

GRESLEY HOUSE, MARKET STREET, CHURCH GRESLEY, SWADLINCOTE, DE11 9PN

Order Details

Date: 07/09/2021
Your ref: Gresley_House
Our Ref: GS-8176077
Client: Hodgkins Boden Associates

Site Details

Location: 429762 318422
Area: 0.18 ha
Authority: [South Derbyshire District Council](#)



Summary of findings

p. 2

Aerial image

p. 5

OS MasterMap site plan

p.10

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Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
11	1.1	<u>10k Availability</u>	Identified (within 500m)				
12	1.2	<u>Artificial and made ground (10k)</u>	0	0	5	16	-
14	1.3	Superficial geology (10k)	0	0	0	0	-
14	1.4	Landslip (10k)	0	0	0	0	-
15	1.5	<u>Bedrock geology (10k)</u>	1	0	8	21	-
17	1.6	<u>Bedrock faults and other linear features (10k)</u>	0	0	18	29	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
20	2.1	<u>50k Availability</u>	Identified (within 500m)				
21	2.2	<u>Artificial and made ground (50k)</u>	0	0	3	4	-
22	2.3	Artificial ground permeability (50k)	0	0	-	-	-
23	2.4	Superficial geology (50k)	0	0	0	0	-
23	2.5	Superficial permeability (50k)	None (within 50m)				
23	2.6	Landslip (50k)	0	0	0	0	-
23	2.7	Landslip permeability (50k)	None (within 50m)				
24	2.8	<u>Bedrock geology (50k)</u>	1	0	6	11	-
26	2.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
26	2.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	6	5	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
27	3.1	<u>BGS Boreholes</u>	0	9	88	-	-
Page	Section	Natural ground subsidence					
33	4.1	<u>Shrink swell clays</u>	Very low (within 50m)				
34	4.2	<u>Running sands</u>	Negligible (within 50m)				
35	4.3	<u>Compressible deposits</u>	Negligible (within 50m)				
36	4.4	<u>Collapsible deposits</u>	Very low (within 50m)				
37	4.5	<u>Landslides</u>	Very low (within 50m)				
38	4.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				



Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
39	5.1	Natural cavities	0	0	0	0	-
40	5.2	<u>BritPits</u>	0	0	1	2	-
40	5.3	<u>Surface ground workings</u>	0	2	13	-	-
41	5.4	<u>Underground workings</u>	0	0	0	25	62
45	5.5	<u>Historical Mineral Planning Areas</u>	0	1	14	11	-
46	5.6	<u>Non-coal mining</u>	1	0	1	0	0
47	5.7	<u>Mining cavities</u>	0	0	0	1	3
47	5.8	<u>JPB mining areas</u>	Identified (within 0m)				
48	5.9	<u>Coal mining</u>	Identified (within 0m)				
48	5.10	Brine areas	None (within 0m)				
48	5.11	Gypsum areas	None (within 0m)				
48	5.12	Tin mining	None (within 0m)				
48	5.13	Clay mining	None (within 0m)				
Page	Section	Radon					
49	6.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
50	7.1	<u>BGS Estimated Background Soil Chemistry</u>	1	1	-	-	-
50	7.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
50	7.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
51	8.1	Underground railways (London)	0	0	0	-	-
51	8.2	Underground railways (Non-London)	0	0	0	-	-
52	8.3	Railway tunnels	0	0	0	-	-
52	8.4	<u>Historical railway and tunnel features</u>	1	1	9	-	-
53	8.5	Royal Mail tunnels	0	0	0	-	-
53	8.6	<u>Historical railways</u>	0	0	1	-	-
53	8.7	Railways	0	0	0	-	-
53	8.8	Crossrail 1	0	0	0	0	-

54	8.9	Crossrail 2	0	0	0	0	-
54	8.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 20/04/2019

Site Area: 0.18ha



Recent site history - 2018 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2021. All Rights Reserved

Capture Date: 01/07/2018

Site Area: 0.18ha



Recent site history - 2015 aerial photograph



Capture Date: 12/08/2015

Site Area: 0.18ha



Recent site history - 2010 aerial photograph



Capture Date: 24/04/2010

Site Area: 0.18ha



Recent site history - 1999 aerial photograph



Capture Date: 17/11/1999

Site Area: 0.18ha



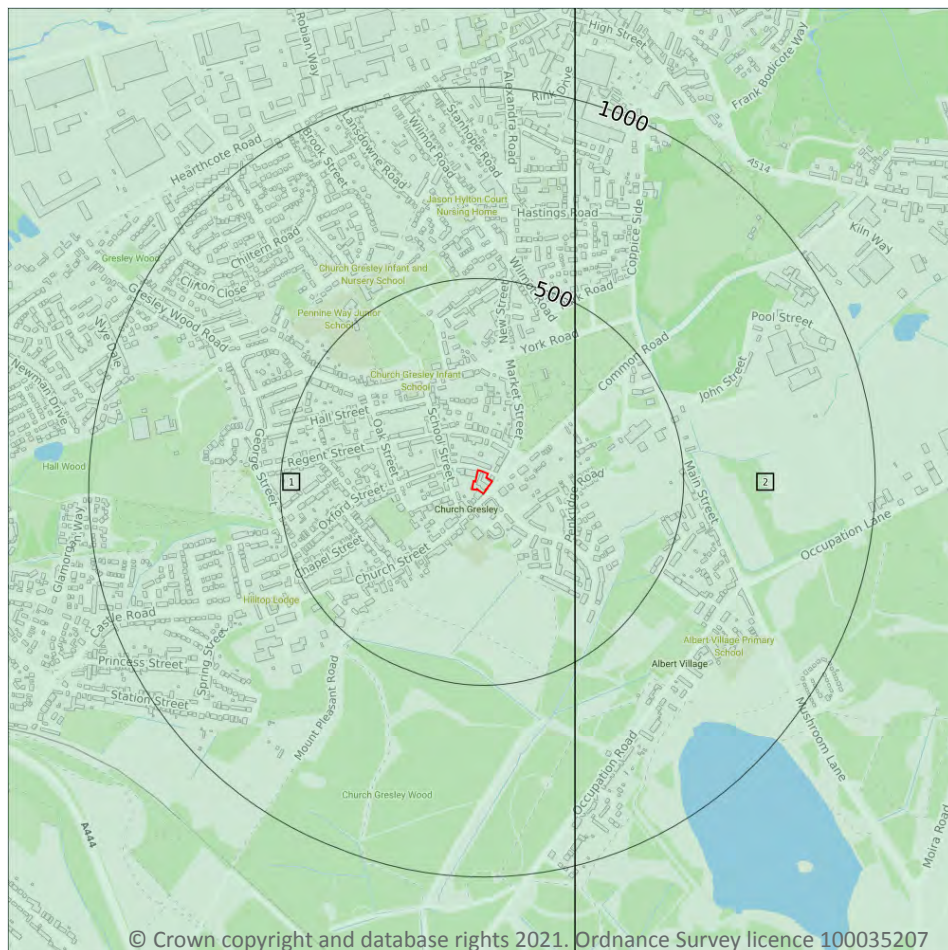
OS MasterMap site plan



Site Area: 0.18ha



1 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

1.1 10k Availability

Records within 500m

2

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

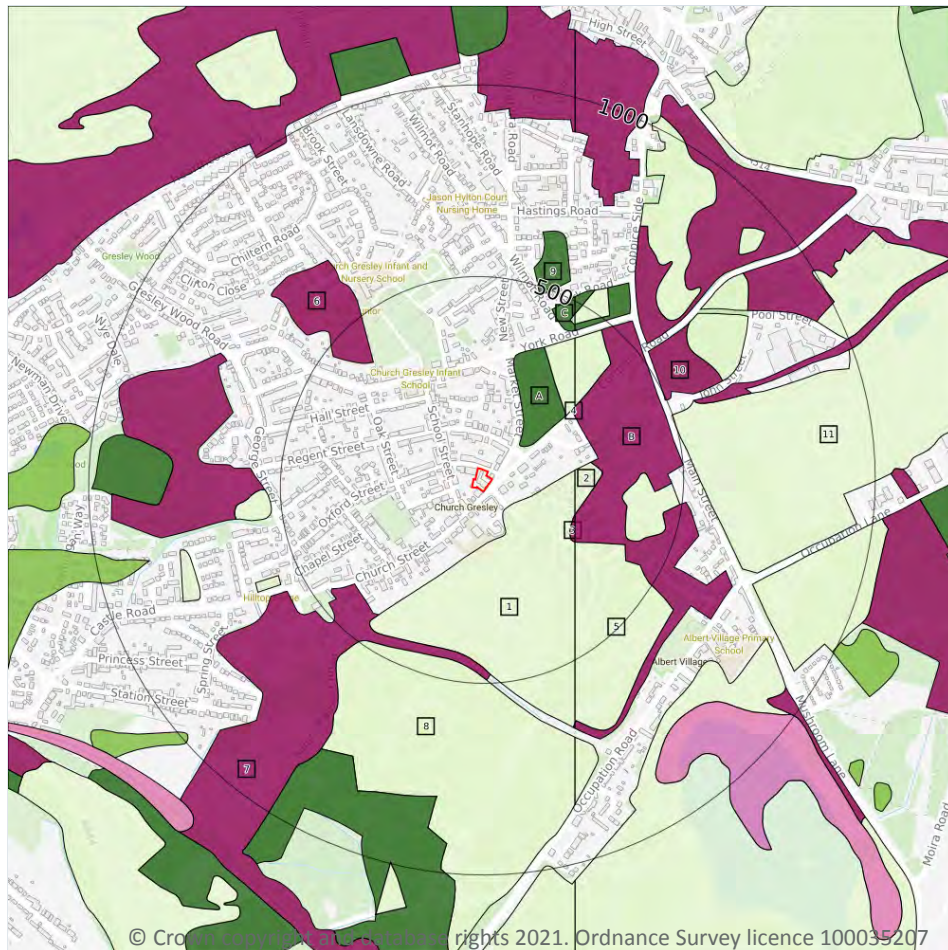
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 11**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SK21NE
2	217m E	Full	Full	Full	No coverage	SK31NW

This data is sourced from the British Geological Survey.



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



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

1.2 Artificial and made ground (10k)

Records within 500m

21

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 12**

ID	Location	LEX Code	Description	Rock description
1	72m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
A	108m NE	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	217m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	235m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit



ID	Location	LEX Code	Description	Rock description
B	236m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	252m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	269m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	270m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
A	284m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
B	343m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	388m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	397m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
C	422m NE	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
C	433m NE	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
8	445m S	WMGR-ARTDP	Infilled Ground	Artificial Deposit
C	445m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
C	447m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
C	471m NE	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
9	478m N	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
10	497m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
11	498m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

1.3 Superficial geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

1.4 Landslip (10k)

Records within 500m

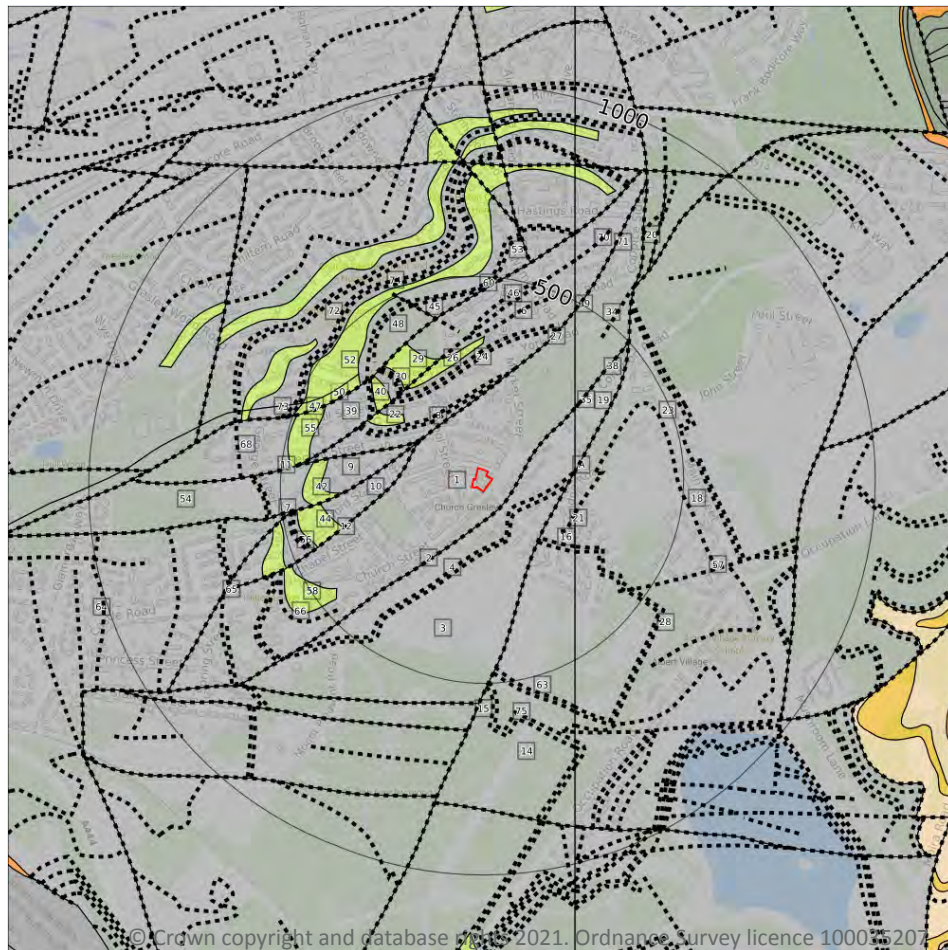
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (10k)
- Bedrock geology (10k)
Please see table for more details.

1.5 Bedrock geology (10k)

Records within 500m

30

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 15**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
3	60m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age

ID	Location	LEX Code	Description	Rock age
6	150m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
9	167m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
10	167m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
14	180m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
18	217m E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
19	218m E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
22	226m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
26	263m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
29	280m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
30	280m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
34	282m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
36	285m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
39	300m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
42	338m W	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
44	351m W	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
48	363m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
50	375m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
52	397m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age



ID	Location	LEX Code	Description	Rock age
53	405m N	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
54	416m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
55	426m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
56	432m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
58	441m SW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
64	472m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
68	475m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
70	479m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
72	486m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
73	488m W	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age

This data is sourced from the British Geological Survey.

1.6 Bedrock faults and other linear features (10k)

Records within 500m

47

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 15**

ID	Location	Category	Description
2	60m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	85m SE	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
5	98m SE	ROCK	Coal seam, inferred (DERBY)
7	150m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side



ID	Location	Category	Description
8	165m NW	ROCK	Coal seam, inferred (P39/40)
11	167m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side
12	167m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side
13	175m NW	FOSSIL_HORIZON	Fossil horizon, lingula band (MALTBY MARINE BAND)
15	180m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side
16	190m SE	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
17	193m SE	ROCK	Coal seam, observed (DERBY)
A	218m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
A	218m E	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
20	221m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
21	224m SE	ROCK	Coal seam, inferred (P27/28)
23	234m E	ROCK	Coal seam, inferred (P27/28)
24	236m NW	ROCK	Coal seam, inferred (ELL)
25	248m NW	FOSSIL_HORIZON	Fossil horizon, marine band (HAUGHTON MARINE BAND)
27	275m N	FAULT	Normal fault, inferred; crossmarks on downthrow side
28	277m SE	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
31	280m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side
32	280m NW	FOSSIL_HORIZON	Fossil horizon, marine band (HAUGHTON MARINE BAND)
33	281m NW	ROCK	Coal seam, inferred (ELL)
35	282m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
37	286m SE	ROCK	Coal seam, observed (DERBY)
38	297m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
40	307m NW	FOSSIL_HORIZON	Fossil horizon, lingula band (MALTBY MARINE BAND)
41	312m NW	ROCK	Coal seam, inferred (P39/40)
43	342m N	ROCK	Coal seam, inferred (P32)
45	359m N	FAULT	Normal fault, inferred; crossmarks on downthrow side
46	360m N	ROCK	Coal seam, inferred (? P32)
47	363m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side

ID	Location	Category	Description
49	368m NW	ROCK	Coal seam, inferred (DERBY)
51	386m NW	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
57	437m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side
59	447m W	FOSSIL_HORIZON	Fossil horizon, marine band (HAUGHTON MARINE BAND)
60	453m N	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
61	457m W	ROCK	Coal seam, inferred (ELL)
62	459m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
63	460m S	ROCK	Coal seam, observed (DERBY)
65	472m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
66	473m SW	ROCK	Coal seam, inferred (P31)
67	474m S	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)
69	479m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
71	482m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
74	494m W	FOSSIL_HORIZON	Fossil horizon, marine band (HAUGHTON MARINE BAND)
75	496m S	FOSSIL_HORIZON	Fossil horizon, marine band (AEGIRANUM MARINE BAND)

This data is sourced from the British Geological Survey.



2 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

□ Geological map tile

2.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

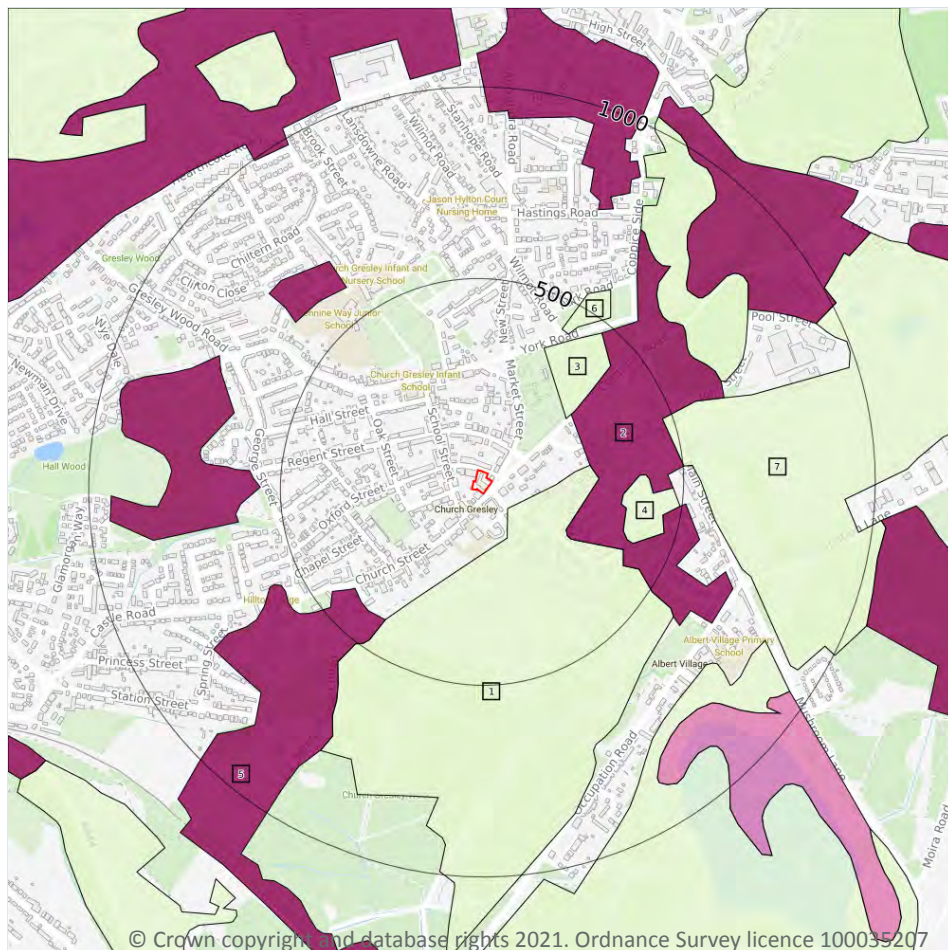
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 20**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW141_loughborough_v4

This data is sourced from the British Geological Survey.



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



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

2.2 Artificial and made ground (50k)

Records within 500m

7

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 21**

ID	Location	LEX Code	Description	Rock description
1	74m SE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	231m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	250m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	343m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT



ID	Location	LEX Code	Description	Rock description
5	400m SW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	420m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
7	473m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

2.3 Artificial ground permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial

2.4 Superficial geology (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

2.5 Superficial permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.

2.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

2.7 Landslip permeability (50k)

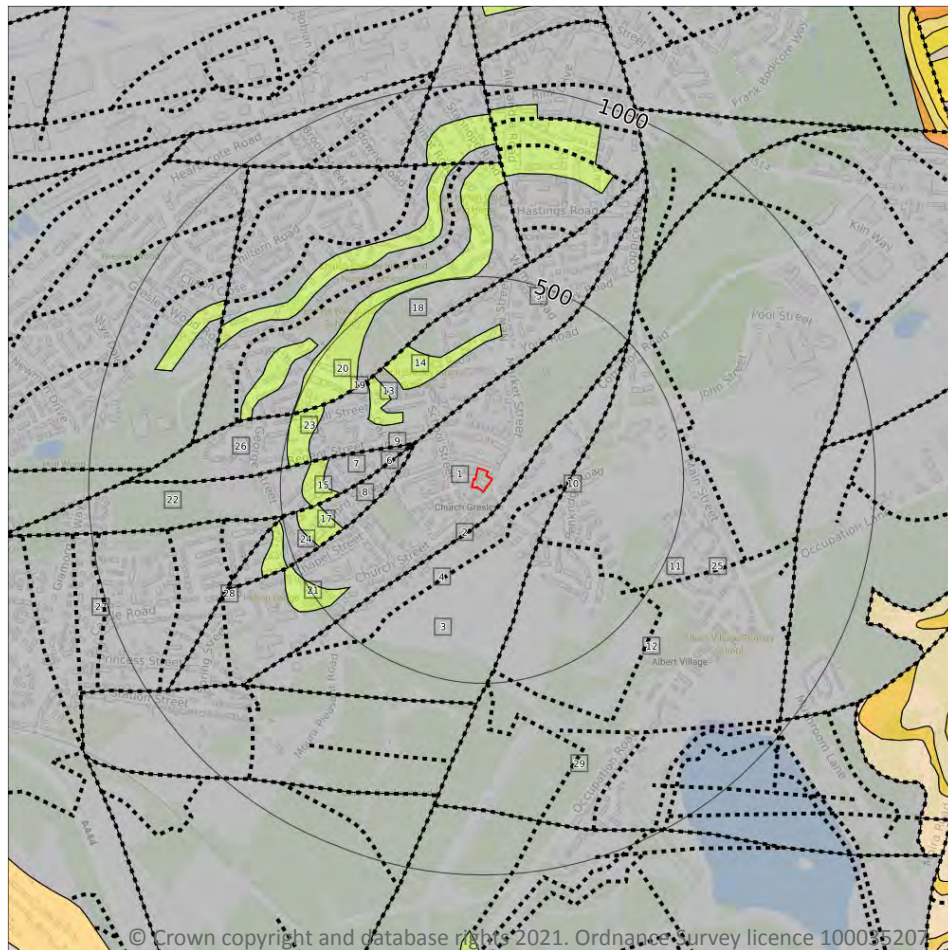
Records within 50m

0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

2.8 Bedrock geology (50k)

Records within 500m

18

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 24**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
3	54m SE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
5	154m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
7	179m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
8	179m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
11	179m SE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
13	230m NW	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
14	262m NW	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
15	342m W	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
17	352m W	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
18	361m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
20	380m NW	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
21	413m SW	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
22	420m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
23	424m W	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
24	427m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
26	480m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
27	496m W	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.



2.9 Bedrock permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

2.10 Bedrock faults and other linear features (50k)

Records within 500m

11

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

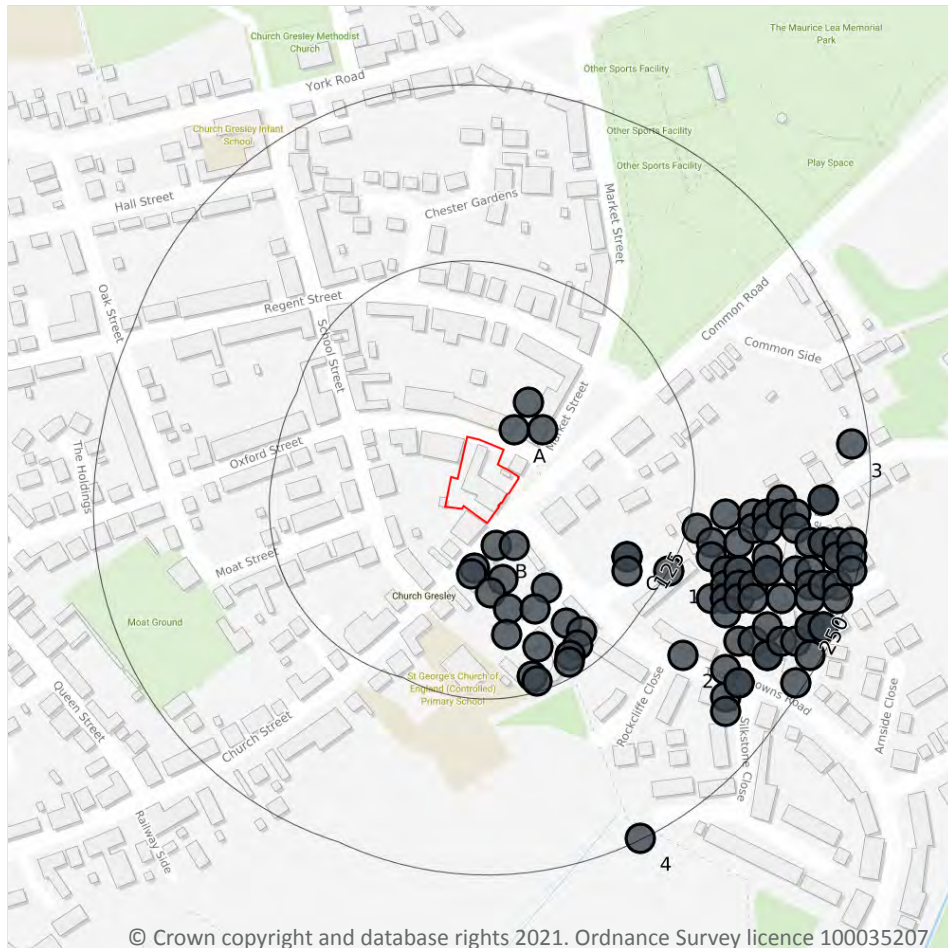
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 24**

ID	Location	Category	Description
2	54m SE	FAULT	Fault, inferred
4	101m SE	FOSSIL_HORIZON	Marine band
6	154m NW	FAULT	Fault, inferred
9	179m W	FAULT	Fault, inferred
10	179m SE	FAULT	Fault, inferred
12	193m SE	FOSSIL_HORIZON	Marine band
16	348m NW	FOSSIL_HORIZON	Marine band
19	361m NW	FAULT	Fault, inferred
25	438m SE	FAULT	Fault, inferred
28	496m W	FAULT	Fault, inferred
29	499m S	FOSSIL_HORIZON	Marine band

This data is sourced from the British Geological Survey.



3 Boreholes



— Site Outline
Search buffers in metres (m)

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

3.1 BGS Boreholes

Records within 250m

97

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

Features are displayed on the Boreholes map on **page 27**

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	16m NE	429780 318470	OXFORD STREET CHURCH GRESLEY TP 2	-	Y	N/A
B	17m S	429767 318388	CHURCH GRESLEY SWADLINCOTE WS3	-	Y	N/A
B	25m SE	429780 318388	CHURCH GRESLEY SWADLINCOTE 3	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
A	31m NE	429800 318470	OXFORD STREET CHURCH GRESLEY TP 3	-	Y	N/A
B	33m S	429752 318372	CHURCH GRESLEY SWADLINCOTE WS1	-	Y	N/A
B	38m S	429750 318368	CHURCH GRESLEY SWADLINCOTE R1	-	Y	N/A
A	38m NE	429790 318490	OXFORD STREET CHURCH GRESLEY TP 1	-	Y	N/A
B	41m S	429772 318364	CHURCH GRESLEY SWADLINCOTE WS2	-	Y	N/A
B	50m S	429763 318354	CHURCH GRESLEY SWADLINCOTE TP 4	-	Y	N/A
B	62m SE	429803 318358	CHURCH GRESLEY SWADLINCOTE TP 5	-	Y	N/A
B	63m S	429776 318343	CHURCH GRESLEY SWADLINCOTE 2	-	Y	N/A
B	70m SE	429795 318343	CHURCH GRESLEY SWADLINCOTE TP 8	-	Y	N/A
B	80m S	429775 318325	CHURCH GRESLEY SWADLINCOTE TP 3	-	Y	N/A
B	90m SE	429817 318333	CHURCH GRESLEY SWADLINCOTE TP 6	-	Y	N/A
C	95m SE	429860 318380	LAND OFF CHURCH STREET CHURCH GRESLEY TP 2	-	Y	N/A
C	95m SE	429860 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 2.1	-	Y	N/A
B	95m S	429797 318316	CHURCH GRESLEY SWADLINCOTE TP 2	-	Y	N/A
C	100m SE	429860 318370	CHURCH GRESLEY 1	-	Y	N/A
B	102m SE	429828 318327	CHURCH GRESLEY SWADLINCOTE 4	-	Y	N/A
B	108m SE	429825 318317	CHURCH GRESLEY SWADLINCOTE R2	-	Y	N/A
B	111m SE	429820 318310	LAND OFF CHURCH STREET CHURCH GRESLEY TP 1	-	Y	N/A
B	113m S	429793 318295	CHURCH GRESLEY SWADLINCOTE 1	-	Y	N/A
B	115m SE	429819 318305	CHURCH GRESLEY SWADLINCOTE TP 7	-	Y	N/A
B	117m S	429796 318292	CHURCH GRESLEY SWADLINCOTE TP 1	-	Y	N/A
1	125m SE	429890 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 2.7	-	Y	N/A
D	132m E	429910 318400	LAND OFF CHURCH STREET CHURCH GRESLEY 19.2	-	Y	N/A
D	144m E	429920 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 19.1	-	Y	N/A
D	148m E	429920 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 16.1	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
D	149m E	429930 318410	LAND OFF CHURCH STREET CHURCH GRESLEY TP 3	-	Y	N/A
D	161m SE	429930 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 16.2	-	Y	N/A
D	161m SE	429930 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 16.3	-	Y	N/A
D	161m SE	429920 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 15.7	-	Y	N/A
D	163m E	429940 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 17.1	-	Y	N/A
D	165m SE	429930 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 2.9	-	Y	N/A
2	168m SE	429900 318310	LAND OFF CHURCH STREET CHURCH GRESLEY TP 13	-	Y	N/A
D	169m E	429950 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 18.1	-	Y	N/A
D	170m SE	429940 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 16.4	-	Y	N/A
D	170m SE	429940 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 16.5	-	Y	N/A
D	170m SE	429930 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 15.5	-	Y	N/A
D	170m SE	429930 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 15.6	-	Y	N/A
D	170m SE	429930 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 11.2	-	Y	N/A
D	171m E	429950 318400	LAND OFF CHURCH STREET CHURCH GRESLEY 17.2	-	Y	N/A
D	174m SE	429940 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 2.10	-	Y	N/A
D	175m SE	429930 318340	LAND OFF CHURCH STREET CHURCH GRESLEY 15.4	-	Y	N/A
D	179m SE	429940 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 11.3	-	Y	N/A
D	179m E	429960 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 17.4	-	Y	N/A
D	179m E	429960 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 17.7	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
D	180m E	429960 318400	LAND OFF CHURCH STREET CHURCH GRESLEY 17.3	-	Y	N/A
D	183m SE	429950 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 9.3	-	Y	N/A
D	185m E	429960 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 9.1	-	Y	N/A
D	187m E	429970 318420	LAND OFF CHURCH STREET CHURCH GRESLEY 17.6	-	Y	N/A
D	188m SE	429950 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 9.4	-	Y	N/A
D	189m E	429970 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 17.5	-	Y	N/A
D	189m E	429970 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 7.1	-	Y	N/A
D	189m E	429960 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 9.2	-	Y	N/A
D	189m E	429960 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 24.1	-	Y	N/A
D	194m SE	429940 318320	LAND OFF CHURCH STREET CHURCH GRESLEY 14.2	-	Y	N/A
D	198m SE	429930 318300	CHURCH GRESLEY 3	-	Y	N/A
D	198m E	429980 318410	LAND OFF CHURCH STREET CHURCH GRESLEY 7.2	-	Y	N/A
D	200m E	429980 318400	LAND OFF CHURCH STREET CHURCH GRESLEY 7.3	-	Y	N/A
D	203m SE	429950 318320	LAND OFF CHURCH STREET CHURCH GRESLEY 14.1	-	Y	N/A
D	206m SE	429970 318350	LAND OFF CHURCH STREET CHURCH GRESLEY TP 6	-	Y	N/A
D	206m SE	429960 318330	LAND OFF CHURCH STREET CHURCH GRESLEY 11.4	-	Y	N/A
D	207m E	429980 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 10.7	-	Y	N/A
D	210m SE	429930 318280	LAND OFF CHURCH STREET CHURCH GRESLEY 9.7	-	Y	N/A
D	212m E	429990 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 7.4	-	Y	N/A
D	212m SE	429940 318290	LAND OFF CHURCH STREET CHURCH GRESLEY 9.6	-	Y	N/A
D	212m SE	429940 318290	LAND OFF CHURCH STREET CHURCH GRESLEY 9.9	-	Y	N/A
D	216m SE	429930 318270	LAND OFF CHURCH STREET CHURCH GRESLEY 9.8	-	Y	N/A
D	217m SE	429960 318310	LAND OFF CHURCH STREET CHURCH GRESLEY 13.5	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
D	217m SE	429960 318310	LAND OFF CHURCH STREET CHURCH GRESLEY 13.6	-	Y	N/A
D	217m E	429990 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 10.6	-	Y	N/A
D	217m E	430000 318420	LAND OFF CHURCH STREET CHURCH GRESLEY TP 5	-	Y	N/A
D	217m E	430000 318420	CHURCH GRESLEY 2	-	Y	N/A
D	220m SE	429970 318320	LAND OFF CHURCH STREET CHURCH GRESLEY 11.5	-	Y	N/A
D	220m E	429990 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 10.5	-	Y	N/A
D	222m E	430000 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 7.6	-	Y	N/A
D	222m E	430000 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 7.5	-	Y	N/A
D	224m E	429990 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 25.1	-	Y	N/A
D	228m SE	429980 318320	LAND OFF CHURCH STREET CHURCH GRESLEY 11.6	-	Y	N/A
D	230m E	430000 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 10.4	-	Y	N/A
D	231m E	430010 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 7.7	-	Y	N/A
D	232m SE	429990 318330	LAND OFF CHURCH STREET CHURCH GRESLEY 8.1	-	Y	N/A
D	232m SE	429990 318330	LAND OFF CHURCH STREET CHURCH GRESLEY 8.2	-	Y	N/A
D	234m E	430010 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 7.8	-	Y	N/A
D	234m E	430010 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 7.9	-	Y	N/A
3	238m E	430020 318460	LAND OFF CHURCH STREET CHURCH GRESLEY TP 4	-	Y	N/A
D	239m E	430010 318360	LAND OFF CHURCH STREET CHURCH GRESLEY 10.3	-	Y	N/A
D	241m SE	430000 318330	LAND OFF CHURCH STREET CHURCH GRESLEY 8.3	-	Y	N/A
D	241m SE	430000 318330	LAND OFF CHURCH STREET CHURCH GRESLEY 8.4	-	Y	N/A
D	241m E	430020 318390	LAND OFF CHURCH STREET CHURCH GRESLEY 27.1	-	Y	N/A
D	242m SE	429990 318310	LAND OFF CHURCH STREET CHURCH GRESLEY 11.7	-	Y	N/A

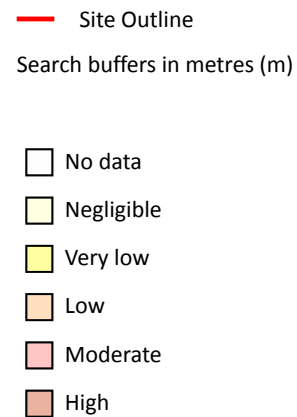
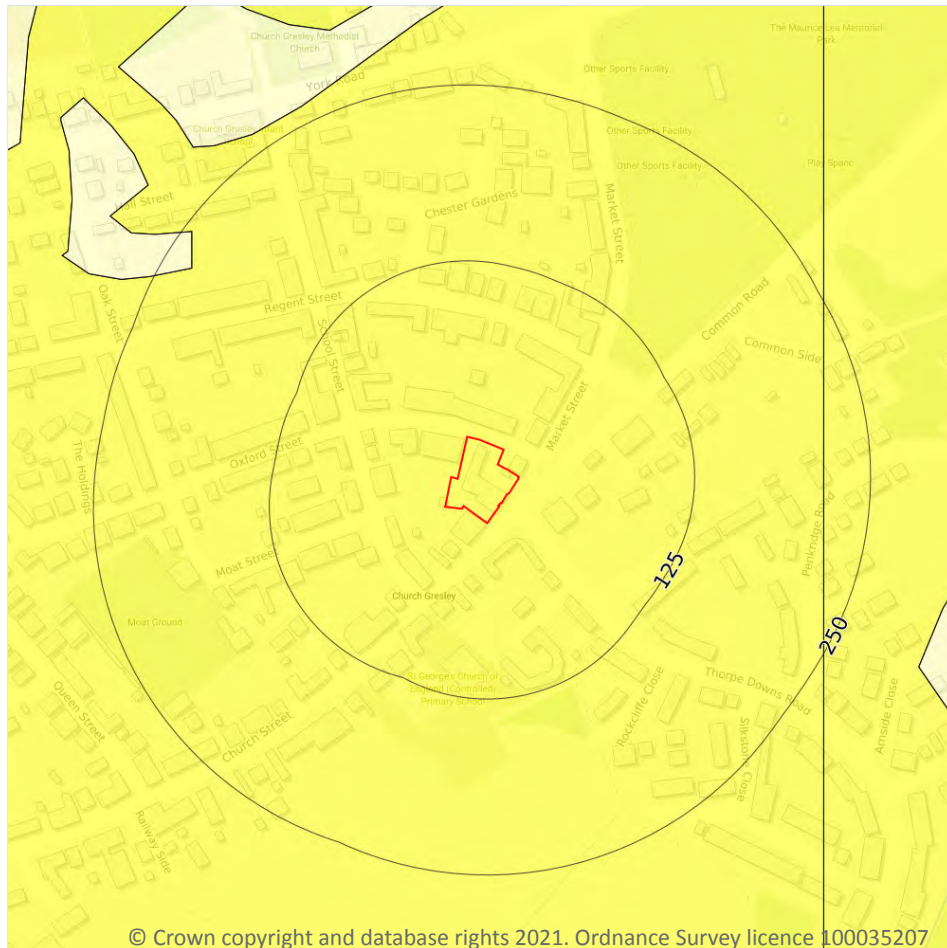


ID	Location	Grid reference	Name	Length	Confidential	Web link
D	242m E	430010 318350	LAND OFF CHURCH STREET CHURCH GRESLEY 10.2	-	Y	N/A
D	243m E	430020 318380	LAND OFF CHURCH STREET CHURCH GRESLEY 7.10	-	Y	N/A
D	244m SE	429980 318290	LAND OFF CHURCH STREET CHURCH GRESLEY 12.1	-	Y	N/A
D	246m E	430020 318370	LAND OFF CHURCH STREET CHURCH GRESLEY 7.11	-	Y	N/A
4	249m SE	429870 318180	LAND OFF CHURCH STREET CHURCH GRESLEY TP 12	-	Y	N/A

This data is sourced from the British Geological Survey.



4 Natural ground subsidence - Shrink swell clays



4.1 Shrink swell clays

Records within 50m

1

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

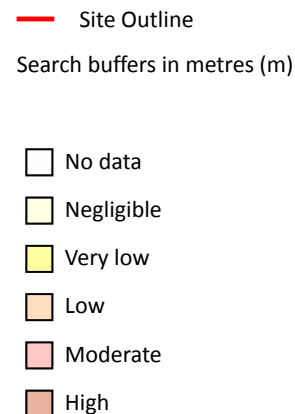
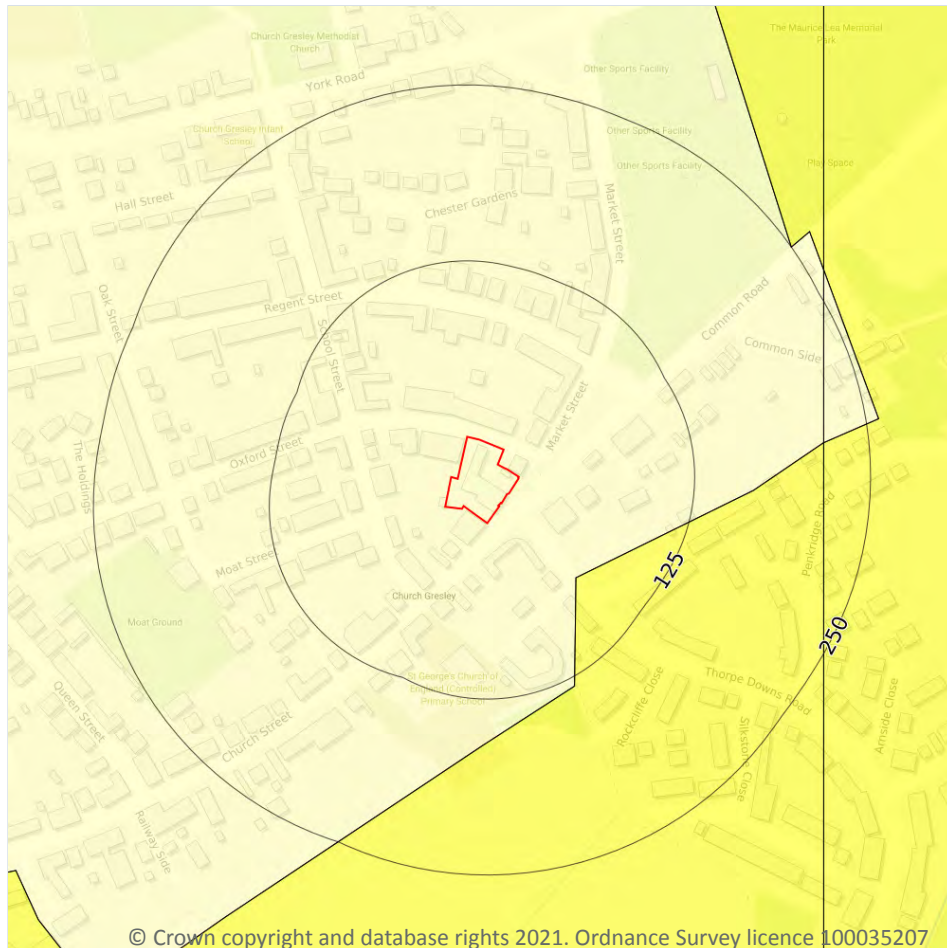
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 33**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



4.2 Running sands

Records within 50m

1

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

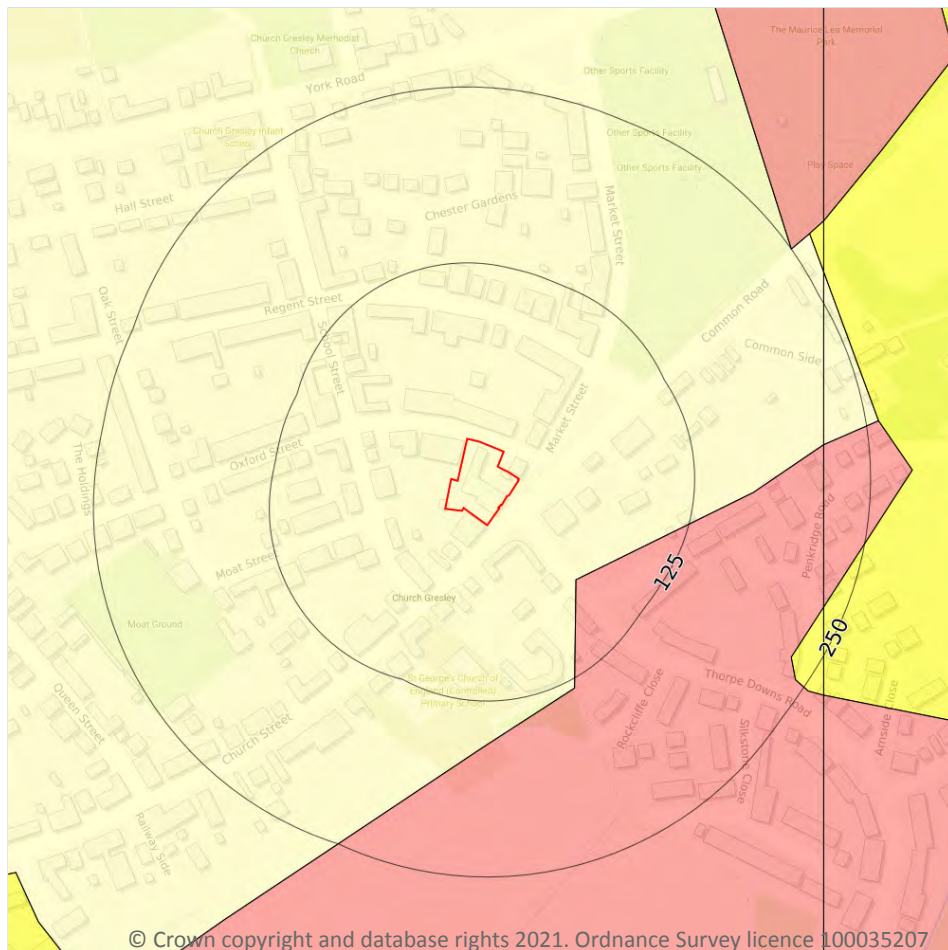
Features are displayed on the Natural ground subsidence - Running sands map on **page 34**

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



— Site Outline
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

4.3 Compressible deposits

Records within 50m

1

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

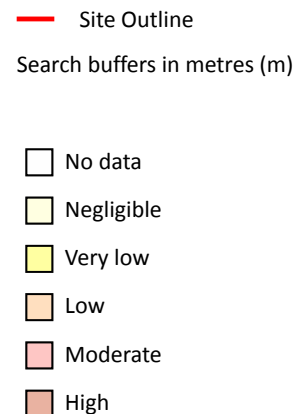
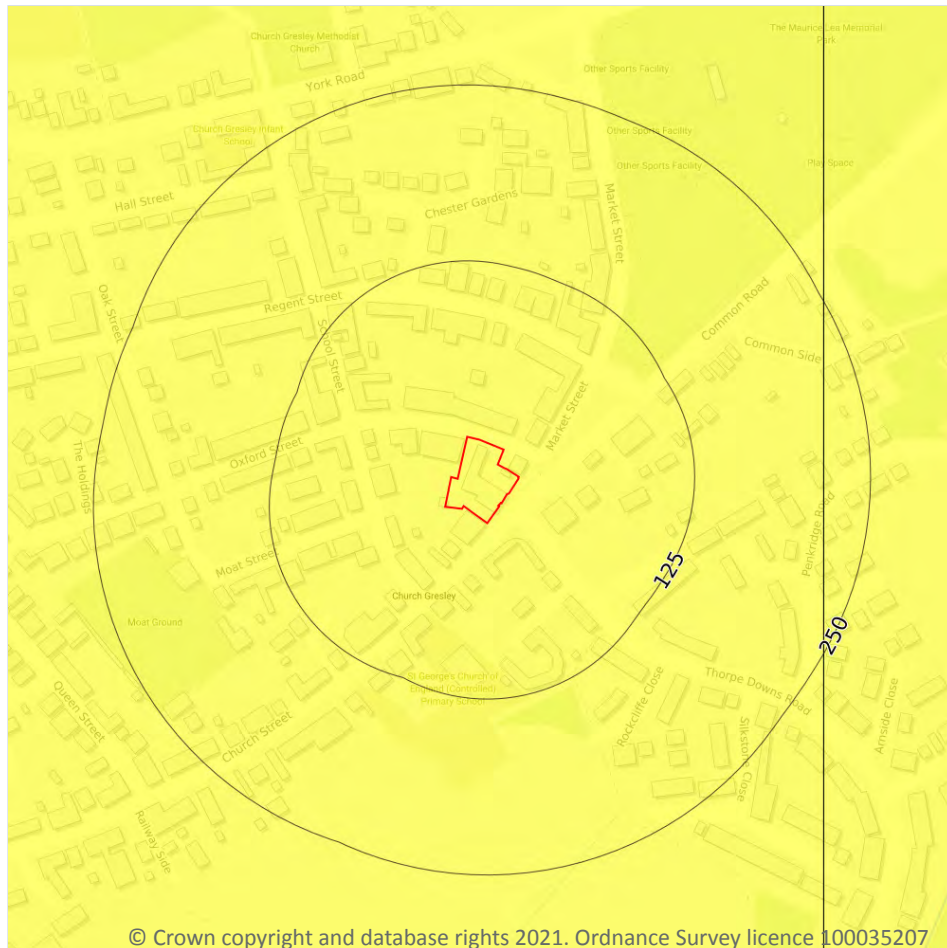
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 35**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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4.4 Collapsible deposits

Records within 50m

1

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

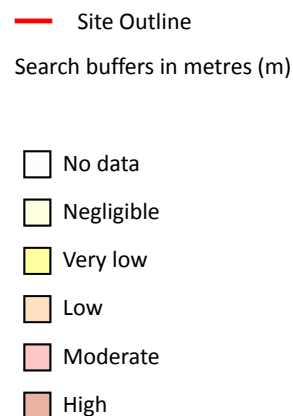
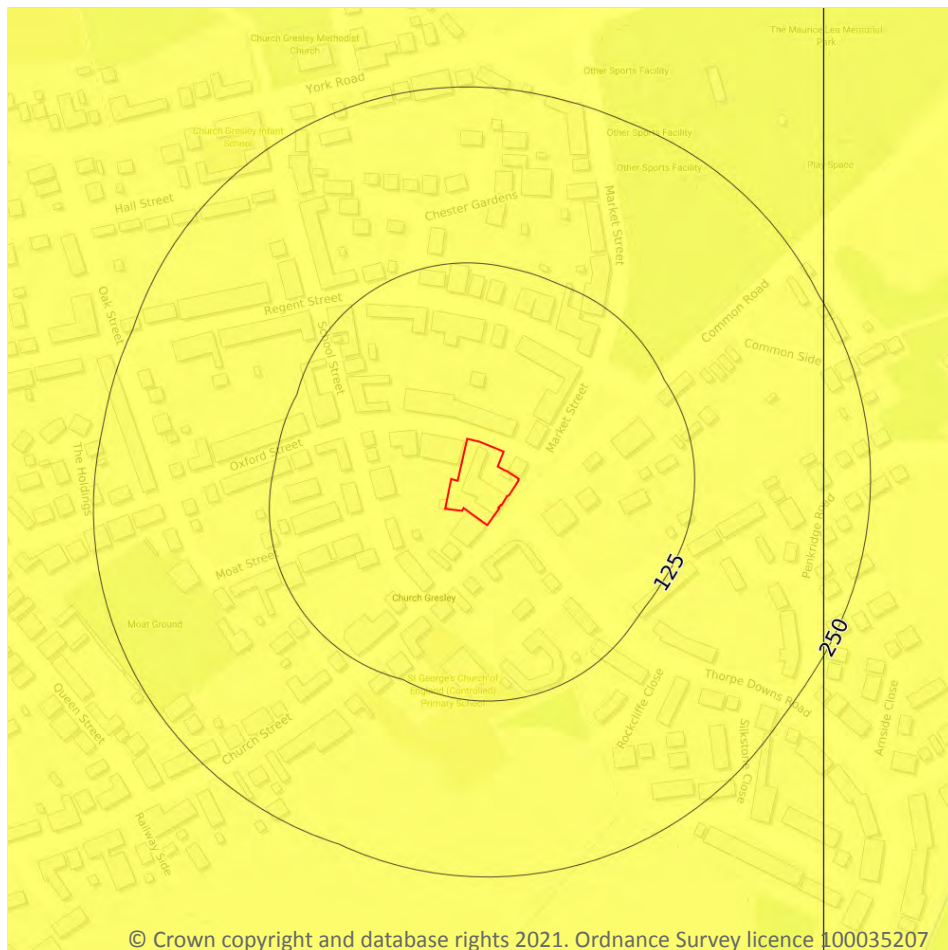
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 36**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



4.5 Landslides

Records within 50m

1

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

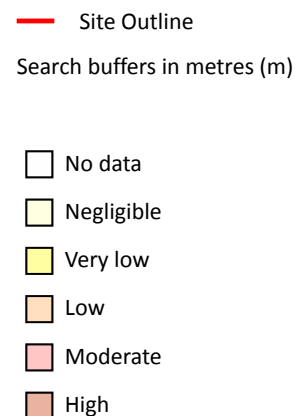
Features are displayed on the Natural ground subsidence - Landslides map on **page 37**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



4.6 Ground dissolution of soluble rocks

Records within 50m

1

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

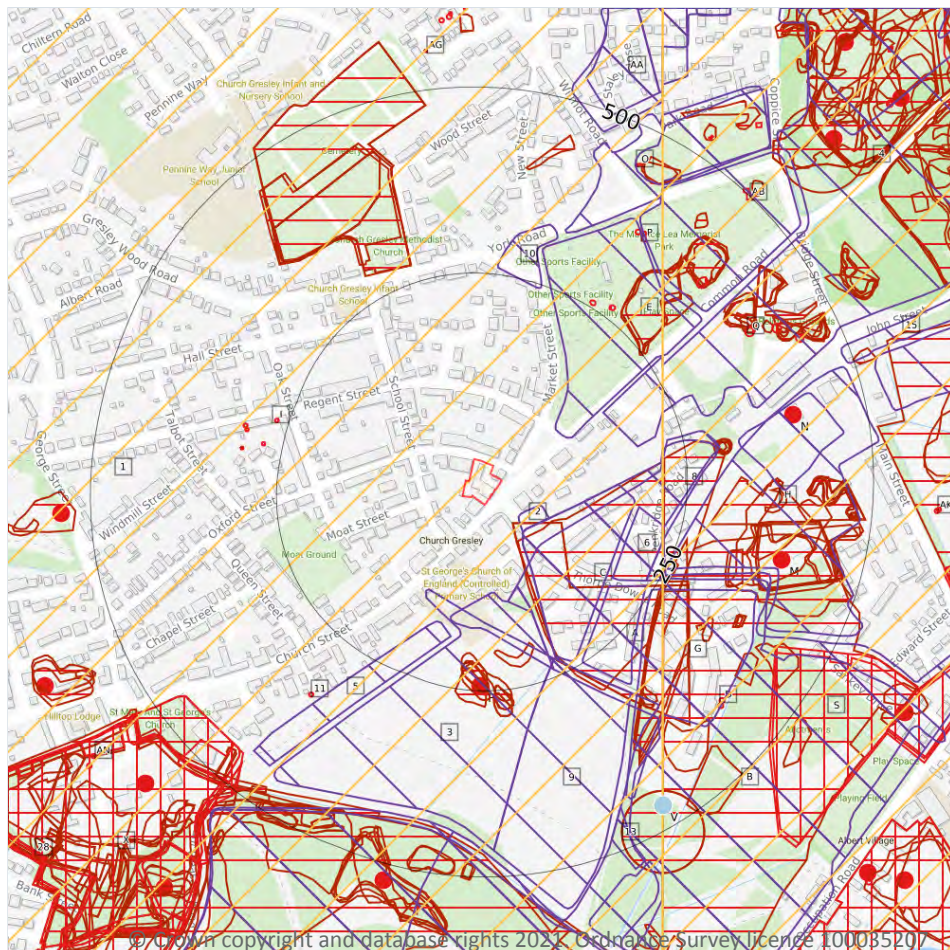
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 38**

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

This data is sourced from the British Geological Survey.



5 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
 - Sporadic underground mining of restricted extent possible
 - Localised small scale underground mining possible
 - Small scale mining possible
 - Underground mining known or likely within or in close proximity
 - Underground mining known within or in very close proximity

5.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

5.2 BritPits

Records within 500m

3

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**

ID	Location	Details	Description
F	243m S	Name: Railwayside Clay Pit Address: Church Gresley, SWADLINCOTE, Derbyshire Commodity: Clay & Shale Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
M	391m E	Name: Albert Works Address: Albert Village, ASHBY-DE-LA-ZOUCH, Leicestershire Commodity: Fireclay Status: Ceased	Type: Working is partly surface and partly underground, working the same bodies for the same commodities Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
N	401m E	Name: Albert Village Address: Albert Village, SWADLINCOTE, Derbyshire Commodity: Clay & Shale Status: Dormant	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at the date of entry, is defined under the Environment Act 1995 as a mineral site where no mineral development has taken place to any substantial extent in, on, or under the site at any time in the period 22nd February 1982 and 6 June 1995.

This data is sourced from the British Geological Survey.

5.3 Surface ground workings

Records within 250m

15

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**



ID	Location	Land Use	Year of mapping	Mapping scale
A	45m SE	Fire Brick and Fire Clay Works	1938	1:10560
A	45m SE	Fire Brick Works	1900	1:10560
C	66m SE	Refuse Heap	1974	1:10000
F	195m S	Unspecified Ground Workings	1967	1:10560
F	200m S	Clay Pit	1884	1:10560
F	211m S	Clay Pit	1938	1:10560
F	213m S	Unspecified Pit	1967	1:10560
F	213m S	Clay Pit	1950	1:10560
8	217m E	Refuse Heap	1975	1:10000
F	220m S	Clay Pit	1925	1:10560
F	243m S	Refuse Heap	1938	1:10560
F	244m S	Refuse Heap	1950	1:10560
E	247m NE	Unspecified Ground Workings	1925	1:10560
E	247m NE	Unspecified Ground Workings	1925	1:10560
E	249m NE	Unspecified Ground Workings	1938	1:10560

This data is sourced from Ordnance Survey/Groundsure.

5.4 Underground workings

Records within 1000m

87

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**

ID	Location	Land Use	Year of mapping	Mapping scale
E	254m NE	Unspecified Shafts	1882	1:10560
E	262m NE	Unspecified Shafts	1882	1:10560
I	264m W	Unspecified Old Shafts	1882	1:10560
I	274m W	Unspecified Old Shafts	1882	1:10560
I	299m W	Unspecified Old Shafts	1882	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
I	301m W	Unspecified Old Shafts	1882	1:10560
I	302m W	Unspecified Old Shafts	1882	1:10560
11	333m SW	Unspecified Old Shaft	1882	1:10560
P	362m NE	Unspecified Shafts	1882	1:10560
E	366m NE	Old Clay Shaft	1882	1:10560
P	366m NE	Unspecified Shafts	1882	1:10560
P	370m NE	Unspecified Shafts	1882	1:10560
Q	382m NE	Unspecified Disused Shafts	1967	1:10560
D	410m SE	Clay Shaft	1950	1:10560
D	413m SE	Clay Shaft	1925	1:10560
Q	416m NE	Unspecified Shaft	1967	1:10560
S	430m SE	Clay Mine	1950	1:10560
S	434m SE	Clay Mine	1925	1:10560
Q	439m NE	Unspecified Shaft	1967	1:10560
O	446m NE	Unspecified Shaft	1882	1:10560
X	453m SW	Colliery	1950	1:10560
X	453m SW	Unspecified Mine	1967	1:10560
AB	494m NE	Pumping Shaft	1882	1:10560
X	496m SW	Colliery	1900	1:10560
X	496m SW	Colliery	1938	1:10560
X	503m SW	Colliery	1882	1:10560
O	526m NE	Pumping Shaft	1882	1:10560
AG	551m N	Unspecified Old Shaft	1882	1:10560
O	576m NE	Unspecified Old Shaft	1900	1:10560
AK	583m E	Clay Shaft	1950	1:10560
AK	586m E	Clay Shaft	1938	1:10560
AG	588m N	Old Coal Shafts	1900	1:10560
AG	592m N	Old Coal Shafts	1900	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AG	597m N	Unspecified Old Shafts	1882	1:10560
AN	603m SW	Air Shafts	1882	1:10560
AG	604m N	Unspecified Old Shafts	1882	1:10560
AP	607m E	Clay Mine	1900	1:10560
AP	608m E	Clay Mine	1950	1:10560
AP	608m E	Clay Mine	1925	1:10560
AR	614m E	Air Shaft	1950	1:10560
AL	615m SE	Air Shaft	1967	1:10560
AR	615m E	Air Shaft	1925	1:10560
AN	615m SW	Air Shafts	1882	1:10560
AL	617m SE	Clay Mine	1900	1:10560
-	633m E	Old Clay Shaft	1882	1:10560
-	651m E	Old Clay Shafts	1882	1:10560
-	655m E	Old Clay Shafts	1882	1:10560
-	656m E	Unspecified Old Shafts	1938	1:10560
-	687m E	Clay Mine	1900	1:10560
25	692m SE	Unspecified Workings	1975	1:10000
AJ	717m NE	Air Shaft	1967	1:10560
AJ	717m NE	Air Shaft	1950	1:10560
-	718m E	Unspecified Old Shafts	1950	1:10560
AV	719m SE	Clay Shaft	1925	1:10560
-	720m E	Old Clay Shafts	1882	1:10560
AV	720m SE	Clay Shaft	1950	1:10560
AJ	720m NE	Air Shaft	1938	1:10560
-	721m E	Unspecified Old Shafts	1938	1:10560
-	721m E	Unspecified Old Shafts	1950	1:10560
-	736m E	Old Clay Shaft	1882	1:10560
-	744m W	Unspecified Disused Shaft	1967	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
28	746m SW	Unspecified Old Shaft	1882	1:10560
-	766m NE	Old Clay Shaft	1882	1:10560
AJ	769m NE	Air Shaft	1950	1:10560
AJ	773m NE	Air Shaft	1938	1:10560
AY	809m NE	Unspecified Mine	1967	1:10560
-	810m E	Unspecified Old Shafts	1938	1:10560
-	865m E	Unspecified Disused Shaft	1967	1:10560
-	865m E	Clay Shaft	1882	1:10560
-	872m E	Unspecified Old Shafts	1950	1:10560
-	891m NE	Colliery	1950	1:10560
-	899m E	Old Clay Shafts	1900	1:10560
-	904m E	Pumping Shaft	1882	1:10560
-	921m NE	Colliery	1938	1:10560
-	921m NE	Colliery	1900	1:10560
-	921m NE	Colliery	1882	1:10560
-	944m E	Unspecified Old Shafts	1938	1:10560
-	944m E	Old Clay Shafts	1900	1:10560
-	944m E	Old Clay Shaft	1882	1:10560
-	944m E	Unspecified Disused Shaft	1967	1:10560
-	944m N	Old Coal Shaft	1900	1:10560
-	945m E	Unspecified Old Shafts	1950	1:10560
-	947m NE	Unspecified Mine	1967	1:10560
-	971m NE	Unspecified Old Shaft	1882	1:10560
-	973m NE	Air Shaft	1882	1:10560
-	977m NW	Colliery	1882	1:10560
-	980m NE	Unspecified Shaft	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



5.5 Historical Mineral Planning Areas

Records within 500m

26

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
2	46m SE	Church Street	Fireclay	Surface mineral working	Valid	Not available
B	63m SE	Church Gresley	Coal	Surface mineral working	Valid	10/9/73
C	63m SE	Church Street	Fireclay	Surface mineral working	Valid	26/6/53
D	91m SE	Church Street	Fireclay	Working is wholly underground	Valid	26/7/51
E	97m NE	Swadlincote	Fireclay	Working is wholly underground	Refused	20/4/53
F	117m S	Church Street	Clay, coal	Working is wholly underground	Valid	15/1/70
F	117m S	Church Street	Clay, coal	Surface mineral working	Valid	15/1/70
3	133m S	Off Church Street	Clay	Surface mineral working	Valid	28/2/53
4	164m NE	Swadlincote	Fireclay	Working is wholly underground	Valid	20/4/53
5	169m S	Off Church Street	Clay	Surface mineral working	Refused	28/2/53
6	185m E	Church Street	Fireclay	Surface mineral working	Valid	26/6/63
A	200m SE	Church Street	Fireclay	Surface mineral working	Valid	26/6/63
9	227m SE	Off Church Street	Clay	Surface mineral working	Valid	28/2/53
10	245m N	Swadlincote	Fireclay	Working is wholly underground	Valid	20/4/53
G	249m SE	Church Street	Fireclay	Surface mineral working	Valid	Not available
H	251m SE	Albert	Fireclay, clay	Working is wholly underground	Valid	5/9/60,26/7/51
N	323m E	Albert	Fireclay, clay	Mineral working is partly on the surface and partly underground	Valid	5/9/60,26/7/51
O	327m N	Swadlincote	Fireclay	Working is wholly underground	Valid	20/4/53
E	342m NE	Swadlincote	Fireclay	Working is wholly underground	Refused	20/4/53



ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
T	431m S	Railway Brickworks	Marl, fireclay	Surface mineral working	Valid	30/11/53
O	436m NE	Gresley Common	Fireclay	Surface mineral working	Valid	15/7/55
T	441m S	Railway Brickworks	Marl, fireclay	Working is wholly underground	Valid	30/11/53
13	445m SE	Off Occupation Road	Clay, coal	Surface mineral working	Valid	1/10/71
AA	472m N	Hastings Road	Fireclay	Working is wholly underground	Valid	4/12/53
15	488m E	Albert Village	Clay, coal	Surface mineral working	Valid	26/4/72
AA	495m N	Hastings Road	Fireclay	Surface mineral working	Valid	4/12/53

This data is sourced from the British Geological Survey.

5.6 Non-coal mining

Records within 1000m

2

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Iron Ore (Bedded)	B	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
7	217m E	Not available	Iron Ore (Bedded)	B	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

This data is sourced from the British Geological Survey.



5.7 Mining cavities

Records within 1000m

4

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 39**

ID	Location	Mine Address	Mineral	Data source	Publisher
V	469m SE	Ashby Woulds, Derbyshire	Clay	CATALOGUE OF PLANS OF ABANDONED MINES (NON COAL)	-
-	638m E	Swadlincote, Leicestershire	Clay	-	-
-	730m E	Pool No. 8, Swadlincote, Derbyshire	Clay	CATALOGUE OF PLANS OF ABANDONED MINES (NON COAL)	-
-	820m S	Railway Works No.2, Derbyshire	Fireclay	MINING FILE	-

This data is sourced from Stantec UK Ltd.

5.8 JPB mining areas

Records on site

1

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

Location	Details
On site	In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk .

This data is sourced from Johnson Poole and Bloomer.



5.9 Coal mining

Records on site	1
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Areas which could be affected by past, current or future coal mining.

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

This data is sourced from the Coal Authority.

5.10 Brine areas

Records on site	0
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The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

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

5.11 Gypsum areas

Records on site	0
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

5.12 Tin mining

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

This data is sourced from Mining Searches UK.

5.13 Clay mining

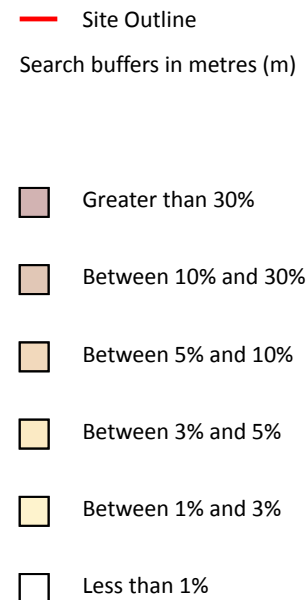
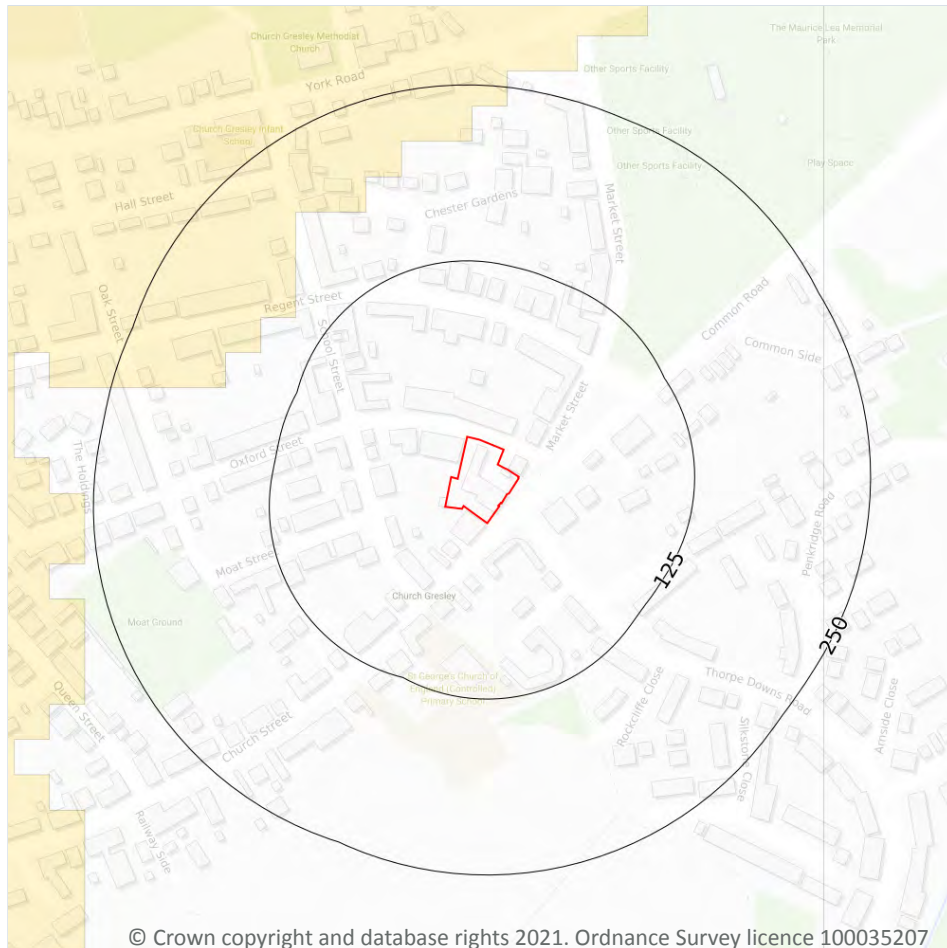
Records on site	0
-----------------	---

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

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



6 Radon



6.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 49**

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

This data is sourced from the British Geological Survey and Public Health England.



7 Soil chemistry

7.1 BGS Estimated Background Soil Chemistry

Records within 50m**2**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
35m NE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

7.2 BGS Estimated Urban Soil Chemistry

Records within 50m**0**

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

This data is sourced from the British Geological Survey.

7.3 BGS Measured Urban Soil Chemistry

Records within 50m**0**

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

This data is sourced from the British Geological Survey.



8 Railway infrastructure and projects



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

8.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

8.2 Underground railways (Non-London)

Records within 250m

0

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



This data is sourced from publicly available information by Groundsure.

8.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

8.4 Historical railway and tunnel features

Records within 250m

11

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

Features are displayed on the Railway infrastructure and projects map on **page 51**

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1950	10560
27m S	Railway Sidings	1938	10560
74m S	Railway Sidings	1950	10560
232m E	Railway Sidings	1967	10560
238m SE	Railway Sidings	1959	2500
240m SE	Railway Sidings	1950	10560
241m E	Railway Sidings	1938	10560
241m E	Railway Sidings	1900	10560
244m E	Railway Sidings	1882	10560
244m E	Railway Sidings	1925	10560
245m SE	Railway Sidings	1959	2500

This data is sourced from Ordnance Survey/Groundsure.



8.5 Royal Mail tunnels

Records within 250m

0

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

This data is sourced from Groundsure/the Postal Museum.

8.6 Historical railways

Records within 250m

1

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

Features are displayed on the Railway infrastructure and projects map on **page 51**

Location	Description
243m SE	Razed

This data is sourced from OpenStreetMap.

8.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

8.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

8.9 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

8.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.



Data providers

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

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