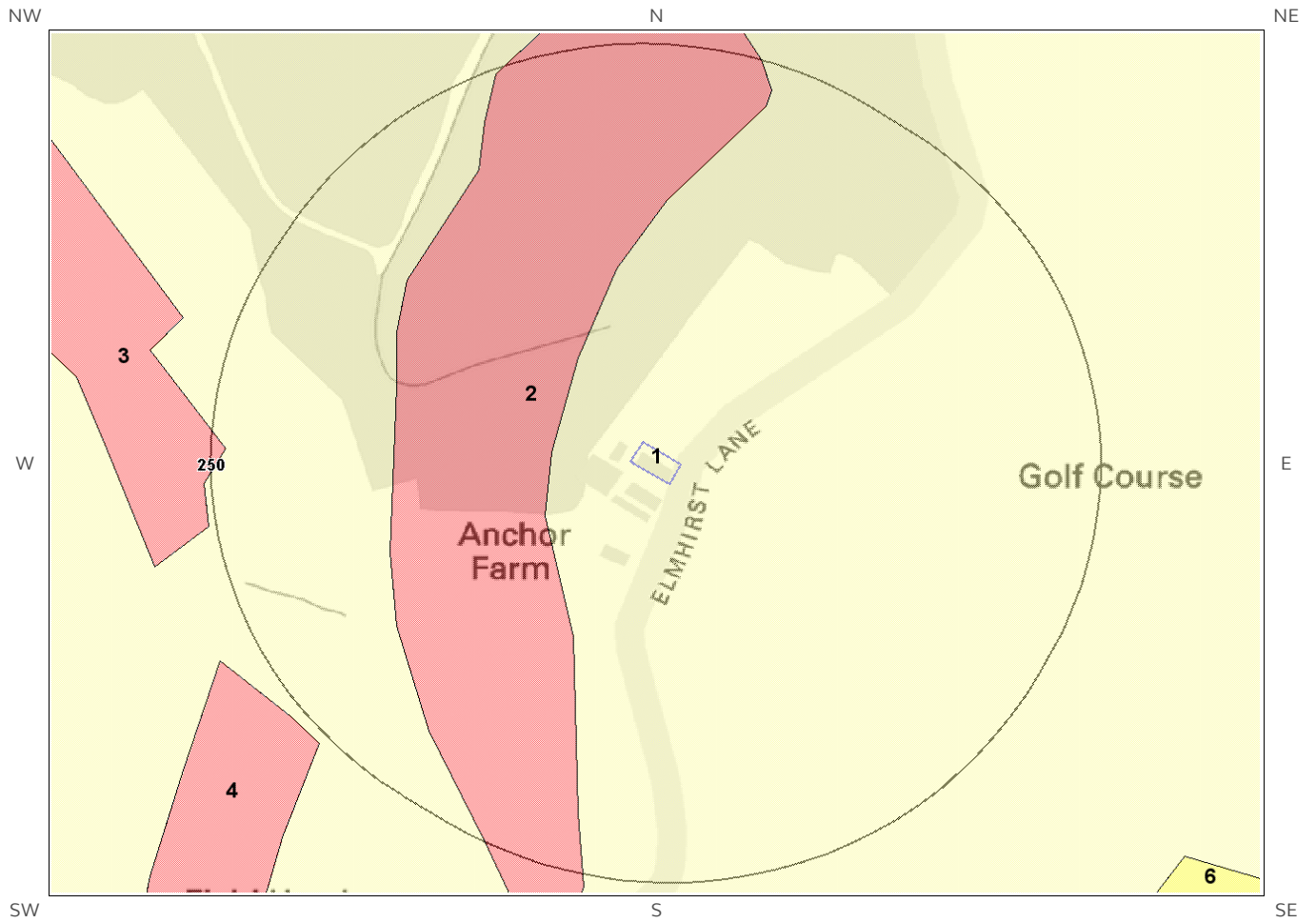
Ground Dissolution
Soluble Rocks Legend

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6.4 Compressible Deposits map



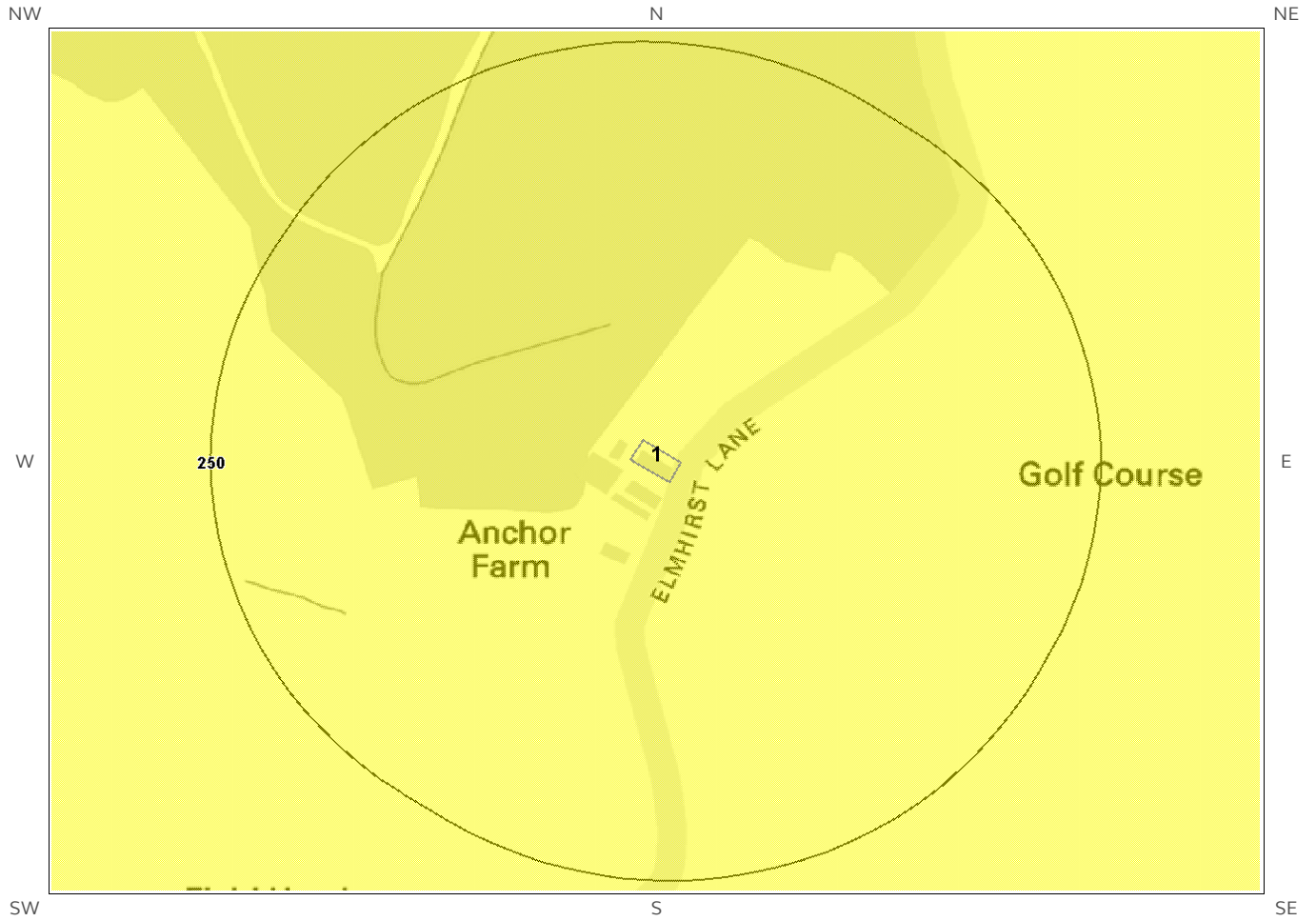
Compressible Deposits Legend

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6.5 Collapsible Deposits map



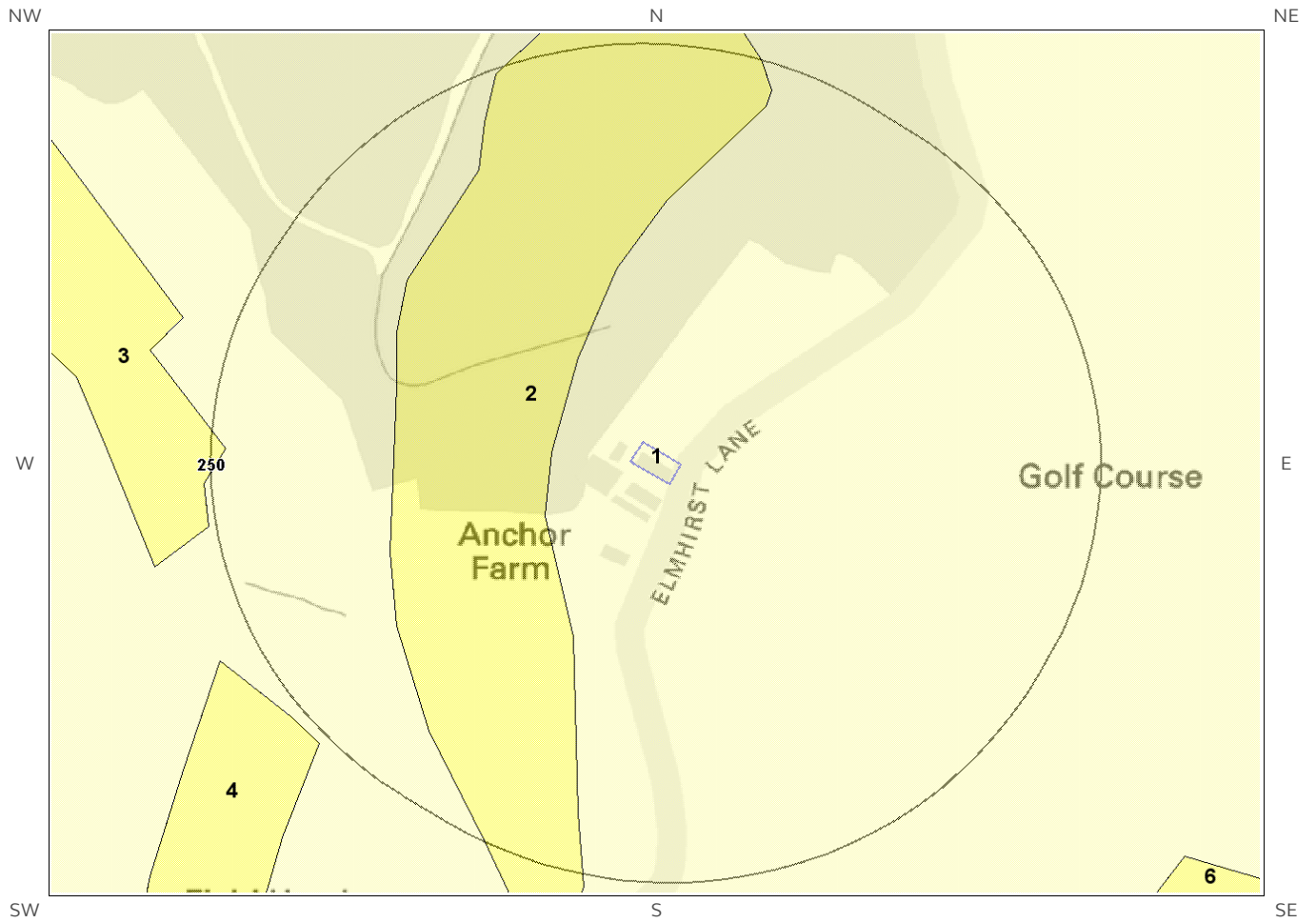
Collapsible Deposits Legend

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6.6 Running Sand map



Running Sand Legend

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6 Natural Ground Subsidence

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

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

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

6.1 Shrink-Swell Clays

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.
2	30.0	E	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.

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

6.3 Ground Dissolution of Soluble Rocks

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

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

6.4 Compressible Deposits

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

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
2	47.0	W	Moderate	Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build - consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

6.5 Collapsible Deposits

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

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

ID	Distance (m)	Direction	Hazard Rating	Details
2	47.0	W	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.



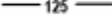



7 Borehole Records map



Borehole Records Legend

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-  Site Outline
-  Borehole Locations
-  125 Search Buffers (m)
-  250 Search Buffers (m)

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: 0

Database searched and no data found.



8 Estimated Background Soil Chemistry

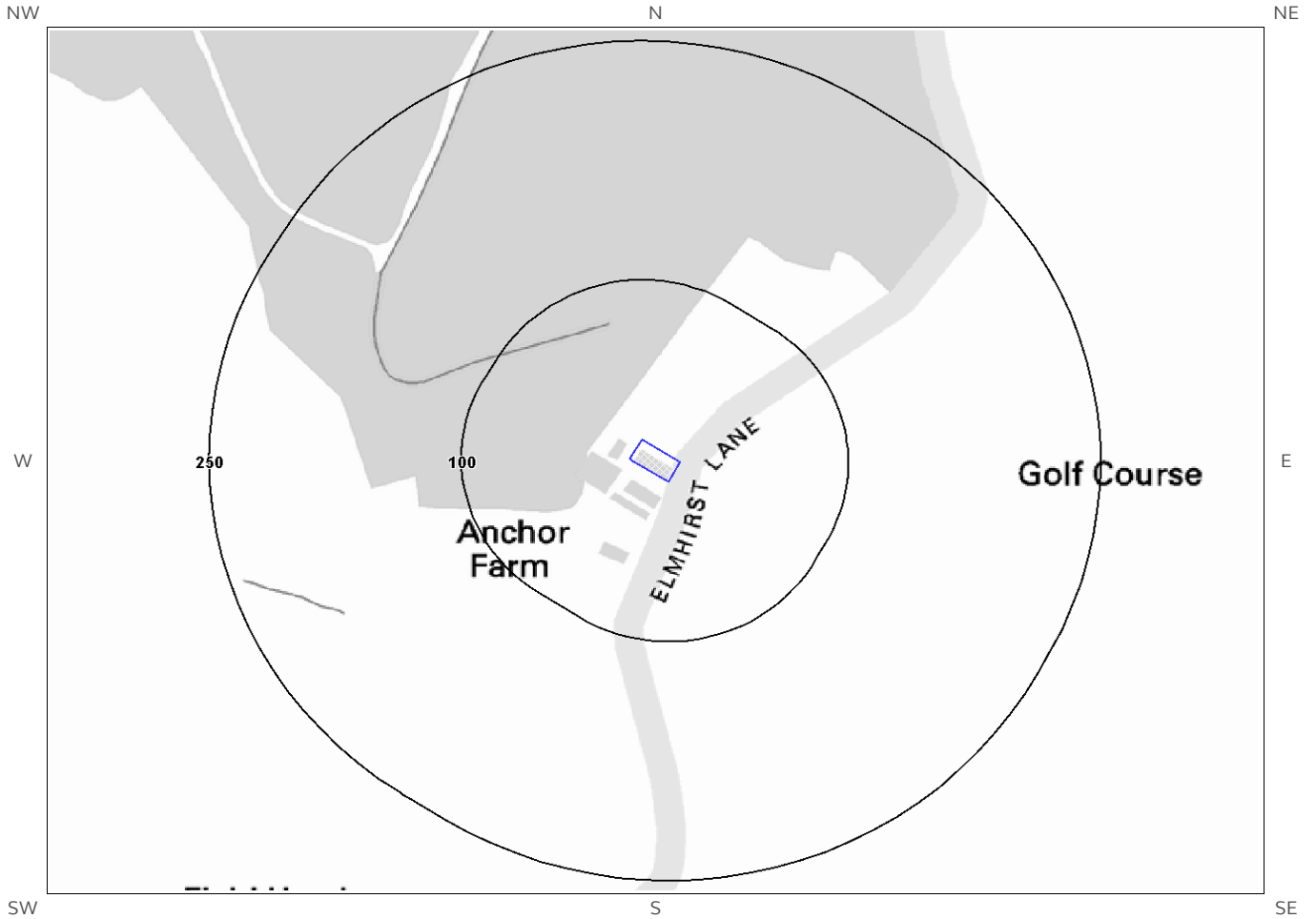
Records of background estimated soil chemistry within 250m of the study site boundary: 3

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	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
9.0	W	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	<100 mg/kg
44.0	E	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg














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

9 Railways and Tunnels map



Railways and Tunnels Legend

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- | | | | | | |
|---|-----------------------------|---|--|---|---|
|  | Site Outline |  | Underground or Partially Underground Railway / Subway System |  | Railway Track (OpenStreetMap) |
|  | Railway Tunnel (OS Mapping) |  | High Speed 2 |  | High Speed 2 Revised Proposed Route |
|  | Search Buffers (m) |  | Abandoned or Dismantled Railway (OpenStreetMap) |  | Crossrail 1 |
|  | 250 |  | Railway Track (OS Mapping) |  | Railway and/or Tunnel Feature from Historical Mapping |
|  | 500 | | | | |

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.

Contact Details

Demeter Environmental Ltd
Telephone: 0151 521 2539
enquiries@demeter-environmental.co.uk



British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email: enquiries@bgs.ac.uk
Web: www.bgs.ac.uk



BGS Geological Hazards Reports and general geological enquiries

British Gypsum

British Gypsum Ltd
East Leake
Loughborough
Leicestershire
LE12 6HX



The Coal Authority

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



Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
<https://www.gov.uk/government/organisations/public-health-england>
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000



Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane
Brierley Hill, West Midlands
DY5 3LH
Tel: +44 (0) 1384 262 000
Email: enquiries.gs@jpb.co.uk
Website: www.jpb.co.uk



Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505
Website: <http://www.ordnancesurvey.co.uk/>



Getmapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444
Website: <http://www1.getmapping.com/>



Peter Brett Associates
Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN
Tel: +44 (0)118 950 0761 E-mail: reading@pba.co.uk
Website: <http://www.peterbrett.com/home>



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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-may25-2018>

Demeter Environmental Ltd
Hanover House, Hanover Street,
Liverpool, L3 3DZ

Groundsure Reference: EMS-DE-509766_686092

Your Reference: EMS_509766_686092

Report Date 2 Nov 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: 2 Nov 2018
Reference: EMS-DE-509766_686092
Client: Demeter Environmental Ltd



Aerial Photograph Capture date: 07-Jun-2013
Grid Reference: 430524,406291
Site Size: 0.04ha

Report Reference: EMS-DE-509766_686092
Client Reference: EMS_509766_686092

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Overview of Findings

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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	0	18
1.2 Additional Information – Historical Tank Database	0	0	0	1
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
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 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	0	19
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	1
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	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	1	0	0	0	0	6
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0	3
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0	0
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	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	0	0
Section 4: Current Land Use		On-site	0-50m	51-250	251-500		
4.1 Current Industrial Sites Data	0	0	0	0	0	Not searched	
4.2 Records of Petrol and Fuel Sites	0	0	0	0	0	0	
4.3 National Grid Underground Electricity Cables	0	0	0	0	0	0	
4.4 National Grid Gas Transmission Pipelines	0	0	0	0	0	0	
Section 5: Geology							
5.1 Records of Artificial Ground and Made Ground present beneath the study site				Identified			
5.2 Records of Superficial Ground and Drift Geology present beneath the study site				None 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				None 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	1	0	0	0
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0	2
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	#250GWV #	#500GWV #	0	0	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	2	28	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	Limited potential					
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	1	1	1	4	5
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
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	1	0	0	0	1	0
8.14 Records of Green Belt land	1	0	0	0	1	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Moderate
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	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	Moderate
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

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



Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

Note: Maps

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

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

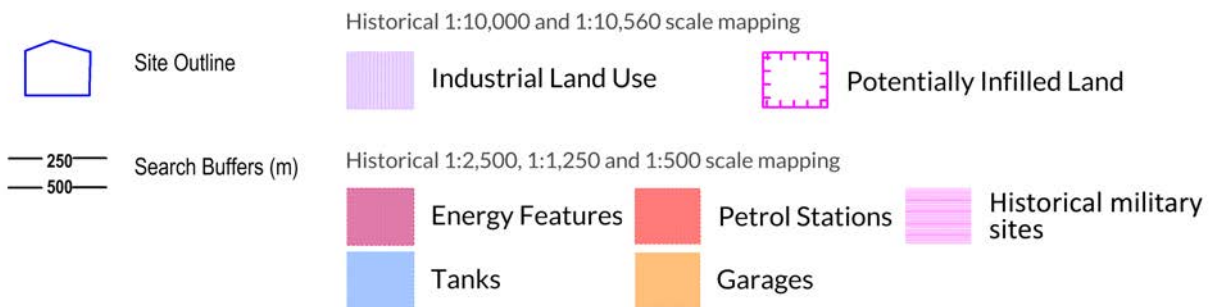
All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



1. Historical Land Use



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1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 18

ID	Distance [m]	Direction	Use	Date
1A	282	NW	Unspecified Heap	1948
2A	282	NW	Unspecified Heap	1948
3A	284	NW	Unspecified Heap	1929
4A	290	NW	Unspecified Heap	1951
5A	296	NW	Old Coal Pits	1850
6	297	NW	Old Coal Pits	1850
7B	328	NW	Disused Air Shaft	1982
8B	328	NW	Disused Air Shaft	1966
9B	328	NW	Disused Air Shaft	1973
10B	328	NW	Disused Air Shaft	1993
11	371	SW	Unspecified Pump	1850
12	380	SE	Railway Sidings	1966
13	383	SE	Railway Sidings	1982
14C	387	SE	Refuse Heap	1966
15	388	SE	Railway Sidings	1973
16C	391	SE	Refuse Heap	1973
17E	493	E	Refuse Heap	1982
18F	498	E	Unspecified Disused Workings	1993

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: 1

ID	Distance (m)	Direction	Use	Date
19	310	S	Tanks	1991

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: 0

Database searched and no data found.

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 Historical military sites

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

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

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 19

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

ID	Distance(m)	Direction	Use	Date
----	-------------	-----------	-----	------



20A	282	NW	Unspecified Heap	1948
21A	282	NW	Unspecified Heap	1948
22A	284	NW	Unspecified Heap	1929
23A	290	NW	Unspecified Heap	1951
24A	294	NW	Air Shaft	1904
25B	322	NW	Air Shaft	1948
26B	324	NW	Air Shaft	1929
27B	324	NW	Air Shaft	1904
28B	328	NW	Disused Air Shaft	1966
29B	328	NW	Disused Air Shaft	1993
30B	328	NW	Disused Air Shaft	1973
31B	328	NW	Disused Air Shaft	1982
32B	328	NW	Air Shaft	1951
33D	364	S	Pond	1966
34C	387	SE	Refuse Heap	1966
35C	391	SE	Refuse Heap	1973
36D	406	S	Pond	1993
37E	493	E	Refuse Heap	1982
38F	498	E	Unspecified Disused Workings	1993



2. Environmental Permits, Incidents and Registers Map



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

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

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:

1

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

ID	Distance (m)	Direction	NGR	Details
1	284	SW	430300 406100	Address: HOUSING DEVELOPMENT, ADJ TO SILKSTONE GOLF CLUB, SILKSTONE, BARNSELY Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C3923 Permit Version: 1 Receiving Water: TRIB OF SILKSTONE BECK Status: REVISED CONSENT, BY NOTICE (SECTION 37(1)) Issue date: 07/06/1993 Effective Date: 07-Jun-1993 Revocation Date:

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

0

Database searched and no data found.

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

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.

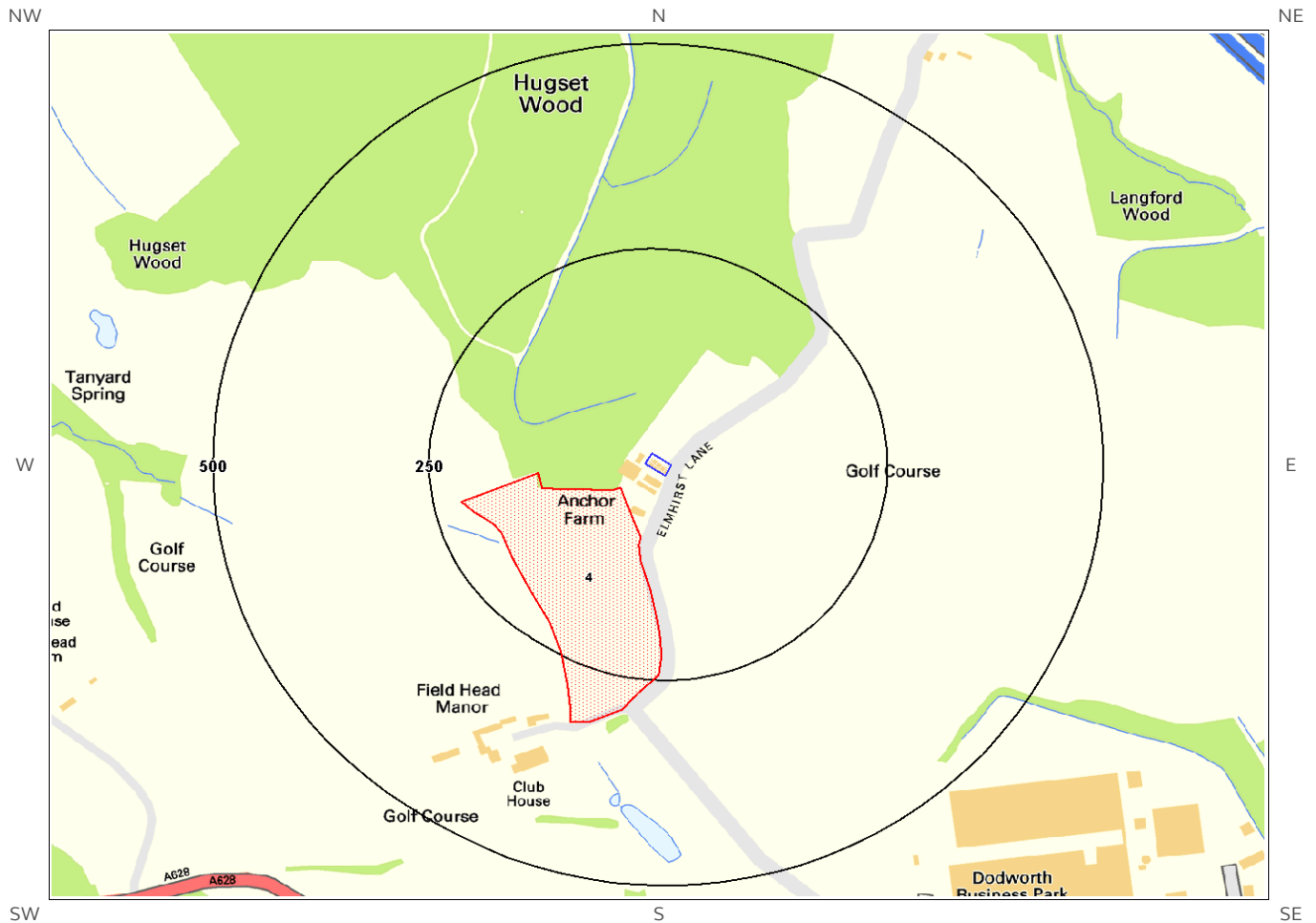
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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 | EA/NRW Active Landfill | Historic and Planned Waste Sites |
| 250 Search Buffers (m) | EA/NRW Historic Landfill | EA/NRW Licensed Waste Site |
| 500 Search Buffers (m) | 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:

7

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
4	40	SW		<p>Site Address: Silkstone Golf Club, Elmhirst Lane, Dodworth, Barnsley Waste Licence: Yes Site Reference: WD20 B716, 4400/B716, 20B716(126) Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: 26-Feb-1990 Licence Surrendered: 02-Nov-1992 Licence Holder Address: 42 High Street, Boston-Spa, Wetherby Operator: A Monk, Civil Engineering Limited Licence Holder: A Monk, Civil Engineering Limited First Recorded: 30-Apr-1990 Last Recorded: 30-Jun-1990</p>
Not shown	1009	W		<p>Site Address: Fall Head Lane, Silkstone, Barnsley Waste Licence: - Site Reference: 4400/(120) Waste Type: Household Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: - Licence Surrendered: - Licence Holder Address: - Operator: Penistone Rural District Council Licence Holder: Penistone Rural District Council First Recorded: - Last Recorded: -</p>
Not shown	1021	NE		<p>Site Address: Football Pitch to rear of Mines Public House, Higham Common Road, Higham Waste Licence: - Site Reference: 4400/(156) Waste Type: Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: - Licence Surrendered: - Licence Holder Address: - Operator: Mr J Cooper Licence Holder: Mr J Cooper First Recorded: 25-Dec-1993 Last Recorded: 25-Dec-1994</p>
Not shown	1110	W		<p>Site Address: Silkstone, Thurstone, Near Sheffield, South Yorkshire Waste Licence: - Site Reference: - Waste Type: Commercial, Liquid sludge</p> <p>Licence Issue: - Licence Surrendered: - Licence Holder Address: - Operator: Penistone Rural District Council Licence Holder: -</p>

ID	Distance (m)	Direction	NGR	Details
				Environmental Permitting Regulations (Waste) Reference: - First Recorded: 31-Dec-1971 Last Recorded: -
Not shown	1355	NW		Site Address: Engineers O.C.C.S, Barnby Furnace, Barnsley, South Yorkshire Waste Licence: Yes Site Reference: WD20 B193, 4400/B193, 20B193(30) Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 03-Oct-1978 Licence Surrendered: 21-Nov-1990 Licence Holder Address: Invercreran, Appin, Argyll Operator: Penistone Urban District Council Licence Holder: S W Fraser First Recorded: 31-Oct-1978 Last Recorded: 21-Nov-1990
Not shown	1378	SE		Site Address: Jermyn Croft, Dodworth, Barnsley Waste Licence: - Site Reference: - Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Dodworth Urban District Council Licence Holder: - First Recorded: 31-Dec-1955 Last Recorded: -
Not shown	1435	SE		Site Address: Dodworth Miners Welfare, Sports Ground, Dodworth, Barnsley Waste Licence: Yes Site Reference: WD20 B789, 20B789(113), 4400/B789 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 02-Aug-1990 Licence Surrendered: 13-Nov-1992 Licence Holder Address: 42 High Street, Boston-Spa, Wetherby Operator: - Licence Holder: A Monk, Civil Engineering Limited First Recorded: - Last Recorded: -

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

3

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1109	W	429400.0 406300.0	Address: Silkstone, Thurstone, Nr Sheffield, S Yorks BGS Number: 1425.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1481	NW	429800.0 407600.0	Address: Engineers, Barnby Furnace, Barnsley BGS Number: 2814.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1487	SE	431800.0 405500.0	Address: Jermyn Croft, Dodworth, Barnsley, Yorks BGS Number: 2880.0 Risk: No risk to aquifer Waste Type: N/A

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

0

Database searched and no data found.



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

0

Database searched and no data found.

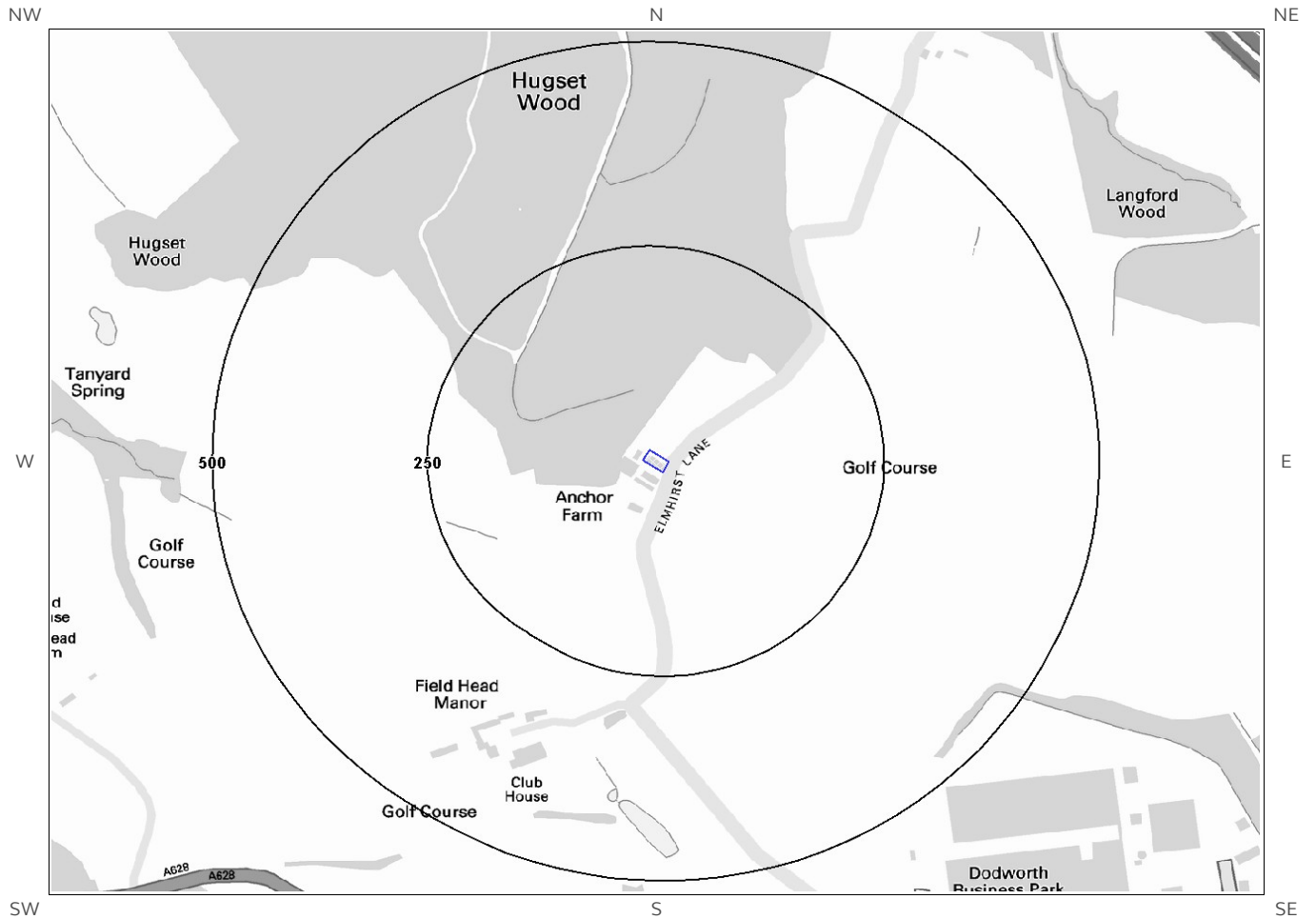
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

0

Database searched and no data found.



4. Current Land Use Map



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- | | | | | | |
|---|--------------------|---|--------------------------|--|---------------------------------|
|  | Site Outline |  | Current Industrial Sites |  | Electricity Transmission Cables |
|  | Search Buffers (m) |  | Petrol & Fuel Sites |  | Gas Transmission Pipelines |

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 0

Database searched and no data found.

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

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

Lex Code	Description	Rock Type
WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

5.2 Superficial Ground and Drift Geology

Database searched and no data found.

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

5.3 Bedrock and Solid Geology

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

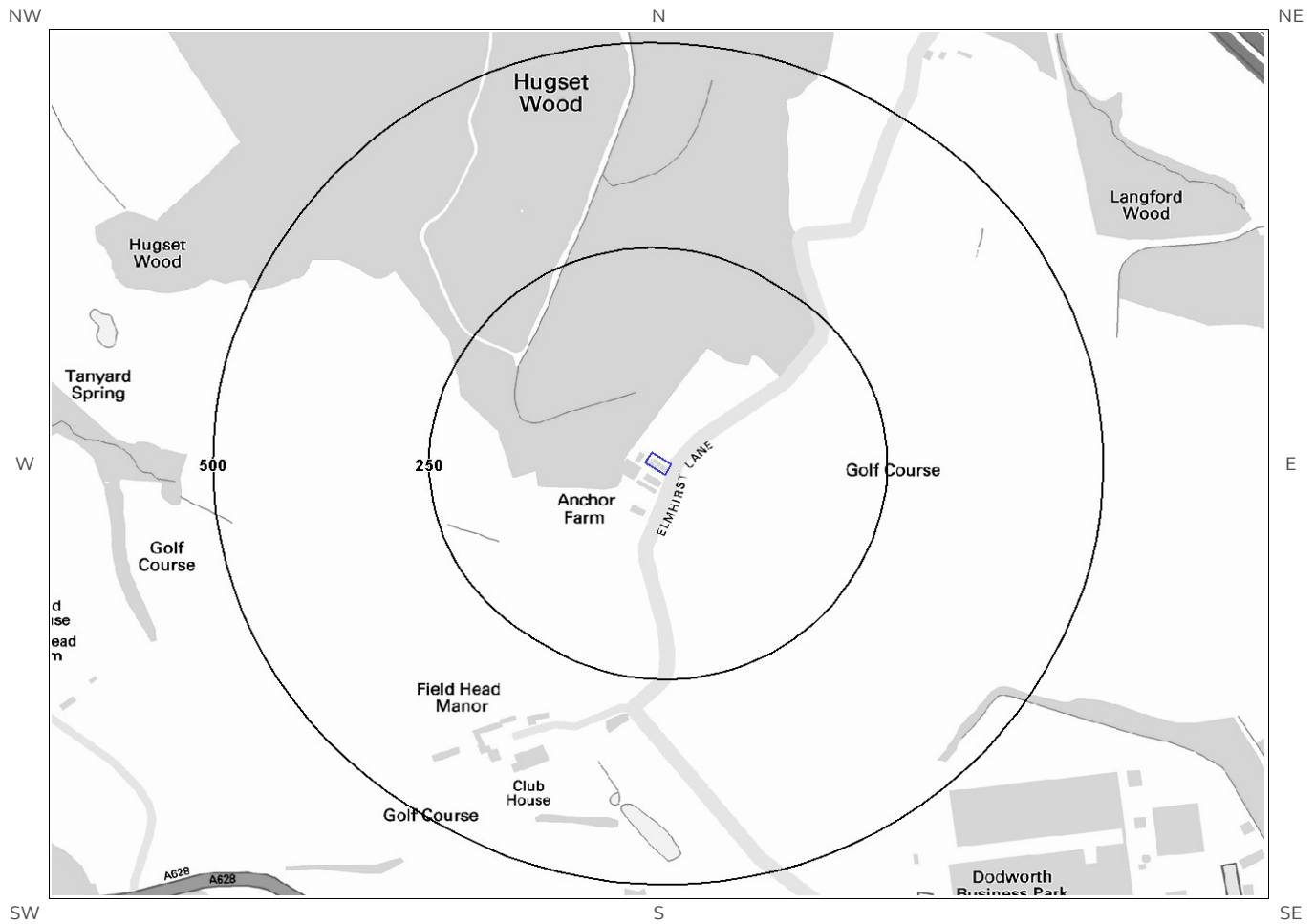
Lex Code	Description	Rock Type
PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION	SANDSTONE
PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE

(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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