Recent aerial photograph

Capture Date: 19/04/2021

Site Area: 99.99ha

Recent site history - 2018 aerial photograph

Capture Date: 01/07/2018

Site Area: 99.99ha

Recent site history - 2013 aerial photograph

Capture Date: 07/06/2013

Site Area: 99.99ha

Recent site history - 2009 aerial photograph

Capture Date: 11/09/2009

Site Area: 99.99ha

Recent site history - 1999 aerial photograph

Capture Date: 10/07/1999

Site Area: 99.99ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

1.1 Historical industrial land uses

Records within 500m	36

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Brick Works**	**1904**	**1472353**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Disused Brick Works**	**1929**	**1474450**
A	**On site**	**Unspecified Heap**	**1939**	**1492290**
A	**On site**	**Brick Works**	**1939**	**1509384**
A	**On site**	**Unspecified Ground Workings**	**1951**	**1515998**
A	**On site**	**Unspecified Heap**	**1948**	**1527067**
A	**On site**	**Disused Brick Works**	**1948 - 1951**	**1529936**
A	**On site**	**Brick Works**	**1929**	**1548117**
A	2m E	Unspecified Ground Workings	1967 - 1988	1522868
A	16m E	Unspecified Pit	1948	1482403
A	17m E	Unspecified Pit	1939	1547629
A	28m E	Unspecified Pit	1904	1466309
B	59m SE	Cuttings	1951	1507435
C	63m SE	Cuttings	1901	1499270
B	64m SE	Cuttings	1938	1474024
B	64m S	Cuttings	1948	1491263
C	69m SE	Cuttings	1967	1467846
C	97m S	Brick Works	1938	1484942
C	99m S	Brick Works	1948	1470680
C	99m S	Unspecified Ground Workings	1948	1509809
C	101m S	Refuse Heap	1938	1438063
C	113m S	Unspecified Ground Workings	1951	1485631
C	122m S	Unspecified Pit	1938	1455362
C	122m S	Unspecified Pit	1938	1455363
C	137m SE	Railway Sidings	1938	1409649
D	177m S	Cuttings	1938	1513584
D	177m S	Cuttings	1951	1460339
D	178m S	Cuttings	1948	1499582
1	227m SW	Refuse Heap	1977 - 1988	1518760

ID	Location	Land use	Dates present	Group ID
3	277m E	Unspecified Works	1967 - 1988	1465535
5	314m S	Railway Sidings	1966 - 1967	1528420
E	336m E	Unspecified Ground Workings	1986	1414511
E	375m E	Electricity Substation	1986	1450834
F	392m NE	Unspecified Tank	1948	1473063
F	392m NE	Unspecified Tank	1951	1513927
F	394m NE	Unspecified Tank	1929 - 1939	1486371

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m **3**

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
F	394m NE	Tanks	1976 - 1995	239203
F	395m NE	Unspecified Tank	1930	229112
6	416m SE	Unspecified Tank	1977	229111

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m **4**

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
2	252m E	Electricity Substation	1977	131181
4	279m E	Electricity Substation	1994	131182
E	381m E	Electricity Substation	1982 - 1990	141205
7	459m S	Electricity Substation	1972	131180

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

2.1 Historical industrial land uses

Records within 500m	47

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

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Brick Works**	**1929**	**1548117**
A	**On site**	**Disused Brick Works**	**1929**	**1474450**
A	**On site**	**Disused Brick Works**	**1951**	**1529936**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Ground Workings**	**1951**	**1515998**
A	**On site**	**Brick Works**	**1939**	**1509384**
A	**On site**	**Unspecified Heap**	**1939**	**1492290**
A	**On site**	**Brick Works**	**1904**	**1472353**
A	**On site**	**Disused Brick Works**	**1948**	**1529936**
A	**On site**	**Unspecified Heap**	**1948**	**1527067**
A	**On site**	**Unspecified Heap**	**1948**	**1527067**
A	2m E	Unspecified Ground Workings	1967	1522868
A	2m E	Unspecified Ground Workings	1988	1522868
A	2m E	Unspecified Ground Workings	1977	1522868
A	16m E	Unspecified Pit	1948	1482403
A	16m E	Unspecified Pit	1948	1482403
A	17m E	Unspecified Pit	1939	1547629
A	28m E	Unspecified Pit	1904	1466309
B	59m SE	Cuttings	1951	1507435
C	63m SE	Cuttings	1901	1499270
B	64m SE	Cuttings	1938	1474024
B	64m S	Cuttings	1948	1491263
C	69m SE	Cuttings	1967	1467846
C	97m S	Brick Works	1938	1484942
C	99m S	Brick Works	1948	1470680
C	99m S	Unspecified Ground Workings	1948	1509809
C	99m S	Brick Works	1948	1470680
C	99m S	Unspecified Ground Workings	1948	1509809
C	101m S	Refuse Heap	1938	1438063
C	113m S	Unspecified Ground Workings	1951	1485631
C	122m S	Unspecified Pit	1938	1455362
C	122m S	Unspecified Pit	1938	1455363

ID	Location	Land Use	Date	Group ID
C	137m SE	Railway Sidings	1938	1409649
D	177m S	Cuttings	1938	1513584
D	177m S	Cuttings	1951	1460339
D	178m S	Cuttings	1948	1499582
1	227m SW	Refuse Heap	1977	1518760
2	228m SW	Refuse Heap	1988	1518760
E	277m E	Unspecified Works	1967	1465535
E	277m E	Unspecified Works	1988	1465535
E	277m E	Unspecified Works	1977	1465535
5	314m S	Railway Sidings	1967	1528420
F	336m E	Unspecified Ground Workings	1986	1414511
F	375m E	Electricity Substation	1986	1450834
G	392m NE	Unspecified Tank	1948	1473063
G	392m NE	Unspecified Tank	1951	1513927
G	394m NE	Unspecified Tank	1929	1486371
G	395m NE	Unspecified Tank	1939	1486371

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**4**

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

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
G	394m NE	Tanks	1976	239203
G	395m NE	Tanks	1995	239203
G	395m NE	Unspecified Tank	1930	229112
6	416m SE	Unspecified Tank	1977	229111

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	5

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

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
3	252m E	Electricity Substation	1977	131181
4	279m E	Electricity Substation	1994	131182
F	381m E	Electricity Substation	1982	141205
F	381m E	Electricity Substation	1990	141205
7	459m S	Electricity Substation	1972	131180

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

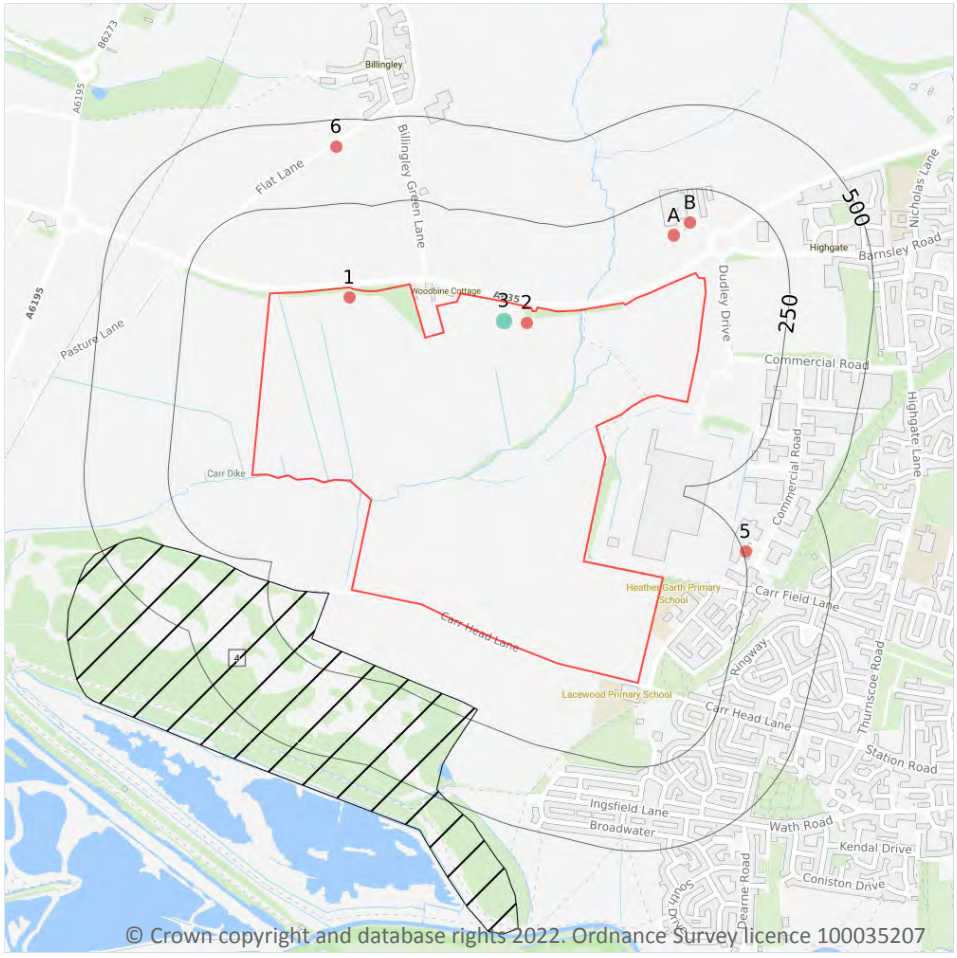
2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical landfill (BGS)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	1

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

Features are displayed on the Waste and landfill map on **page 21**

ID	Location	Address	BGS Number	Risk	Waste Type
3	**On site**	**Mary Lane, Darfield, nr Barnsley, S. Yorks**	**19**	**Risk not recorded**	**Domestic Refuse**

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	**0**

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	**1**

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

Features are displayed on the Waste and landfill map on **page 21**

ID	Location	Details		
4	68m W	Site Address: Wath Colliery, Manvers Central Coal Preparation Plant Licence Holder Address: Golden Smithies Lane, Wath upon Dearne, Rotherham	Waste Licence: Yes Site Reference: WD20 R161, 4400/R161, 20R161 Waste Type: Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 20/12/1977 Licence Surrender: 26/10/1983	Operator: - Licence Holder: National Coal Board South Yorkshire Area First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m	**0**

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

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	28

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

Features are displayed on the Waste and landfill map on **page 21**

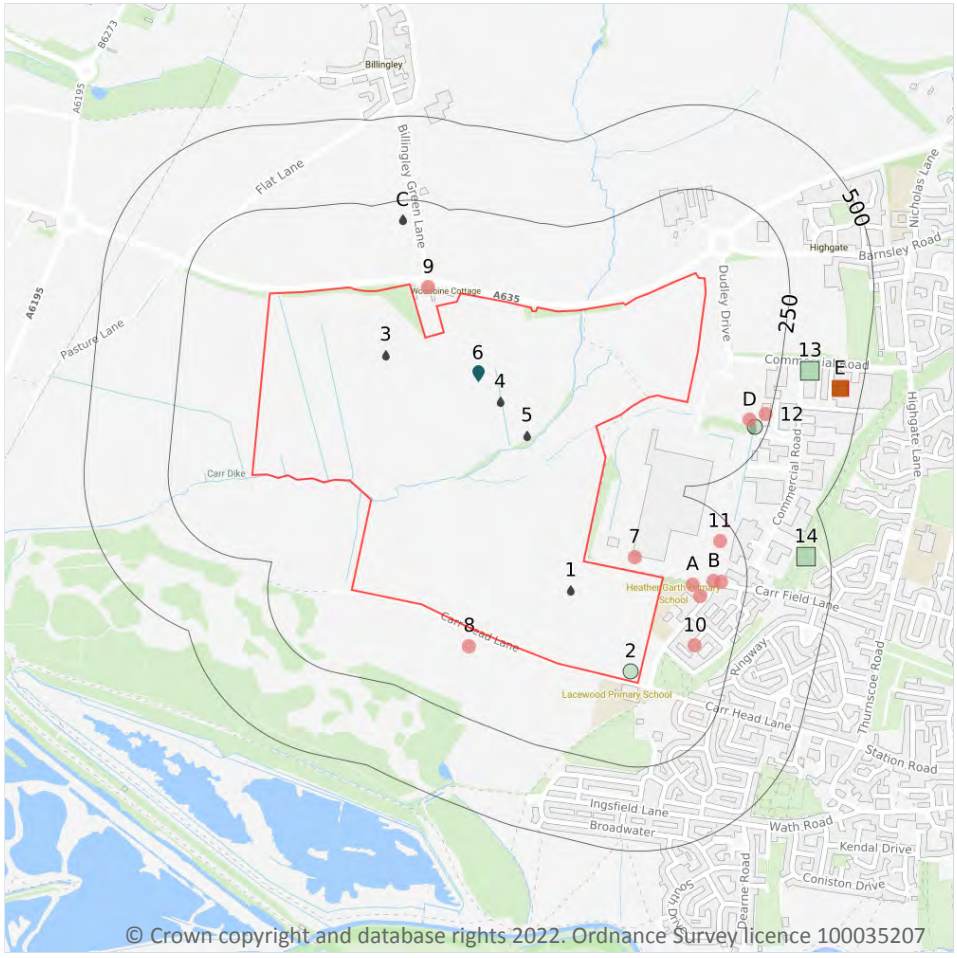
ID	Location	Site	Reference	Category	Sub-Category	Description
1	**On site**	**NEW HALL FARM, BACK LANE, BILLINGLEY, BARNSLEY, S72 0JF**	**WEX142907**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
2	**On site**	**NEW HALL FARM, BACK LANE, BILLINGLEY, BARNSLEY, S72 0JF**	**WEX142908**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Using waste exemption	On a Farm	Use of waste in construction
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Using waste exemption	On a Farm	Use of waste for a specified purpose
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX208941	Disposing of waste exemption	On a Farm	Burning waste in the open
A	127m NW	HIGHGATE HOUSE FARM, WENTWORTH, ROTHERHAM, S63 9EY	WEX126935	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
A	127m NW	HIGHGATE HOUSE FARM, WENTWORTH, ROTHERHAM, S63 9EY	WEX126935	Using waste exemption	On a farm	Use of waste for a specified purpose
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Disposing of waste exemption	On a farm	Burning waste in the open
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Using waste exemption	On a farm	Use of waste in construction
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
A	127m NW	HIGHGATE HOUSE FARM, DEARNE VALLEY PARKWAY, GOLDTHORPE, ROTHERHAM, S63 9EY	WEX049660	Using waste exemption	On a farm	Use of waste for a specified purpose

ID	Location	Site	Reference	Category	Sub-Category	Description
A	128m NW	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/FF0330EP/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
B	149m N	Highgate House Farm Dearne Valley Parkway ROTHERHAM South Yorkshire S63 9EY	EPR/TH0976DY/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
5	255m E	UNIT 29, GOLDTHORPE INDUSTRIAL ESTATE, COMMERCIAL ROAD, GOLDTHORPE, ROTHERHAM, S63 9BL	WEX224434	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
6	419m N	NEW HALL FARM, BACK LANE, BILLINGLEY, BARNSLEY, S72 0JF	WEX124276	Storing waste exemption	On a farm	Storage of sludge

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

- Recent industrial land uses
- Historical licensed industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to public sewer
- List 1 Dangerous Substances
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	11

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Company	Address	Activity	Category
7	43m N	Electricity Sub Station	South Yorkshire, S63	Electrical Features	Infrastructure and Facilities
8	50m SW	Mast (Telecommunication)	South Yorkshire, S63	Telecommunications Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
9	51m E	Carlton Motor Sport Ltd	Carlton Motor Sport Rose Valley Cottage, Doncaster Road, Billingley, Barnsley, South Yorkshire, S72 0JE	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	90m E	Chimney	South Yorkshire, S63	Chimneys	Industrial Features
A	120m E	Electricity Sub Station	South Yorkshire, S63	Electrical Features	Infrastructure and Facilities
10	139m E	Electricity Sub Station	South Yorkshire, S63	Electrical Features	Infrastructure and Facilities
B	152m E	Gas Governor	South Yorkshire, S63	Gas Features	Infrastructure and Facilities
B	172m E	Electricity Sub Station	South Yorkshire, S63	Electrical Features	Infrastructure and Facilities
D	192m E	Sewage Pumping Station	South Yorkshire, S63	Waste Storage, Processing and Disposal	Infrastructure and Facilities
11	201m NE	Pumping Station	South Yorkshire, S63	Water Pumping Stations	Industrial Features
12	235m E	Pressure Design	Unit 26 Goldthorpe Industrial Estate, Commercial Road, Goldthorpe, Barnsley, South Yorkshire, S63 9BL	Hydraulic Engineers	Engineering Services

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Details	
E	435m E	Operator: Idi Europe Ltd (dissolved) Address: Unit 20, Commercial Road, Goldthorpe Industrial Estate, Goldthorpe, Rotherham, South Yorkshire, S63 9BL Process: Inorganic Chemical Processes Permit Number: AB4176	Original Permit Number: IPCAPP Date Approved: 28-2-1992 Effective Date: 28-2-1992 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Address	Details	
6	**On site**	**Woodbine Opencast Site, Sth Of Doncaster Rd, Billingley, Barnsley, DN9 1BX**	**Process: Coal & Coke** **Status: Historical Permit** **Permit Type: Part B**	**Enforcement: No Enforcements Notified** **Date of enforcement: No Enforcements Notified** **Comment: No Enforcements Notified**

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	10

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Address	Details	
1	On site	WOODBINE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: WRA7193 Permit Version: 1 Receiving Water: CARR DYKE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/01/1996 Effective Date: 26/01/1996 Revocation Date: 11/06/1999
3	On site	WOODBINE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: WRA7193 Permit Version: 1 Receiving Water: CARR DYKE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/01/1996 Effective Date: 26/01/1996 Revocation Date: 11/06/1999
4	On site	WOODBINE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: WRA7193 Permit Version: 1 Receiving Water: CARR DYKE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/01/1996 Effective Date: 26/01/1996 Revocation Date: 11/06/1999
5	On site	THE BLACK SWAN PUBLIC HOUSE, TRENHOLME BAR, A19 SOUTHBOUND, NORTHALLERTON, NORTH YORKSHIRE, DL6 3JY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 27/23/0195 Permit Version: 1 Receiving Water: UNNAMED OF TRENHOLME STELL	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 03/04/2002 Effective Date: 03/04/2002 Revocation Date: 14/01/2005

ID	Location	Address	Details	
C	191m N	BILLINGLEY GREEN FARMHOUSE, BILLINGLEY GREEN LANE, BILLINGLEY, BARNSLEY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C5259 Permit Version: 1 Receiving Water: LAND ADJACENT TO THE FARMHOUSE	Status: TRANSFERRED FROM COPA 1974 Issue date: 30/09/1988 Effective Date: 30/09/1988 Revocation Date: 25/07/2012
C	191m N	BILLINGLEY GREEN FARMHOUSE, BILLINGLEY GREEN LANE, BILLINGLEY, BARNSLEY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C5259 Permit Version: 2 Receiving Water: LAND ADJACENT TO THE FARMHOUSE	Status: TRANSFERRED FROM COPA 1974 Issue date: 26/07/2012 Effective Date: 26/07/2012 Revocation Date: -
C	191m N	BILLINGLEY GREEN FARMHOUSE, BILLINGLEY GREEN LANE, BILLINGLEY, BARNSLEY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C5259 Permit Version: 1 Receiving Water: LAND ADJACENT TO THE FARMHOUSE	Status: TRANSFERRED FROM COPA 1974 Issue date: 30/09/1988 Effective Date: 30/09/1988 Revocation Date: 25/07/2012
C	191m N	BILLINGLEY GREEN FARMHOUSE, BILLINGLEY GREEN LANE, BILLINGLEY, BARNSLEY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: C5259 Permit Version: 2 Receiving Water: LAND ADJACENT TO THE FARMHOUSE	Status: TRANSFERRED FROM COPA 1974 Issue date: 26/07/2012 Effective Date: 26/07/2012 Revocation Date: -
D	205m E	HIGHGATE INDUSTRIAL ESTATE SPS, COMMERCIAL ROAD, GOLDTHORPE INDUSTRIAL ESTATE, BOLTON UPON DEARNE, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 3508 Permit Version: 1 Receiving Water: TRIB OF CARR DYKE	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 31/12/1980 Effective Date: 31/12/1980 Revocation Date: 05/02/2003
D	209m E	HIGHGATE INDUSTRIAL ESTATE SPS, COMMERCIAL ROAD, GOLDTHORPE INDUSTRIAL ESTATE, BOLTON UPON DEARNE, SOUTH YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 3508 Permit Version: 2 Receiving Water: TRIB OF CARR DYKE	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 06/02/2003 Effective Date: 06/02/2003 Revocation Date: -

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	1

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Address	Details	
E	435m E	MULTISCREEN GLASS LTD, UNIT 20 COMMERCIAL ROAD, GOLDTHORPE IND EST, ROTHERHAM, SOUTH YORKSHIRE, S63 9BL	Permission reference: AE1947 Local Authority: ROTHERHAM METROPOLITAN BOROUGH COUNCIL First received date: 01/06/2001	Last received date: 01/01/2018 Status: DEAD (APPLICATION)

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

4.16 List 1 Dangerous Substances

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Name	Status	Receiving Water	Authorised Substances
E	435m E	Resitex Coatings, Goldthorpe	Not Active	-	Mercury (other)

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

4.17 List 2 Dangerous Substances

Records within 500m	2

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Name	Status	Receiving Water	Authorised Substances
13	338m E	Resitex Coatings	Not Active	-	Copper
14	430m E	Granville Oil And Chemicals, Goldthorpe Rotherham	Not Active	-	Chromium, Copper, Lead, Zinc

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	**2**

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

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Details	
2	**On site**	**Incident Date: 10/01/2003** **Incident Identification: 130216** **Pollutant: Other Pollutant** **Pollutant Description: Other**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 3 (Minor)**
D	212m E	Incident Date: 23/01/2002 Incident Identification: 54052 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	**0**

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

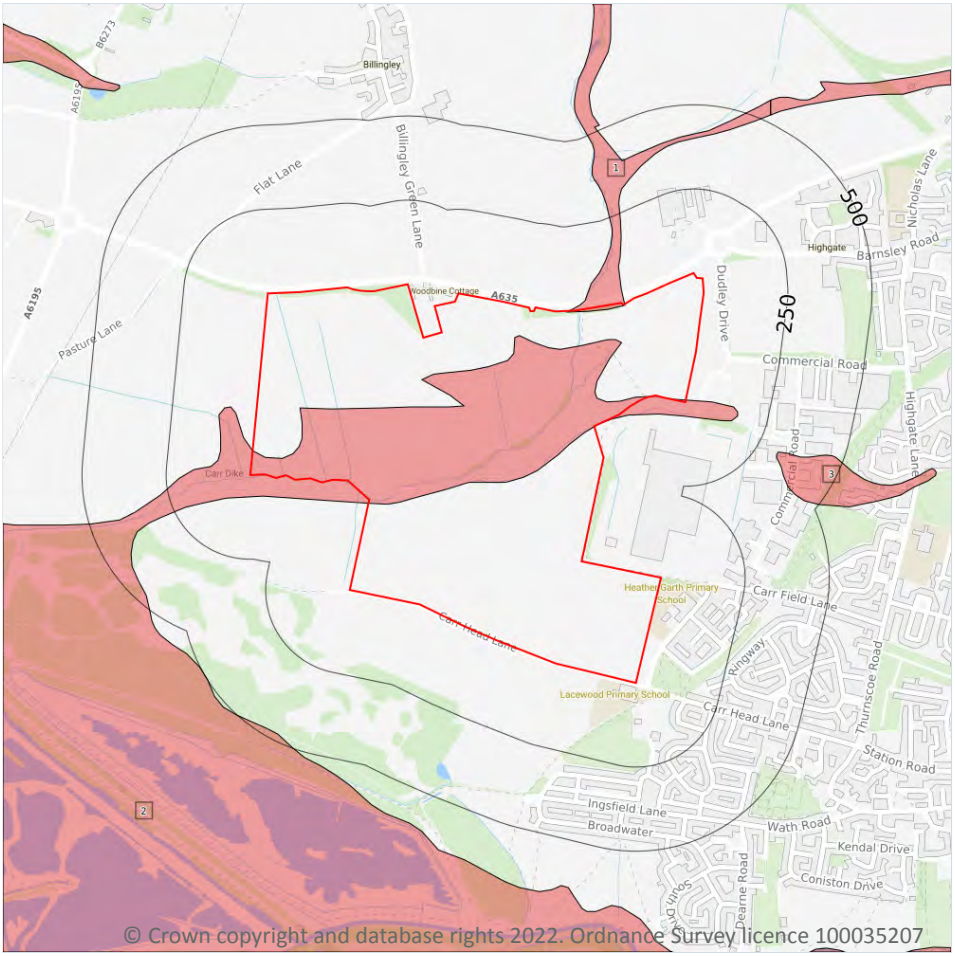
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

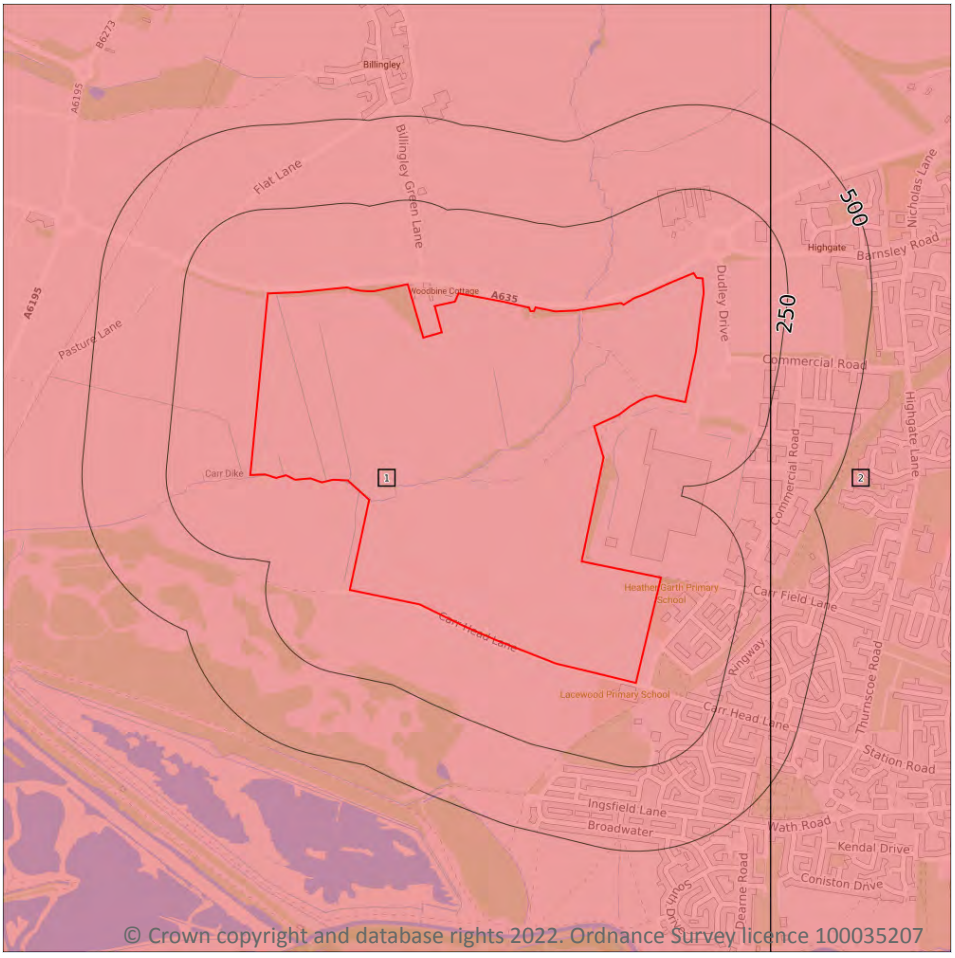
Features are displayed on the Hydrogeology map on **page 35**

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

ID	Location	Designation	Description
3	313m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m	2

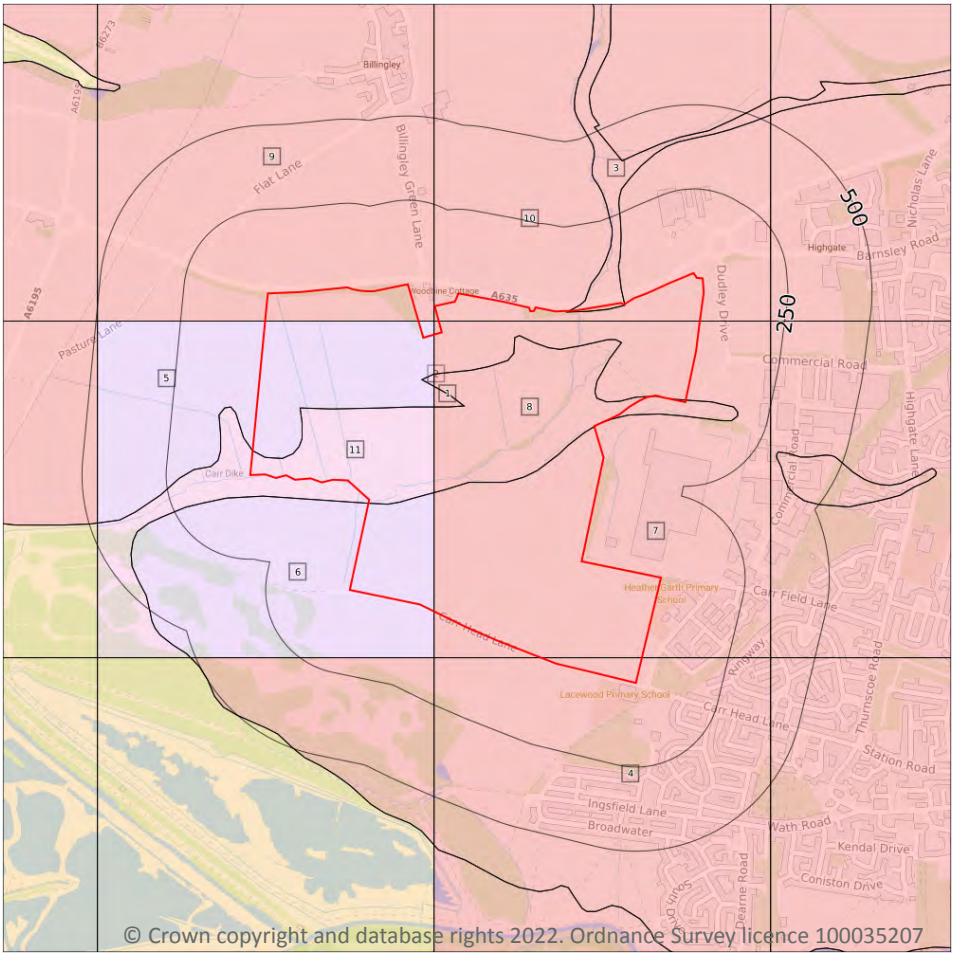
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 37**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	199m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	11

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

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

Features are displayed on the Groundwater vulnerability map on **page 39**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
8	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by

email on enquiries@environment-agency.gov.uk.

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

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	0

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

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

5.7 Surface water abstractions

Records within 2000m	8

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 43**

ID	Location	Details	
-	1185m SW	Status: Historical Licence No: 2/27/08/119 Details: Lake & Pond Throughflow Direct Source: SURFACE WATER Point: RIVER DEARNE - OLD MOOR WETLANDS RESERVE Data Type: Point Name: BARNSLEY METROPOLITAN BOROUGH COUNCIL Easting: 442400 Northing: 403000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 23/05/1997 Expiry Date: - Issue No: 100 Version Start Date: 10/11/1999 Version End Date: -
-	1185m SW	Status: Active Licence No: 2/27/08/119 Details: Lake & Pond Throughflow Direct Source: SURFACE WATER Point: RIVER DEARNE-OLD MOOR WETLANDS RESERVE Data Type: Point Name: ROYAL SOCIETY FOR THE PROTECTION OF BIRDS Easting: 442400 Northing: 403000	Annual Volume (m^3): 1,103,760 Max Daily Volume (m^3): 3,024 Original Application No: 6768 Original Start Date: 23/05/1997 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2003 Version End Date: -
-	1324m S	Status: Historical Licence No: 2/27/08/142 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: KNOLL BECK - WATH UPON DEARNE Data Type: Point Name: Frank Houlgate at Waterfront Golf Ltd Easting: 444030 Northing: 401700	Annual Volume (m^3): 18900 Max Daily Volume (m^3): 90 Original Application No: - Original Start Date: 03/05/2007 Expiry Date: 31/03/2017 Issue No: 4 Version Start Date: 02/08/2016 Version End Date: -

ID	Location	Details	
-	1594m SE	Status: Historical Licence No: 2/27/08/125 Details: Make-Up or Top Up Water Direct Source: SURFACE WATER Point: RIVER DEARNE Data Type: Point Name: NASH Easting: 445970 Northing: 402110	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/09/1999 Expiry Date: 31/12/2009 Issue No: 1 Version Start Date: 20/09/1999 Version End Date: -
-	1594m SE	Status: Historical Licence No: 2/27/08/125 Details: Make-Up or Top Up Water Direct Source: SURFACE WATER Point: RIVER DEARNE-LOWFIELD LANE-WATH ON DEARNE Data Type: Point Name: NASH Easting: 445970 Northing: 402110	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/09/1999 Expiry Date: 31-Dec-09 Issue No: 2 Version Start Date: 30/08/2002 Version End Date: -
-	1594m SE	Status: Historical Licence No: 2/27/08/125 Details: Make-Up or Top Up Water Direct Source: SURFACE WATER Point: INLAND WATER - RIVER DEARNE Data Type: Point Name: NASH Easting: 445970 Northing: 402110	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/09/1999 Expiry Date: 31/12/2009 Issue No: 2 Version Start Date: 30/08/2002 Version End Date: -
-	1595m SE	Status: Historical Licence No: 2/27/08/127 Details: Dust suppression Direct Source: SURFACE WATER Point: INLAND WATER - TRIBUTARY OF RIVER DEARNE Data Type: Point Name: GATEWAYS FUELS LTD Easting: 445900 Northing: 402000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/08/2002 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 02/08/2002 Version End Date: -
-	1678m SE	Status: Historical Licence No: 2/27/08/120 Details: General use relating to Secondary Category (High Loss) Direct Source: SURFACE WATER Point: RIVER DEARNE Data Type: Line Name: A OGDEN & SONS LTD Easting: 446000 Northing: 402000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 25/06/1997 Expiry Date: 31/12/2006 Issue No: 101 Version Start Date: 15/03/2000 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

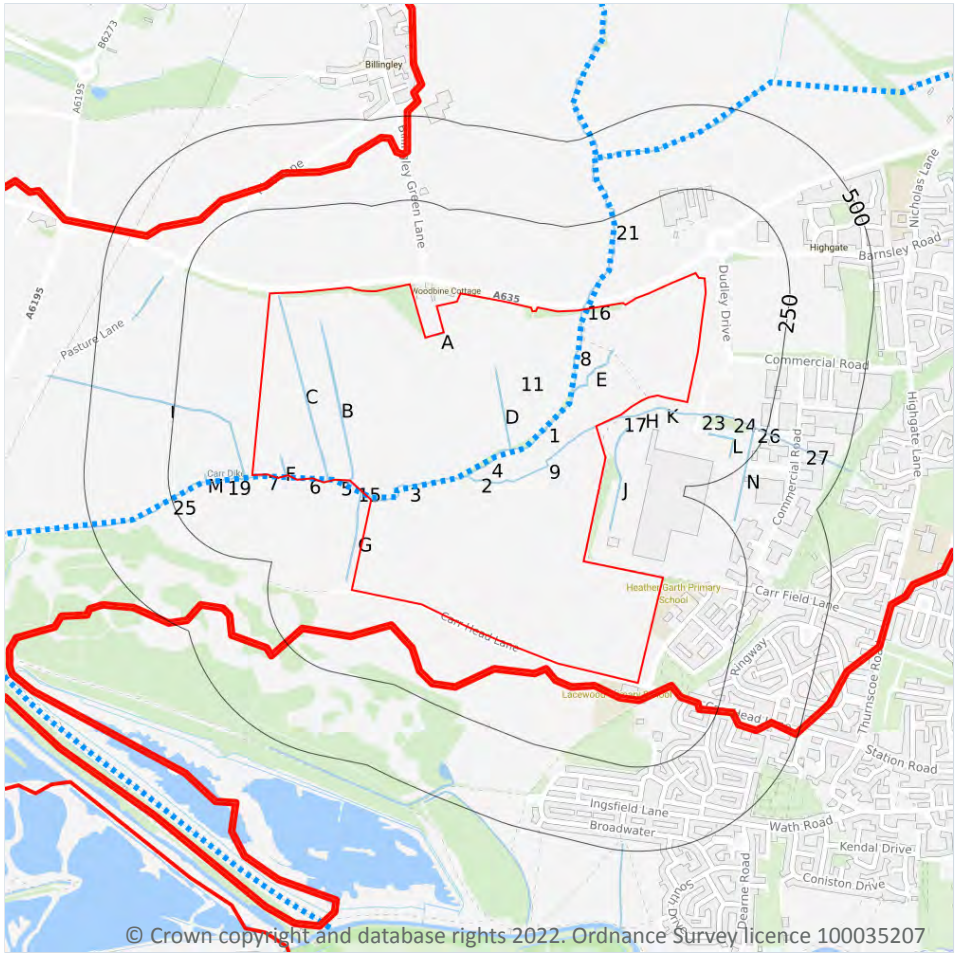
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	33

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

Features are displayed on the Hydrology map on **page 47**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
15	1m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
G	1m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	2m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Carr Dike
17	6m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	8m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	22m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	23m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
21	25m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
J	27m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	31m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
K	32m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
23	38m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
24	69m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
L	113m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	137m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
25	139m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Carr Dike
26	212m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	212m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
27	217m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**11**

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

Features are displayed on the Hydrology map on **page 47**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

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

Features are displayed on the Hydrology map on **page 47**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
11	**On site**	**River**	**Ings/Carr/Thurnscoe Dikes from Source to Dearne**	**GB104027057550**	**Dearne**	**Don and Rother**

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

6.4 WFD Surface water bodies

Records identified	**1**

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

Features are displayed on the Hydrology map on **page 47**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
10	**On site**	**River**	**Ings/Carr/Thurnscoe Dikes from Source to Dearne**	**GB104027057550**	**Moderate**	**Fail**	**Moderate**	**2019**

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

6.5 WFD Groundwater bodies

Records on site	**1**

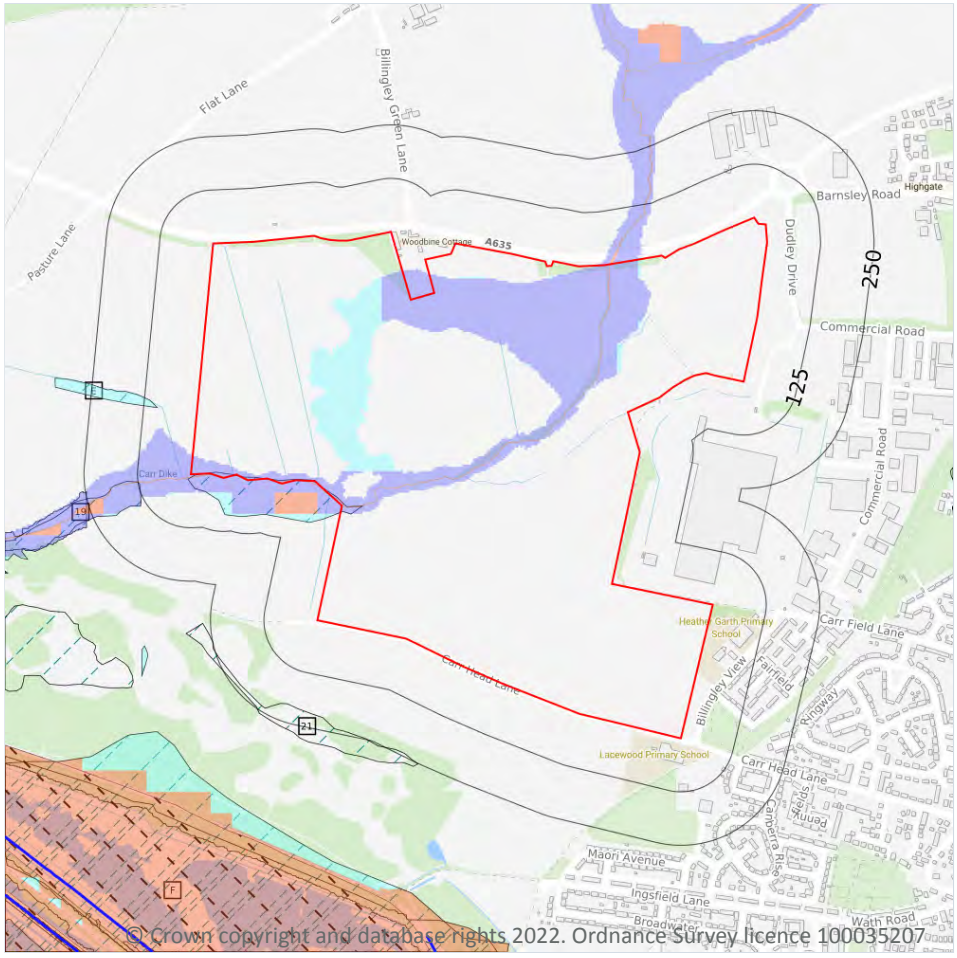
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 47**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**Don & Rother Millstone grit & Coal Measures**	**GB40402G992300**	**Poor**	**Poor**	**Good**	**2019**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	24

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

Features are displayed on the River and coastal flooding map on **page 52**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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

7.2 Historical Flood Events

Records within 250m	**5**

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

Features are displayed on the River and coastal flooding map on **page 52**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
B	**On site**	**June 2007**	**2007-06-26 2007-06-28**	**Main river**	**Channel capacity exceeded (no raised defences)**	**No data**
E	93m W	June 2007	2007-06-26 2007-06-28	Main river	Channel capacity exceeded (no raised defences)	No data
19	122m W	June 2007	2007-06-26 2007-06-28	Main river	Channel capacity exceeded (no raised defences)	No data
21	207m S	June 2007 Surface Water Flooding Yorkshire	2007-06-15 2007-06-25	Other	Unknown	No data
F	248m W	123 Autumn 2000	2000-10-01 2000-11-30	Main river	Unknown	No data

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

7.3 Flood Defences

Records within 250m	**0**

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

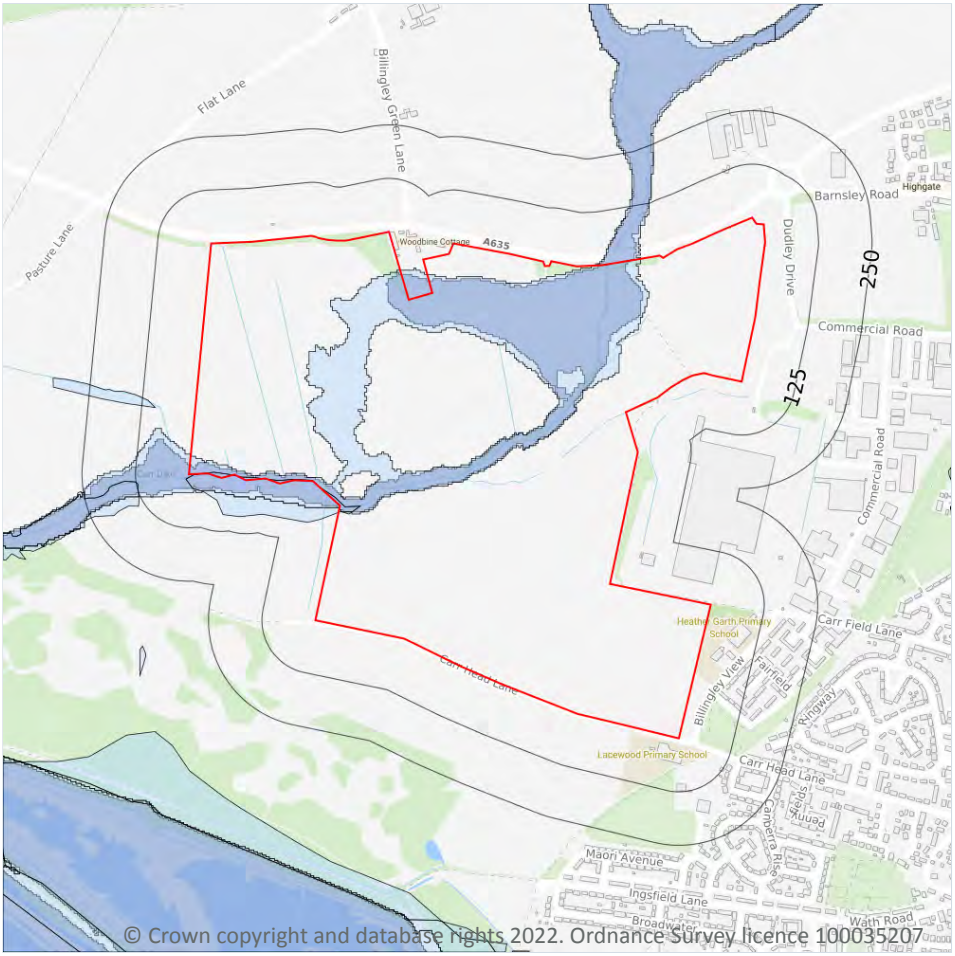
7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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

Features are displayed on the River and coastal flooding map on **page 52**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

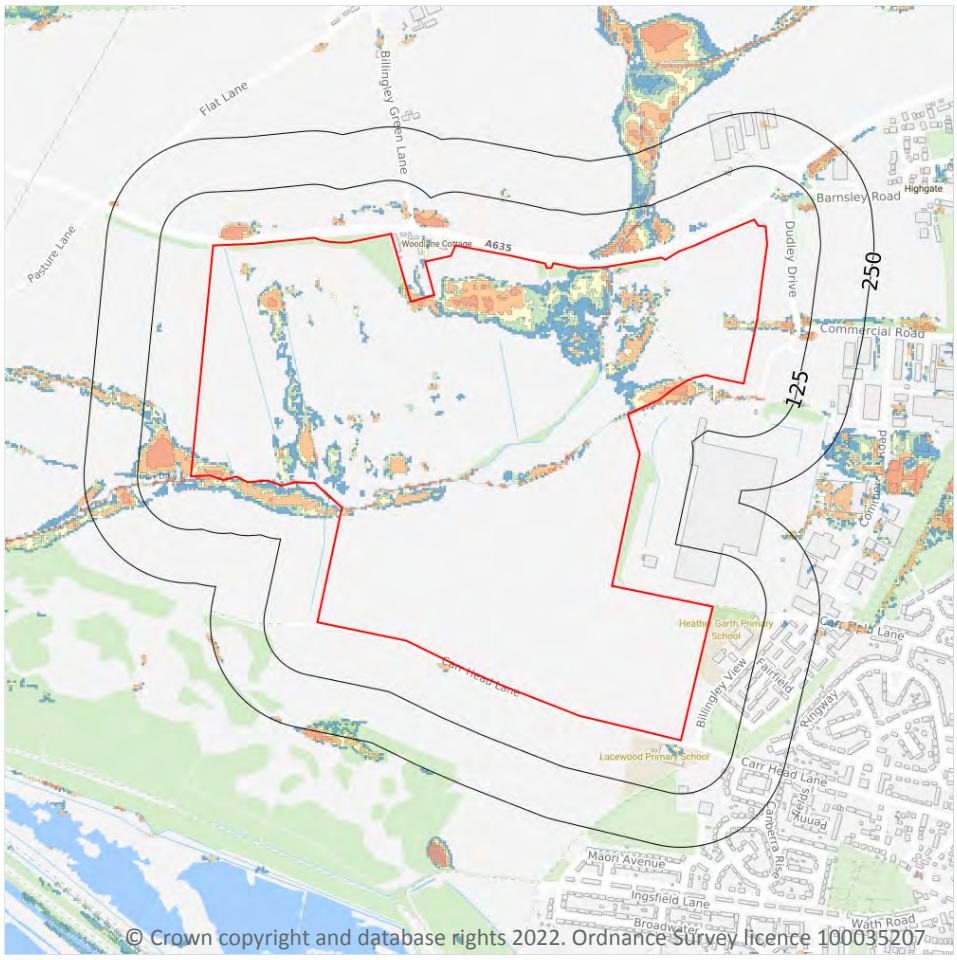
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 52**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 57**

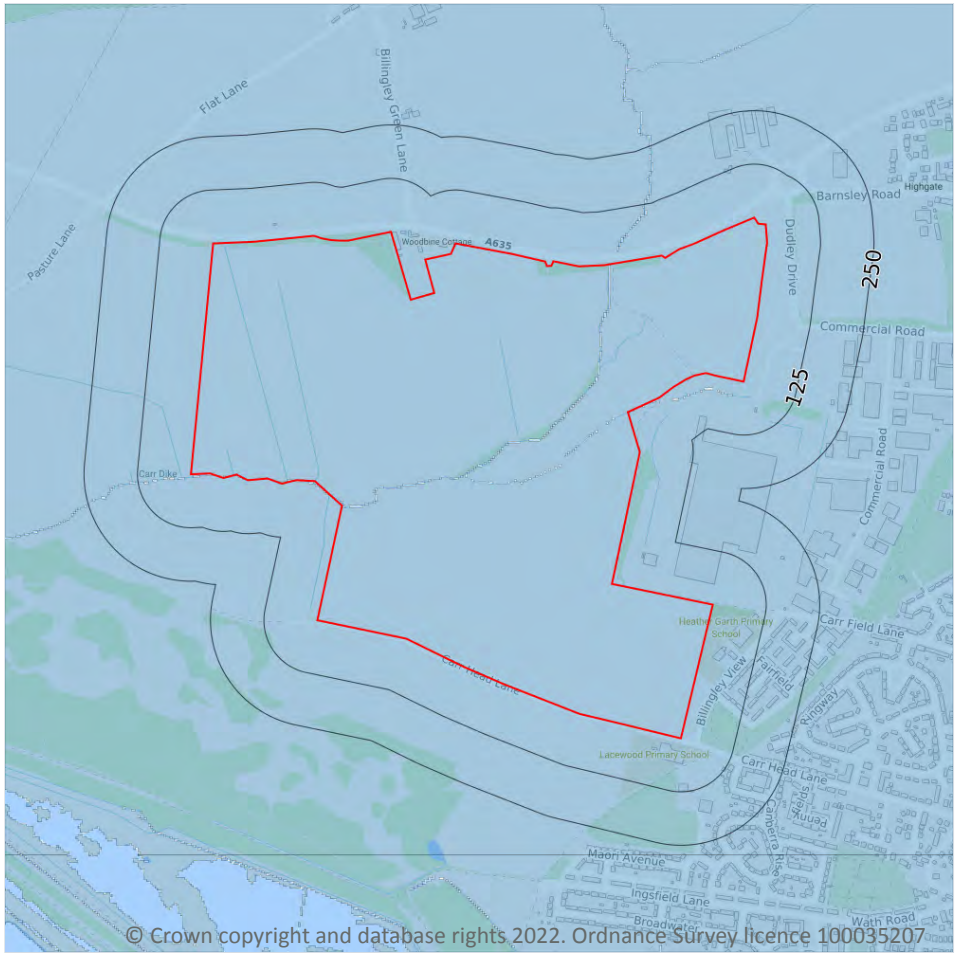
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

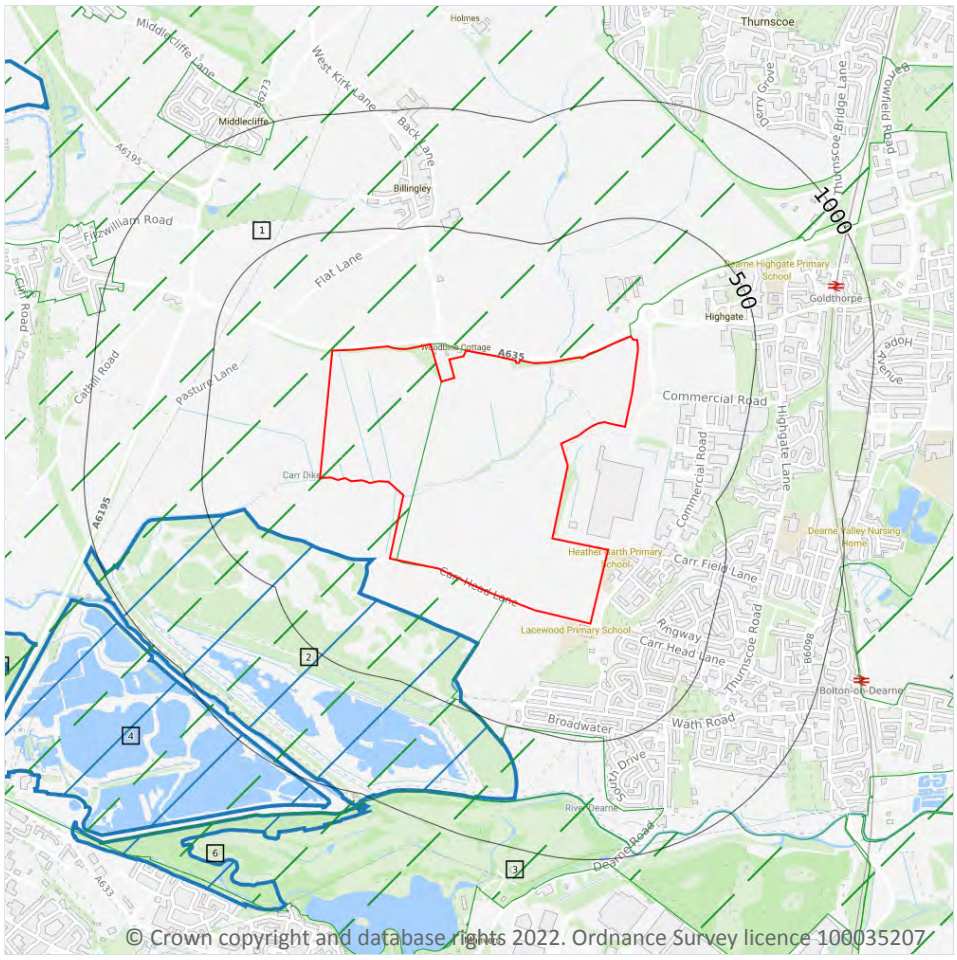
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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

Features are displayed on the Groundwater flooding map on **page 59**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	13

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

Features are displayed on the Environmental designations map on **page 60**

ID	Location	Name	Data source
2	74m W	Dearne Valley Wetlands	Natural England

ID	Location	Name	Data source
4	970m SW	Dearne Valley Wetlands	Natural England
6	1060m SW	Dearne Valley Wetlands	Natural England
-	1371m W	Dearne Valley Wetlands	Natural England
A	1394m SW	Dearne Valley Wetlands	Natural England
-	1570m SW	Dearne Valley Wetlands	Natural England
9	1585m NW	Dearne Valley Wetlands	Natural England
-	1607m SW	Dearne Valley Wetlands	Natural England
-	1613m E	Dearne Valley Wetlands	Natural England
-	1651m SW	Dearne Valley Wetlands	Natural England
-	1657m SW	Dearne Valley Wetlands	Natural England
-	1861m SW	Dearne Valley Wetlands	Natural England
-	1924m W	Dearne Valley Wetlands	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	0

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

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	4

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

Features are displayed on the Environmental designations map on **page 60**

ID	Location	Name	Local Authority name
1	**On site**	**South and West Yorkshire**	**Barnsley**
3	727m S	South and West Yorkshire	Rotherham
5	985m E	South and West Yorkshire	Barnsley
7	1357m SE	South and West Yorkshire	Doncaster

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	4

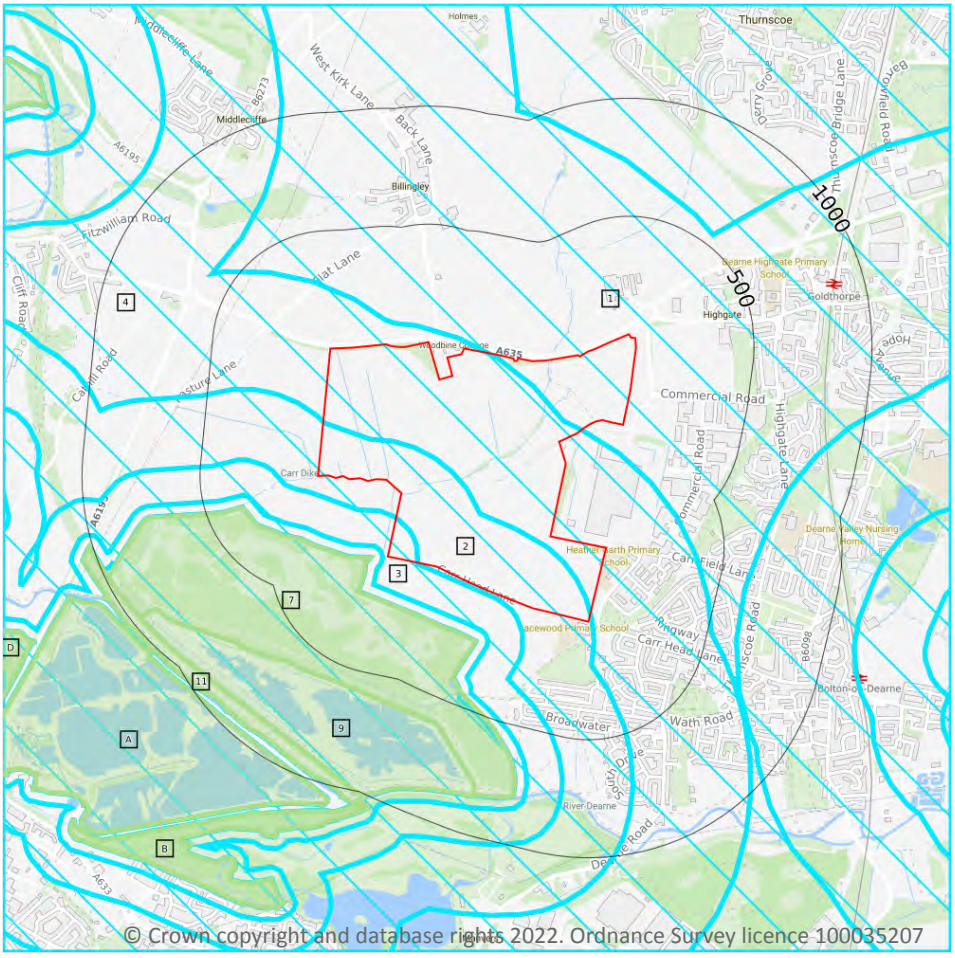
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**River Dearne NVZ**	**Surface Water**	**278**	**Existing**

Location	Name	Type	NVZ ID	Status
On site	**River Dearne NVZ**	**Surface Water**	**278**	**Existing**
1839m N	River Dearne NVZ	Surface Water	278	Existing
1873m NW	River Dearne NVZ	Surface Water	278	Existing

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	4

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

Features are displayed on the SSSI Impact Zones and Units map on **page 66**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where footprint exceeds 1ha. Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste of more than 5m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.**
2	On site	**Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 50 units or more. Rural residential - Any residential development of 10 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause air pollution (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .**

ID	Location	Type of developments requiring consultation
3	**On site**	**All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.** **Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals.** **Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines.** **Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction.** **Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.** **Residential - Residential development of 10 units or more.** **Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.** **Air pollution - Any development that could cause air pollution or dust either in its construction or operation (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores).** **Combustion - All general combustion processes. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.** **Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.** **Composting - Any composting proposal. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.** **Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream.** **Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .**

ID	Location	Type of developments requiring consultation
4	On site	**Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Wind and Solar - Wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 500 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste of more than 2m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**16**

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

Features are displayed on the SSSI Impact Zones and Units map on **page 66**

ID: 7
Location: 74m W
SSSI name: Dearne Valley Wetlands
Unit name: The Mullins
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: 9
Location: 573m S
SSSI name: Dearne Valley Wetlands
Unit name: Bolton Ings
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Black-headed gull, Larus ridibundus	Favourable	01/03/2021
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Pochard, Aythya ferina	Favourable	01/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Aggregations of non-breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: 11
Location: 871m SW
SSSI name: Dearne Valley Wetlands
Unit name: Warbler Way
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: A
Location: 970m SW
SSSI name: Dearne Valley Wetlands
Unit name: Old Moor
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bittern, Botaurus stellaris	Favourable	03/05/2021
Aggregations of breeding birds - Black-headed gull, Larus ridibundus	Favourable	01/03/2021
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Pochard, Aythya ferina	Favourable	01/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Aggregations of non-breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: B
Location: 1060m SW
SSSI name: Dearne Valley Wetlands
Unit name: Golf Course Scrub
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1371m W
SSSI name: Dearne Valley Wetlands
Unit name: Wombwell Ings
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Garganey, Anas querquedula	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021

ID: D
Location: 1394m SW
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Park
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1570m SW
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Park
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021

Feature name	Feature condition	Date of assessment
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: 17
Location: 1585m NW
SSSI name: Dearne Valley Wetlands
Unit name: Little Houghton
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021

ID: -
Location: 1607m SW
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Park
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1613m E
SSSI name: Dearne Valley Wetlands
Unit name: Adwick Washlands
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Garganey, Anas querquedula	Favourable	01/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Aggregations of non-breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021

ID: -
Location: 1651m SW
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Park
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1657m SW
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Park
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1671m W
SSSI name: Dearne Valley Wetlands
Unit name: Broomhill Flash
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Black-headed gull, Larus ridibundus	Favourable	01/03/2021
Aggregations of breeding birds - Gadwall, Anas strepera	Favourable	01/03/2021
Aggregations of breeding birds - Pochard, Aythya ferina	Favourable	01/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021

ID: -
Location: 1861m SW
SSSI name: Dearne Valley Wetlands
Unit name: Gypsy Marsh
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

ID: -
Location: 1924m W
SSSI name: Dearne Valley Wetlands
Unit name: Doveside
Broad habitat:
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	Favourable	01/03/2021
Assemblages of breeding birds - Mixed	Favourable	01/03/2021
Assemblages of breeding birds - Scrub	Favourable	01/03/2021

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

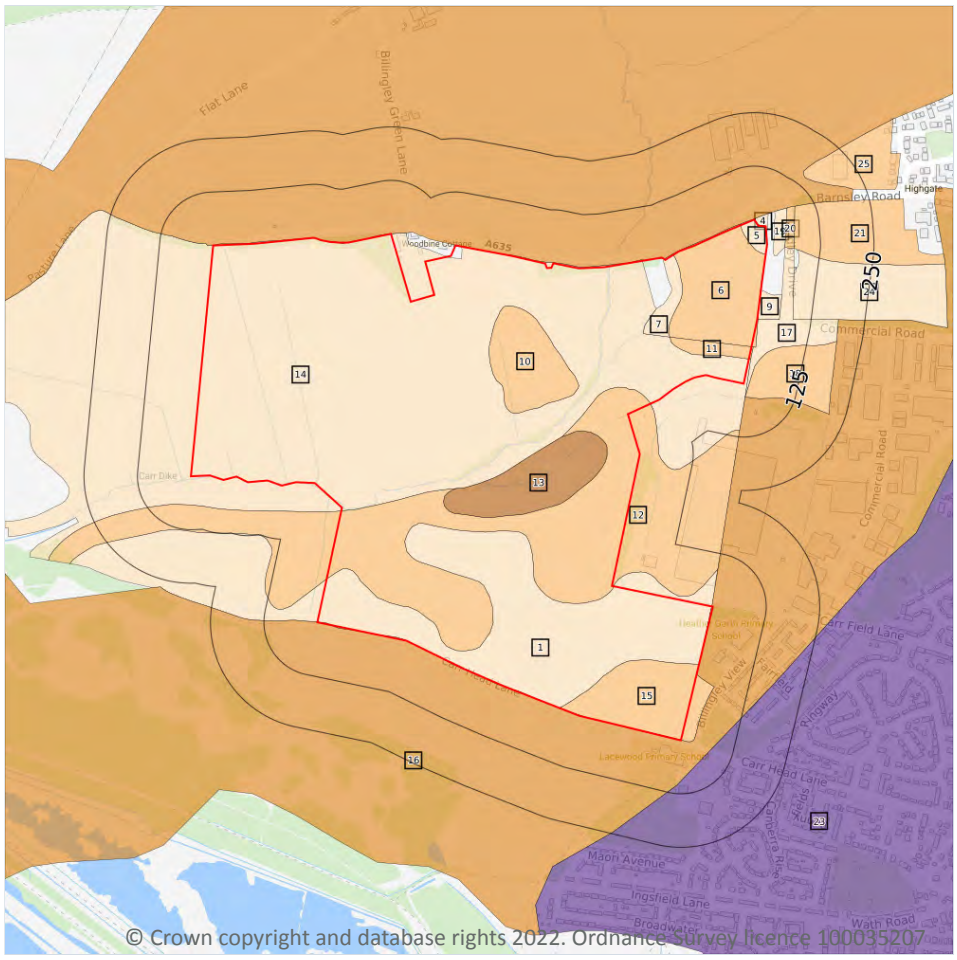
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	21

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

Features are displayed on the Agricultural designations map on **page 79**

ID	Location	Classification	Description
1	On site	Grade 3b	**Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.**

ID	Location	Classification	Description
4	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
5	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
6	On site	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
7	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
9	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
10	On site	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
11	On site	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
12	On site	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
13	On site	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
14	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
15	On site	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

ID	Location	Classification	Description
16	**On site**	**Grade 3**	**Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.**
17	2m E	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
18	13m E	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
19	15m E	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
20	42m E	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
21	64m E	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
23	66m SE	Urban	-
24	71m E	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
25	146m NE	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	1

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

Location	Reference	Scheme	Start Date	End date
On site	**AG00535632**	**Entry Level Stewardship**	**01/12/2013**	**30/11/2018**

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations

Site Outline

Search buffers in metres (m)

- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders

Habitat Networks

- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	4

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

Features are displayed on the Habitat designations map on **page 83**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
A	66m W	BRITPITS ref: 37887	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
A	66m W	BRITPITS ref: 37887	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
A	66m W	BRITPITS ref: 37887	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
A	66m W	BRITPITS ref: 37887	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography

This data is sourced from Natural England.

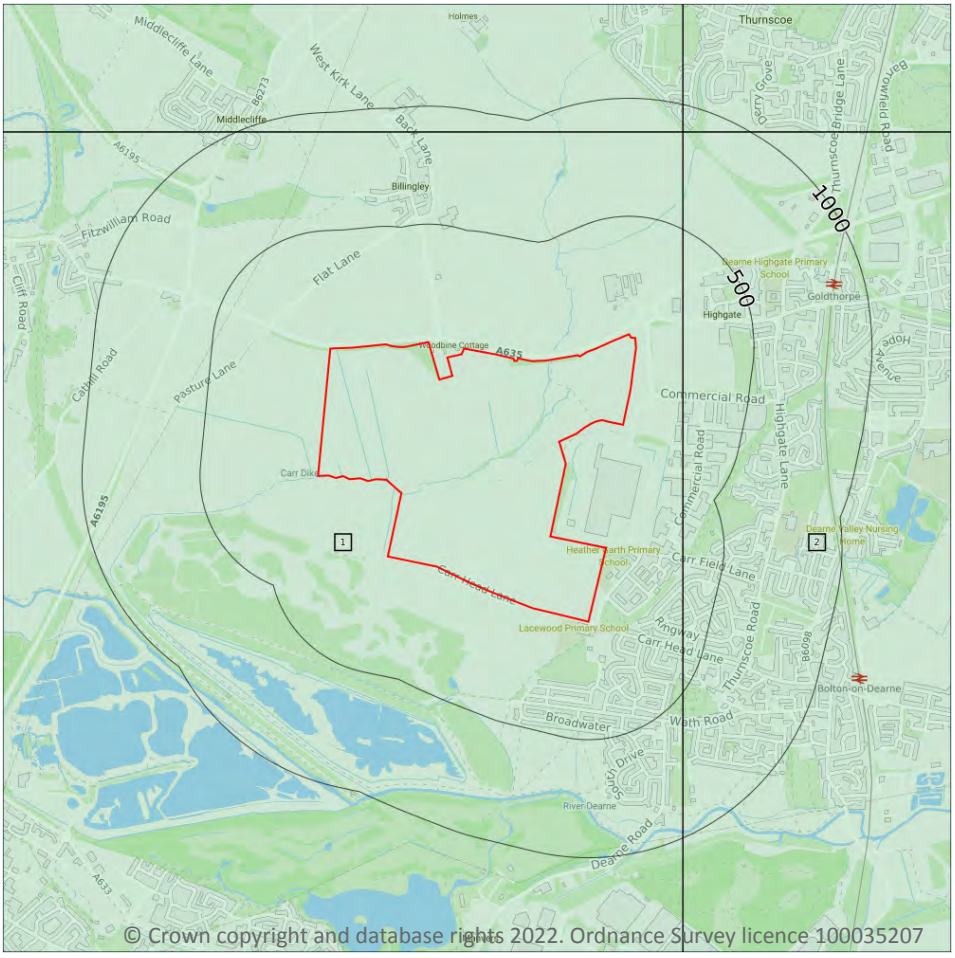
13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m	2

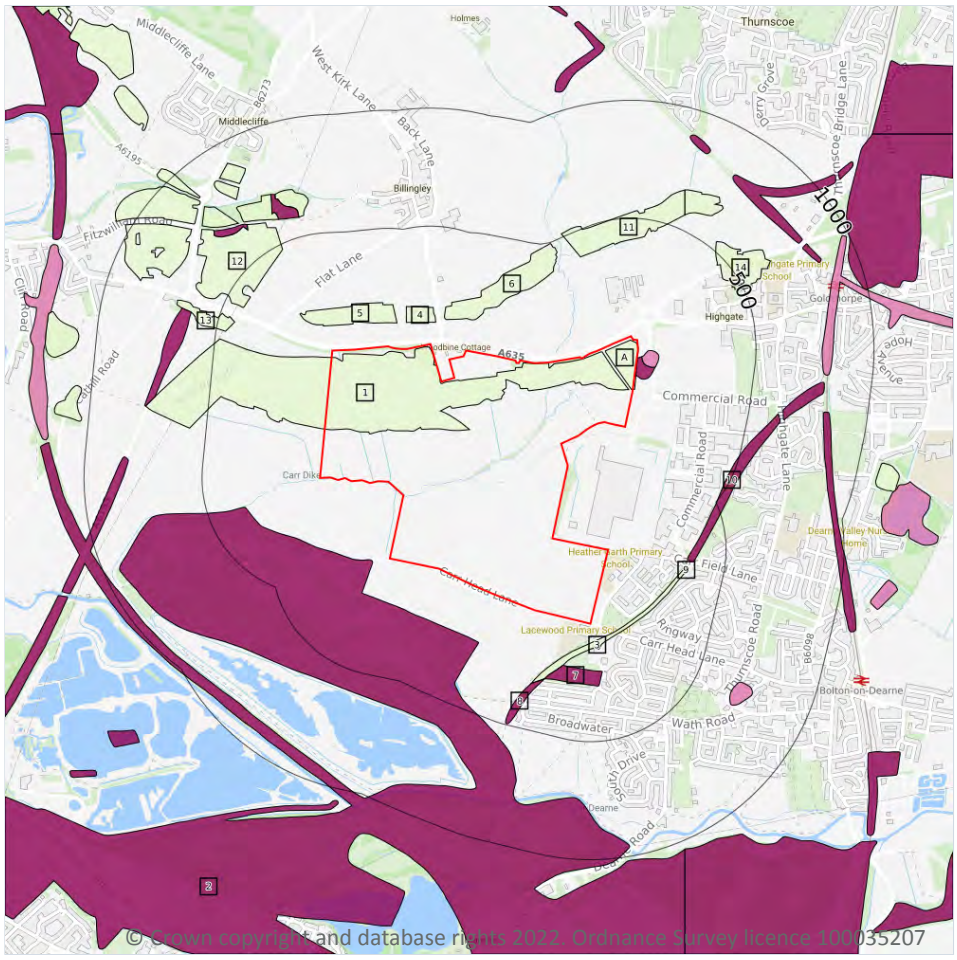
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 85**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SE40SW**
2	199m E	Full	Full	Full	Full	SE40SE

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

14.2 Artificial and made ground (10k)

Records within 500m	17

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.

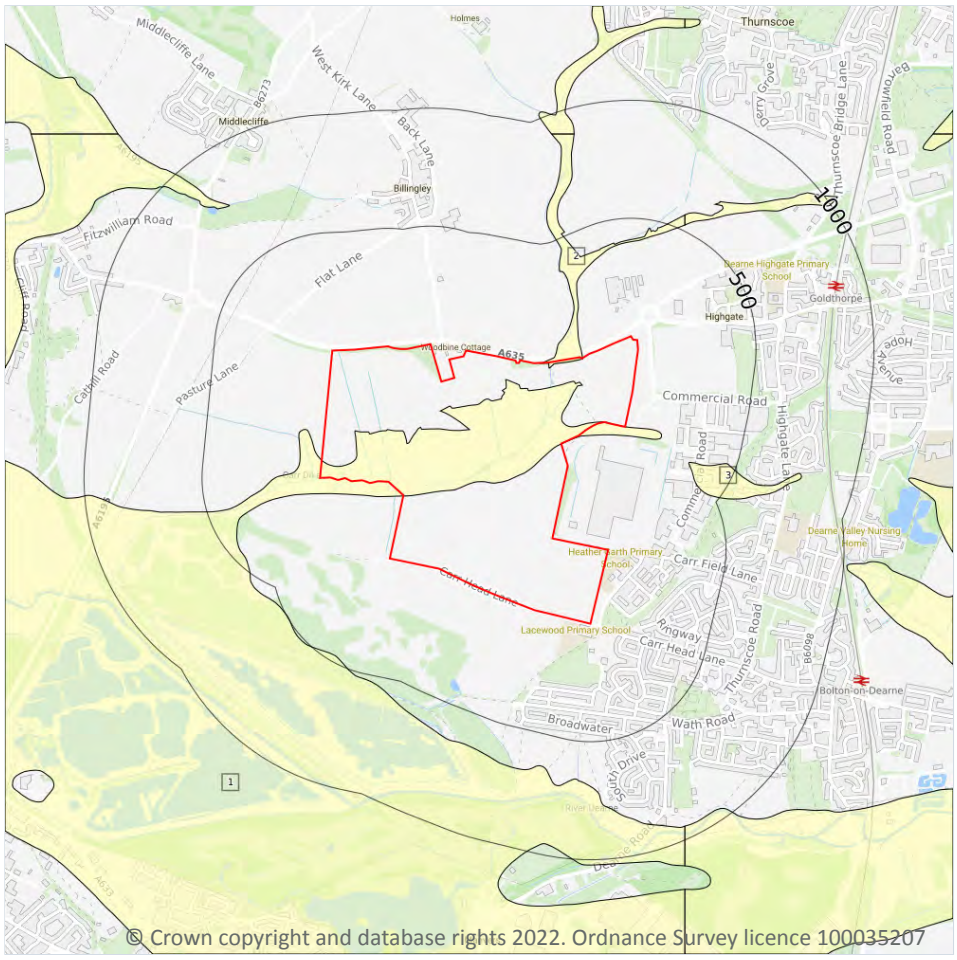
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 86**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**WMGR-ARTDP**	**Infilled Ground**	**Artificial Deposit**
A	**On site**	**WMGR-ARTDP**	**Infilled Ground**	**Artificial Deposit**
A	2m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	20m E	WGR-VOID	Worked Ground (Undivided)	Void

ID	Location	LEX Code	Description	Rock description
2	75m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	75m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	93m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
5	100m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	124m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
7	195m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	273m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	335m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit
10	339m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
11	390m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
12	414m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
13	431m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
14	446m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m **3**

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.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 88**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZ**	**Alluvium - Clay And Silt**	**Clay And Silt**
2	**On site**	**ALV-XCZ**	**Alluvium - Clay And Silt**	**Clay And Silt**
3	310m SE	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt

This data is sourced from the British Geological Survey.

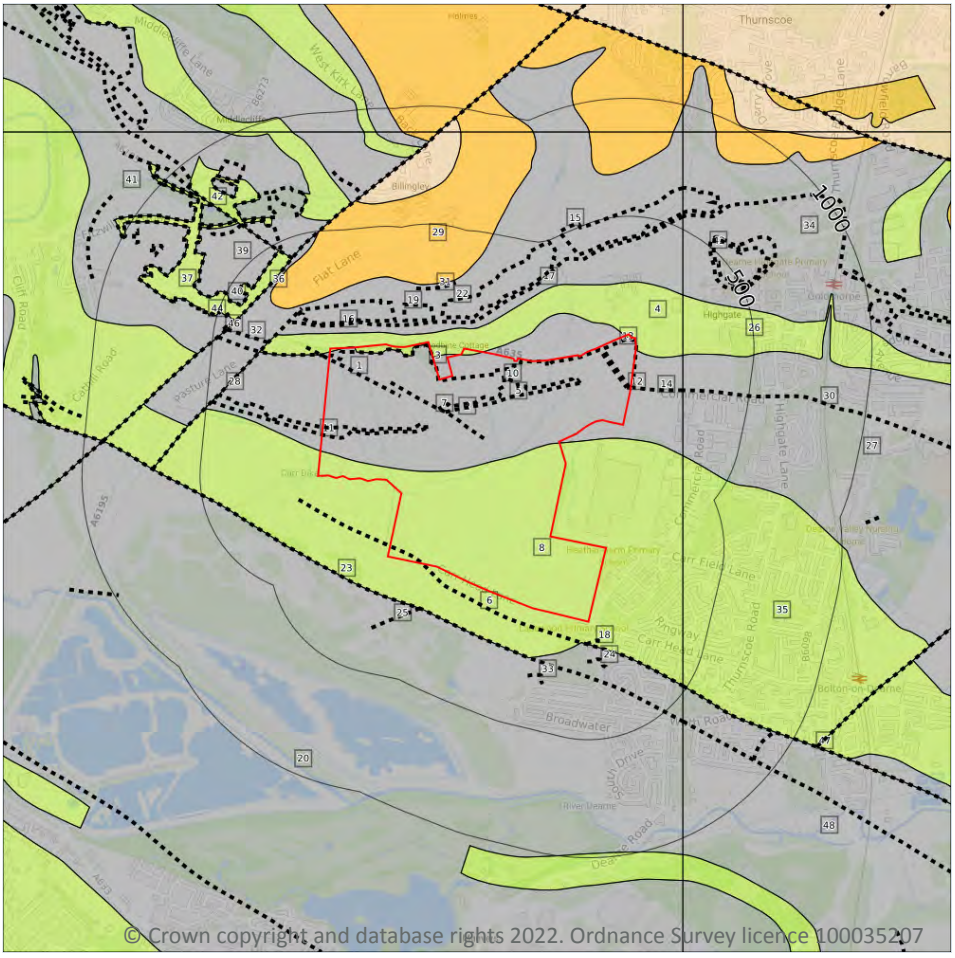
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m **14**

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 90**

ID	Location	LEX Code	Description	Rock age
2	**On site**	**PMCM-MDSS**	**Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone**	**Bolsovian Sub-age - Duckmantian Sub-age**
4	**On site**	**PMCM-SDST**	**Pennine Middle Coal Measures Formation - Sandstone**	**Bolsovian Sub-age - Duckmantian Sub-age**
8	**On site**	**MXR-SDST**	**Mexborough Rock - Sandstone**	**Bolsovian Sub-age**

ID	Location	LEX Code	Description	Rock age
15	38m N	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
20	93m S	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
26	199m E	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
27	201m E	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
29	213m N	AR-SDST	Ackworth Rock - Sandstone	Bolsovian Sub-age
34	272m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
35	285m SE	MXR-SDST	Mexborough Rock - Sandstone	Bolsovian Sub-age
37	371m NW	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
39	414m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
41	416m NW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
48	484m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m **34**

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 90**

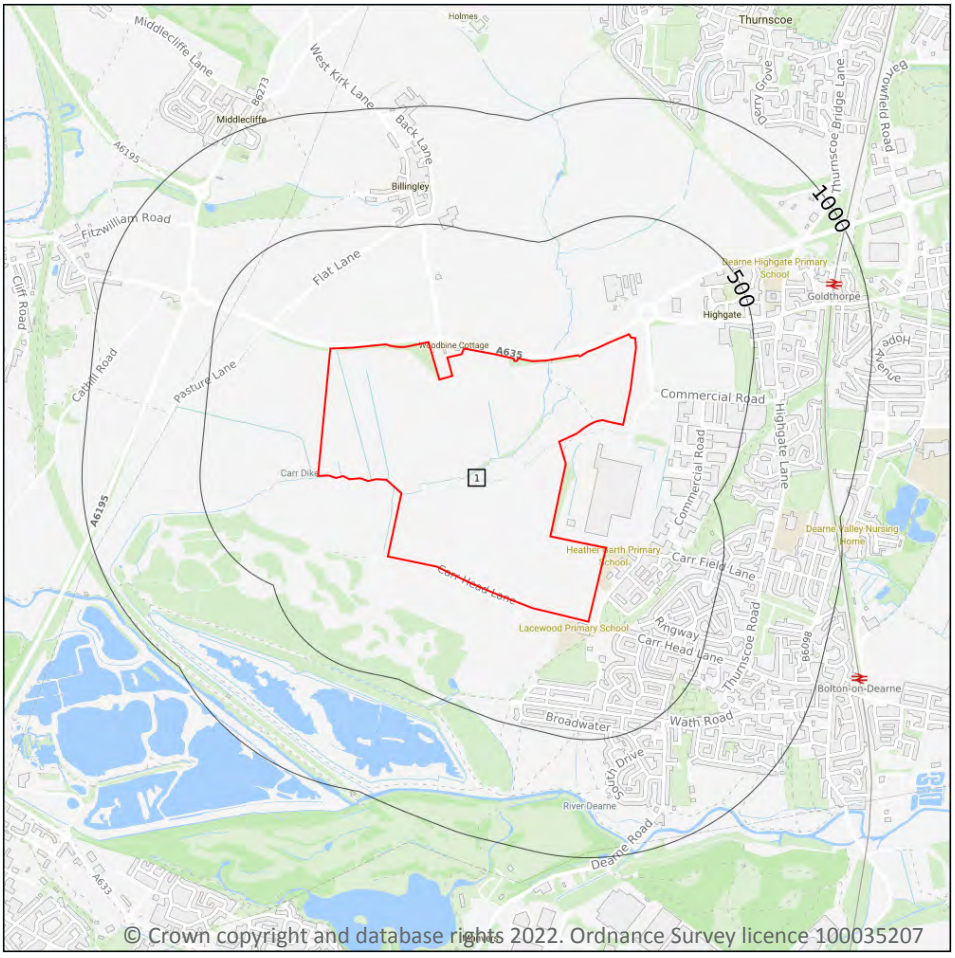
ID	Location	Category	Description
1	**On site**	**FAULT**	**Normal fault, inferred**
3	**On site**	**ROCK**	**Coal seam, observed**
5	**On site**	**ROCK**	**Coal seam, inferred**
6	**On site**	**FAULT**	**Normal fault, inferred**

ID	Location	Category	Description
7	**On site**	**FAULT**	**Normal fault, inferred**
9	**On site**	**ROCK**	**Coal seam, observed**
10	**On site**	**ROCK**	**Coal seam, observed**
11	**On site**	**ROCK**	**Coal seam, inferred**
12	**On site**	**ROCK**	**Coal seam, inferred**
13	**On site**	**ROCK**	**Coal seam, observed**
14	8m E	ROCK	Coal seam, inferred
16	82m N	ROCK	Coal seam, inferred
17	82m N	ROCK	Coal seam, inferred
18	86m S	ROCK	Coal seam, observed
19	93m N	ROCK	Coal seam, observed
21	100m N	ROCK	Coal seam, observed
22	124m NE	ROCK	Coal seam, observed
23	162m SW	FAULT	Normal fault, inferred
24	164m S	ROCK	Coal seam, observed
25	188m S	FAULT	Normal fault, inferred
28	206m NW	FAULT	Normal fault, inferred
30	221m E	ROCK	Coal seam, inferred
31	227m N	ROCK	Coal seam, inferred
32	265m W	ROCK	Coal seam, inferred
33	268m S	ROCK	Coal seam, inferred
36	371m NW	FAULT	Normal fault, inferred
38	390m N	ROCK	Coal seam, observed
40	414m NW	ROCK	Coal seam, observed
42	416m NW	FAULT	Normal fault, inferred
43	425m NE	ROCK	Coal seam, inferred
44	431m W	ROCK	Coal seam, observed
45	446m NE	ROCK	Coal seam, observed

ID	Location	Category	Description
46	446m W	ROCK	Coal seam, inferred
47	484m SE	FAULT	Normal fault, inferred

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

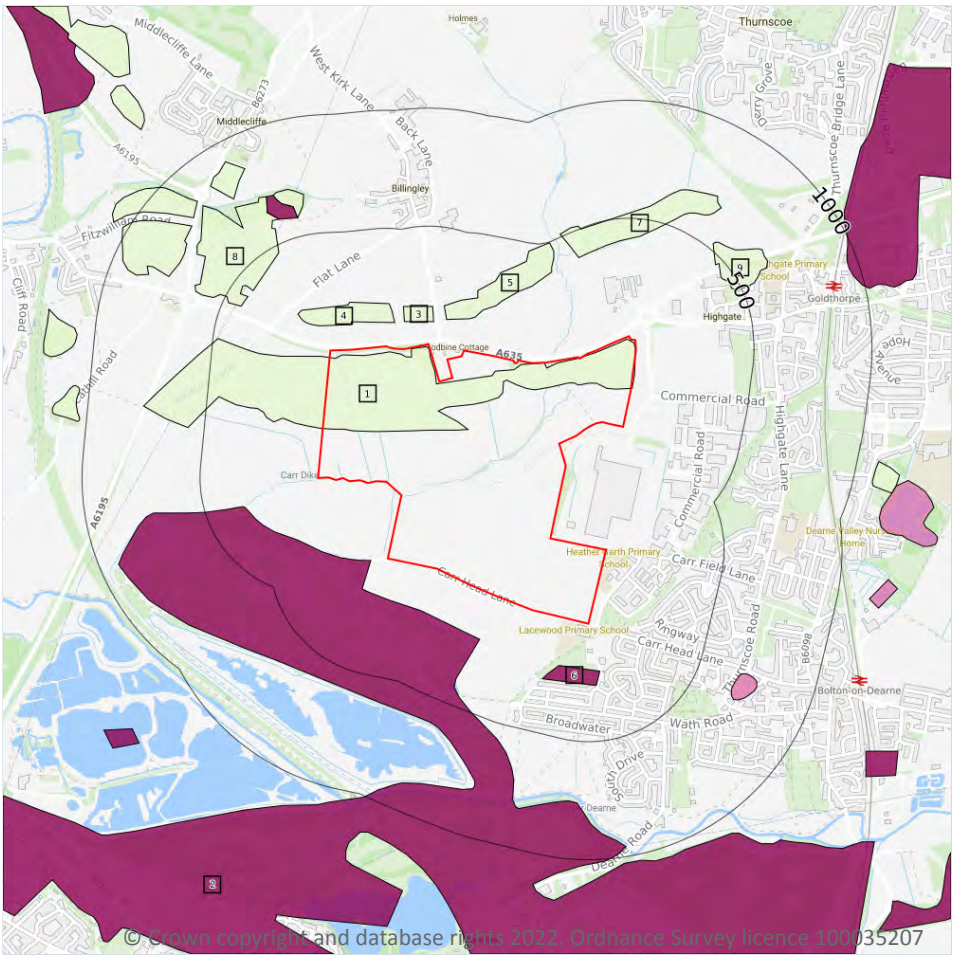
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 94**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**Full**	**Full**	**Full**	**EW087_barnsley_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	9

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 95**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**WMGR-ARTDP**	**INFILLED GROUND**	**ARTIFICIAL DEPOSIT**
2	72m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	96m N	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	101m N	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
5	130m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
6	193m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
7	389m NW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
8	414m NW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
9	450m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

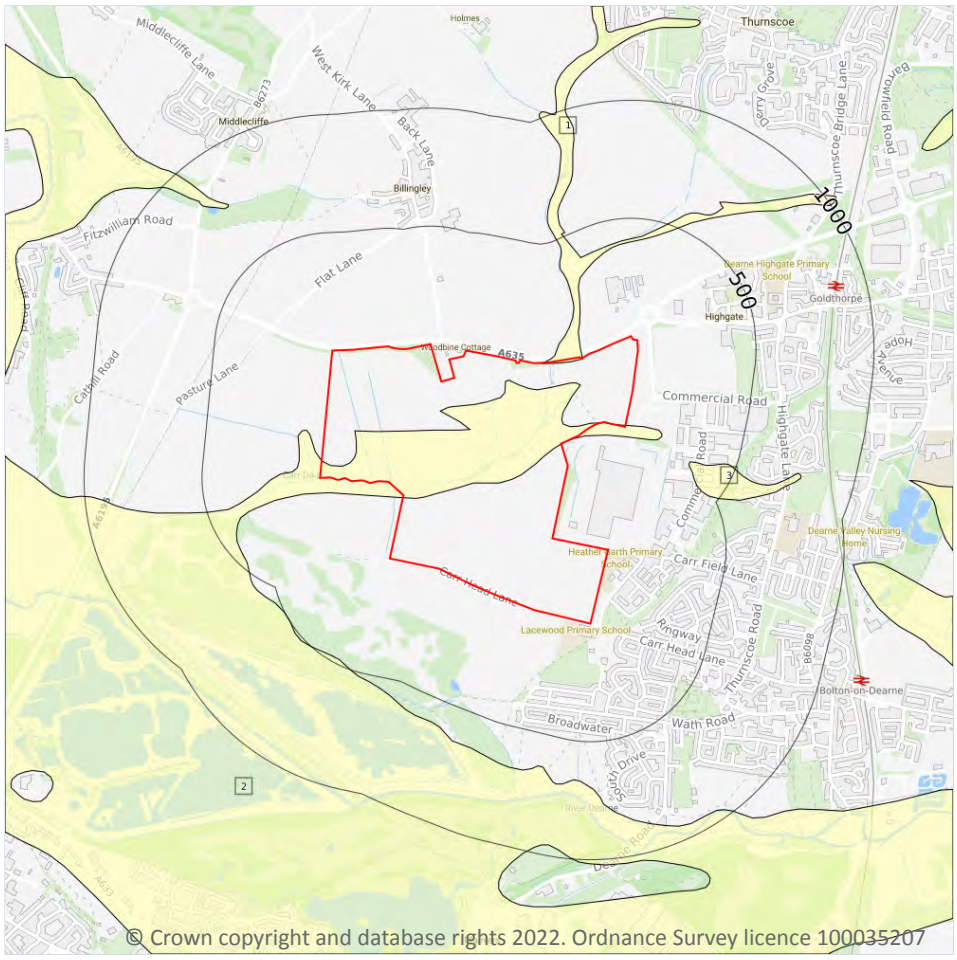
Records within 50m	**1**

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

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m **3**

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 97**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZ**	**ALLUVIUM**	**CLAY AND SILT**
2	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
3	313m SE	ALV-XCZ	ALLUVIUM	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Low**	**Very Low**
On site	**Intergranular**	**High**	**Very Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

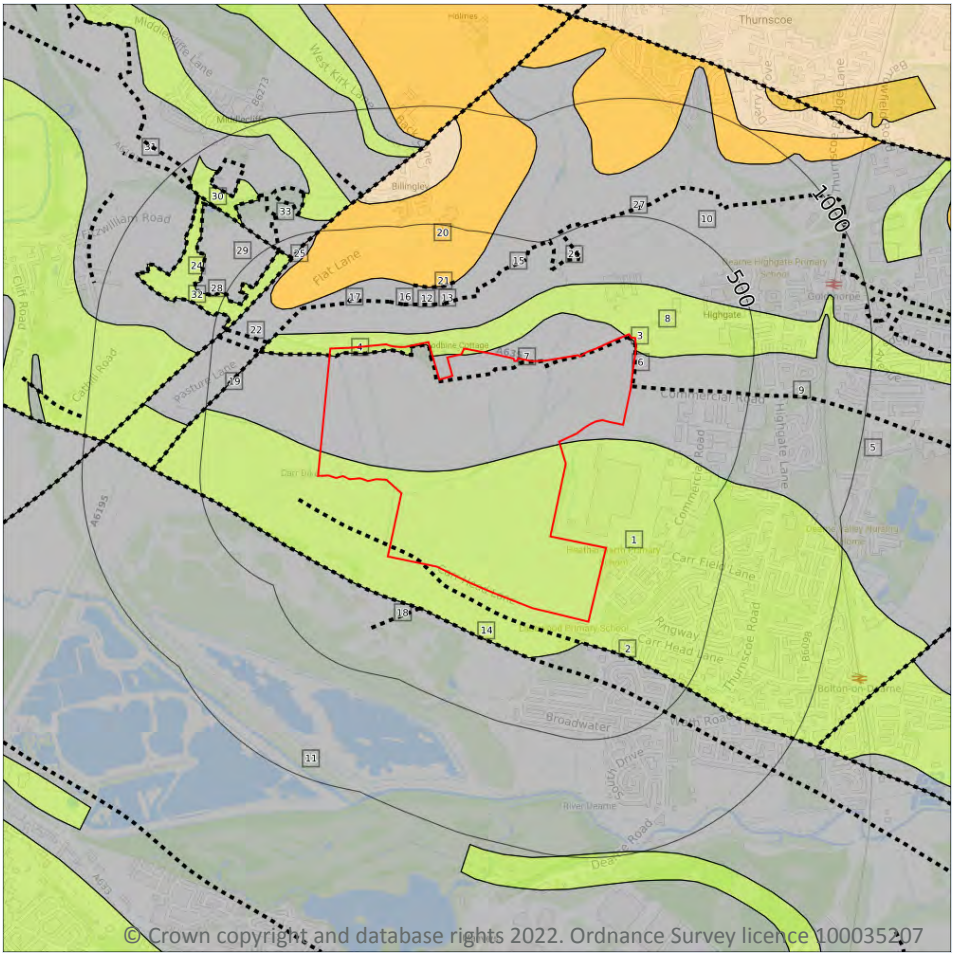
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	9

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 99**

ID	Location	LEX Code	Description	Rock age
1	On site	MXR-SDST	MEXBOROUGH ROCK - SANDSTONE	WESTPHALIAN
5	On site	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
8	On site	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
10	39m N	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
11	94m S	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
20	215m N	AR-SDST	ACKWORTH ROCK - SANDSTONE	WESTPHALIAN
24	370m NW	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
29	414m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
31	416m NW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m **3**

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**	**High**	**Moderate**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**High**	**Moderate**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m **24**

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.

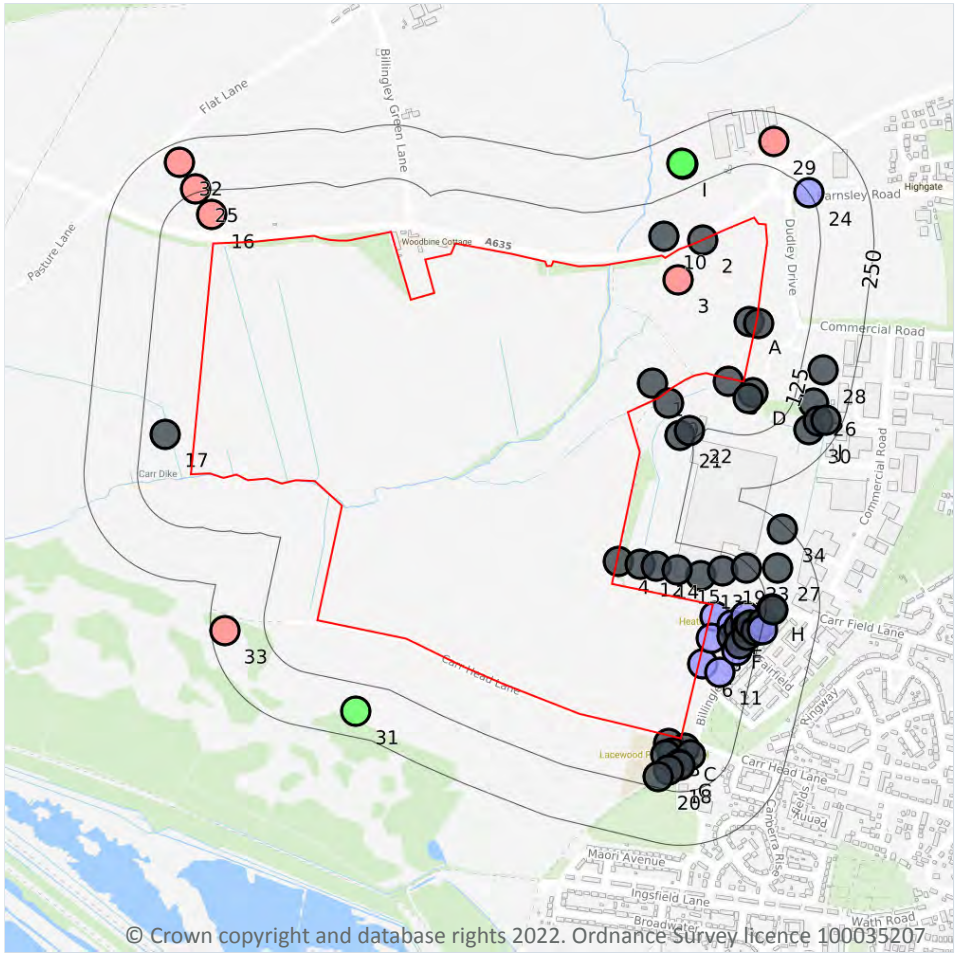
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 99**

ID	Location	Category	Description
2	**On site**	**FAULT**	**Fault, inferred**

ID	Location	Category	Description
3	**On site**	**ROCK**	**Coal seam, inferred**
4	**On site**	**ROCK**	**Coal seam, inferred**
6	**On site**	**ROCK**	**Coal seam, inferred**
7	**On site**	**ROCK**	**Coal seam, inferred**
9	5m E	ROCK	Coal seam, inferred
12	160m N	ROCK	Coal seam, inferred
13	161m N	ROCK	Coal seam, inferred
14	162m SW	FAULT	Fault, inferred
15	176m N	ROCK	Coal seam, inferred
16	178m N	ROCK	Coal seam, inferred
17	181m N	ROCK	Coal seam, inferred
18	187m S	FAULT	Fault, inferred
19	206m NW	FAULT	Fault, inferred
21	232m N	ROCK	Coal seam, inferred
22	265m W	ROCK	Coal seam, inferred
23	297m W	ROCK	Coal seam, inferred
25	370m NW	FAULT	Fault, inferred
26	375m N	ROCK	Coal seam, inferred
27	389m NW	ROCK	Coal seam, inferred
28	414m NW	ROCK	Coal seam, inferred
30	416m NW	FAULT	Fault, inferred
32	444m W	ROCK	Coal seam, inferred
33	469m NW	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

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

16.1 BGS Boreholes

Records within 250m	63

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 102**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	444534 403755	HOUGHTON MAIN COLLIERY	-	Y	N/A
2	On site	444650 404090	THURNSCOE/BOLTON TRUNK SEWER 4	-	Y	N/A
3	On site	444594 403998	WATH MAIN COLLIERY NO.9 UBH	31.39	N	106161

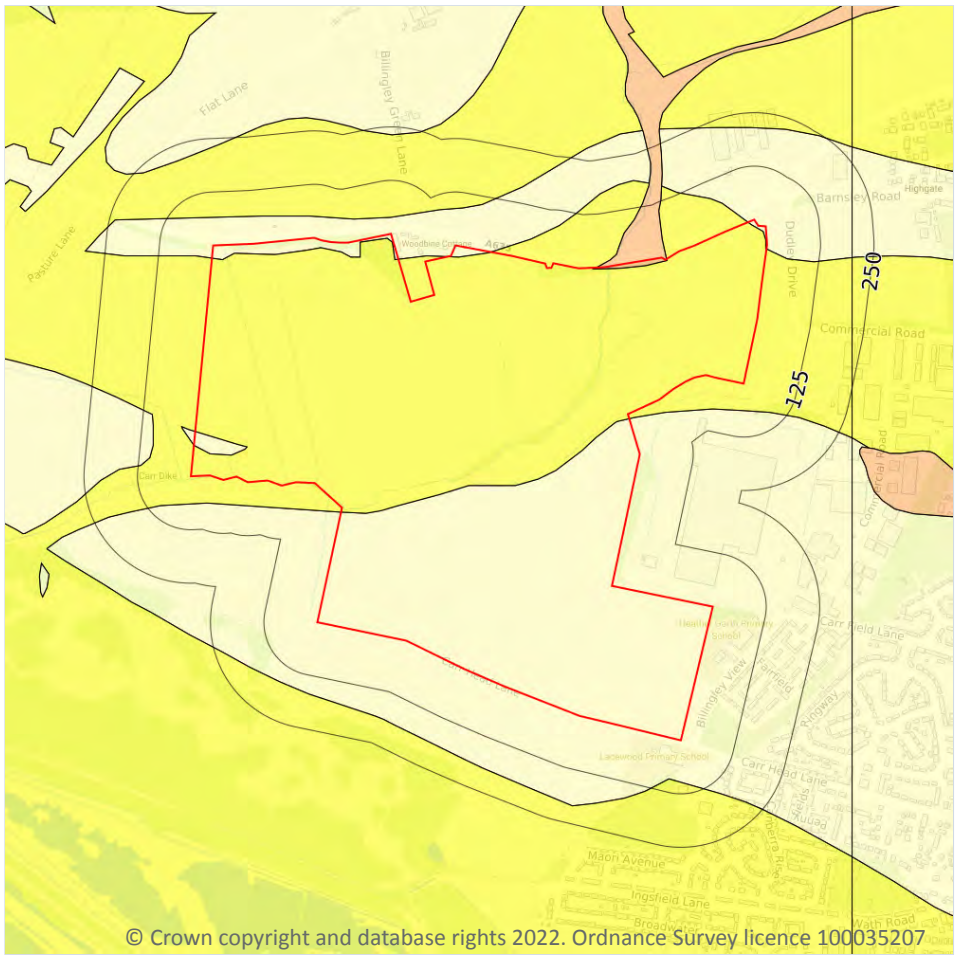
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	**On site**	**444760 403900**	**THURNSCOE/BOLTON TRUNK SEWER 5**	**-**	**Y**	**N/A**
4	4m E	444454 403339	ALDI, GOLDTHORPE GROUND INVESTIGATION SO4	-	Y	N/A
A	6m E	444781 403895	ALDI, GOLDTHORPE GROUND INVESTIGATION TP1	-	Y	N/A
5	7m S	444710 403760	THURNSCOE/BOLTON TRUNK SEWER 6	-	Y	N/A
6	8m E	444650 403100	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 1	2.0	N	106601
7	12m E	444680 403210	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 3	2.5	N	106603
8	14m E	444670 403160	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 2	2.3	N	106602
B	19m S	444571 402913	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA2	-	Y	N/A
9	23m SE	444570 403709	ALDI, GOLDTHORPE GROUND INVESTIGATION TP5	-	Y	N/A
C	24m S	444608 402903	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA1	-	Y	N/A
D	33m SE	444768 403734	ALDI, GOLDTHORPE GROUND INVESTIGATION TP3	-	Y	N/A
B	39m S	444580 402890	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA4	-	Y	N/A
D	40m S	444758 403721	ALDI, GOLDTHORPE GROUND INVESTIGATION TP4	-	Y	N/A
10	45m NW	444560 404100	THURNSCOE/BOLTON TRUNK SEWER 3	-	Y	N/A
B	46m S	444564 402887	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA5	-	Y	N/A
C	46m SE	444623 402886	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA3	-	Y	N/A
11	52m E	444690 403080	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 5	2.0	N	106605
12	55m E	444505 403333	ALDI, GOLDTHORPE GROUND INVESTIGATION BH5	-	Y	N/A
E	56m E	444720 403190	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 4	2.0	N	106604
F	61m E	444719 403164	CARFIELD LANE BOLTON ON DEARNE 7	-	Y	N/A
13	61m N	444646 403306	ALDI, GOLDTHORPE GROUND INVESTIGATION TP8A	-	Y	N/A
G	61m S	444595 402864	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA6	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
14	62m N	444542 403328	ALDI, GOLDTHORPE GROUND INVESTIGATION TP8C	-	Y	N/A
15	62m N	444592 403318	ALDI, GOLDTHORPE GROUND INVESTIGATION TP8B	-	Y	N/A
G	63m S	444597 402862	BARNSLEY SCHOOLS PFI - LACEWOOD BHLA1	-	Y	N/A
16	67m N	443503 404149	BILLINGLEY GREEN NO.2BH	32.31	N	106249
17	68m W	443395 403636	PILLAR SECTION NEWHILL SEAM MAINGATE N53'S	-	Y	N/A
E	73m E	444736 403184	CARFIELD LANE BOLTON ON DEARNE 6	-	Y	N/A
18	79m S	444572 402851	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA8	-	Y	N/A
F	79m E	444730 403130	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 6	2.0	N	106606
E	80m E	444750 403210	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 7	2.3	N	106607
19	82m N	444698 403316	ALDI, GOLDTHORPE GROUND INVESTIGATION TP10	-	Y	N/A
F	82m E	444737 403147	CARFIELD LANE BOLTON ON DEARNE 8	-	Y	N/A
E	89m E	444753 403183	CARFIELD LANE BOLTON ON DEARNE 4	-	Y	N/A
E	95m E	444755 403167	CARFIELD LANE BOLTON ON DEARNE 5	-	Y	N/A
E	95m E	444761 403191	CARFIELD LANE BOLTON ON DEARNE 3	-	Y	N/A
20	99m S	444546 402836	BARNSLEY SCHOOLS PFI - LACEWOOD TPLA7	-	Y	N/A
21	100m SE	444597 403634	ALDI, GOLDTHORPE GROUND INVESTIGATION SO1	-	Y	N/A
22	104m SE	444620 403645	ALDI, GOLDTHORPE GROUND INVESTIGATION BH1	-	Y	N/A
E	112m E	444775 403178	CARFIELD LANE BOLTON ON DEARNE 2	-	Y	N/A
23	117m NE	444753 403324	ALDI, GOLDTHORPE GROUND INVESTIGATION TP9	-	Y	N/A
E	123m E	444790 403195	CARFIELD LANE BOLTON ON DEARNE 1	-	Y	N/A
24	125m NE	444900 404200	DEARNE VALLEY HIGHWAY BH13	4.57	N	106396
E	126m E	444790 403180	BOLTON ON DEARNE JUNIOR AND INFANTS SCHOOL 8	2.0	N	106608
25	134m N	443465 404210	BILLINGLEY GREEN NO.3BH	38.71	N	106250

ID	Location	Grid reference	Name	Length	Confidential	Web link
H	138m E	444812 403229	ALDI, GOLDTHORPE GROUND INVESTIGATION TP7	-	Y	N/A
H	140m E	444814 403225	ALDI, GOLDTHORPE GROUND INVESTIGATION BH4	-	Y	N/A
26	171m E	444910 403710	THURNSCOE/BOLTON TRUNK SEWER 7	-	Y	N/A
27	175m NE	444827 403323	ALDI, GOLDTHORPE GROUND INVESTIGATION SO3	-	Y	N/A
28	177m E	444933 403786	ALDI, GOLDTHORPE GROUND INVESTIGATION TP2	-	Y	N/A
I	181m NW	444604 404268	WATH COLLIERY NO.15 SURFACE BH	28.35	N	106184
I	183m NW	444601 404269	WATH COLLIERY NO.12 SURFACE BH	28.35	N	106183
29	184m N	444816 404321	HIGHGATE HOUSE FARM BARNSLEY ROAD GOLDTHORPE	39.5	N	20790505
30	189m SE	444898 403646	ALDI, GOLDTHORPE GROUND INVESTIGATION SO2	-	Y	N/A
31	190m S	443840 402989	WATH MAIN COLLIERY NO.2 UBH	25.91	N	106131
J	198m SE	444921 403666	ALDI, GOLDTHORPE GROUND INVESTIGATION BH2	-	Y	N/A
32	205m N	443428 404272	BILLINGLEY GREEN NO.1BH	73.15	N	106248
J	213m SE	444939 403669	ALDI, GOLDTHORPE GROUND INVESTIGATION BH2A	-	Y	N/A
33	218m W	443533 403178	WATH MAIN COLLIERY NO.3 UBH	31.39	N	106129
34	241m NE	444838 403415	ALDI, GOLDTHORPE GROUND INVESTIGATION TP6	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	3

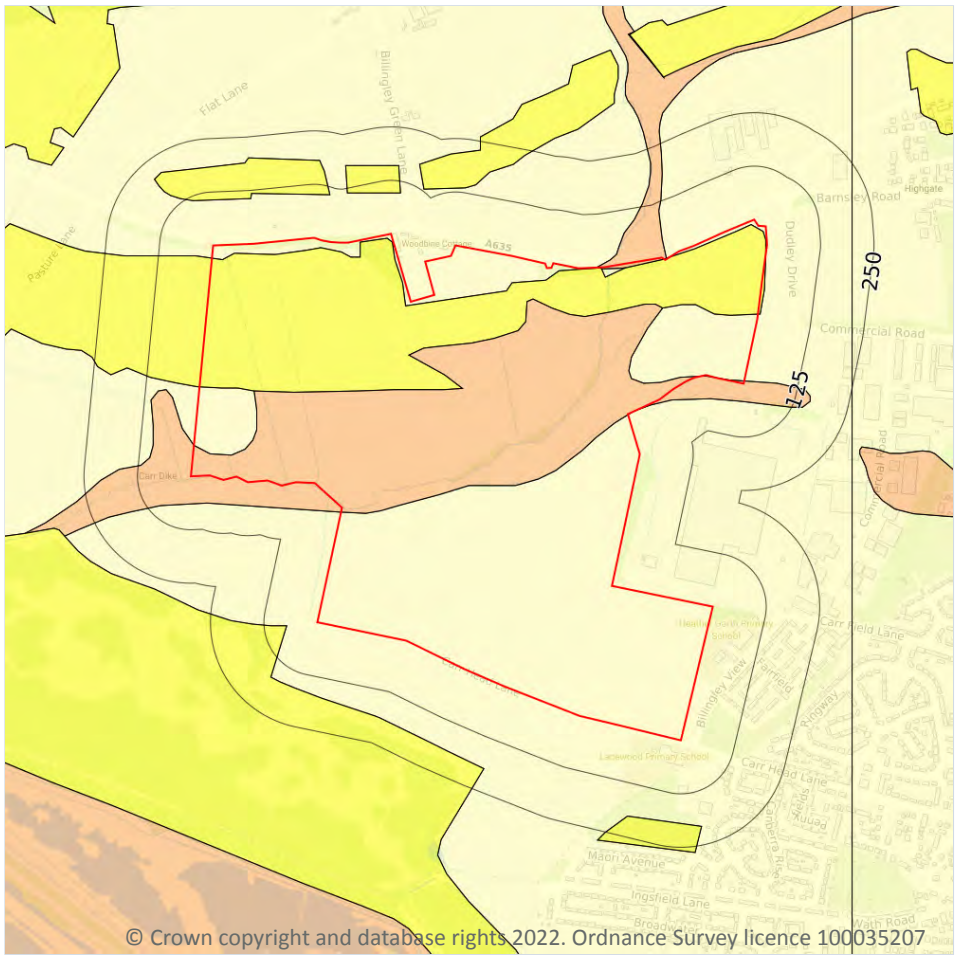
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 106**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	3

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.

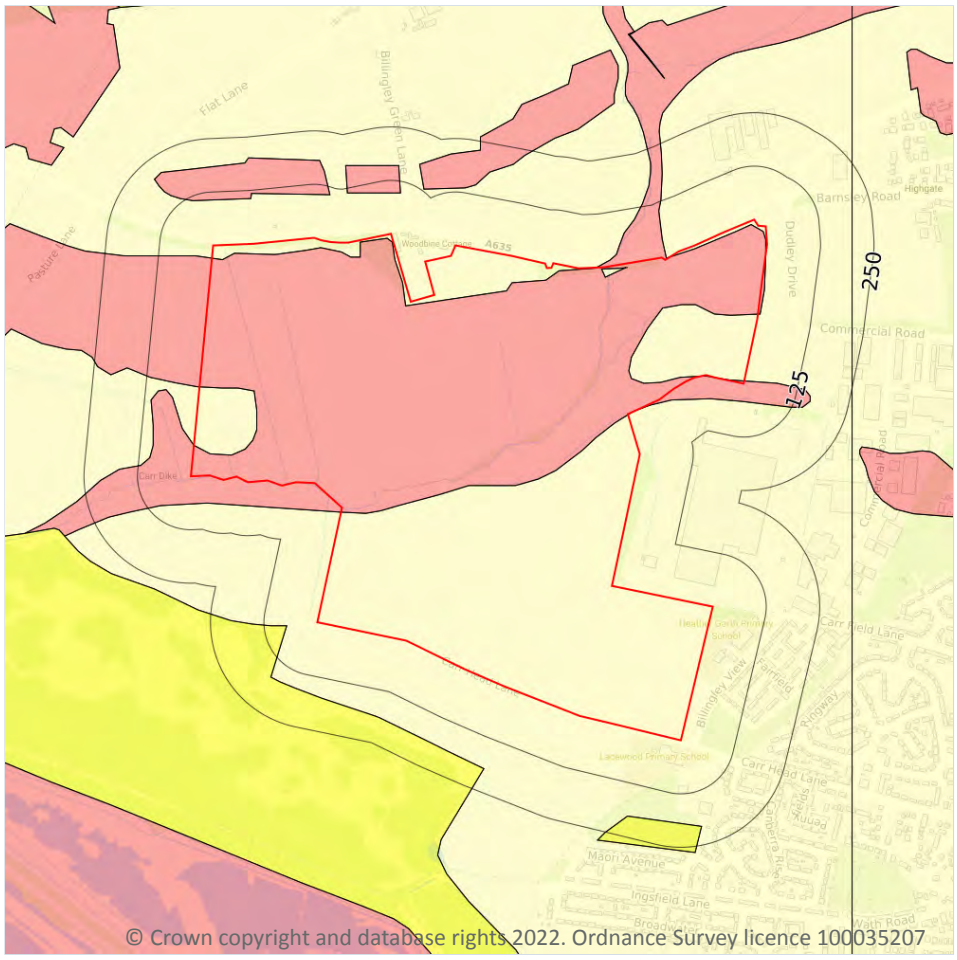
Features are displayed on the Natural ground subsidence - Running sands map on **page 108**

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.**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	2

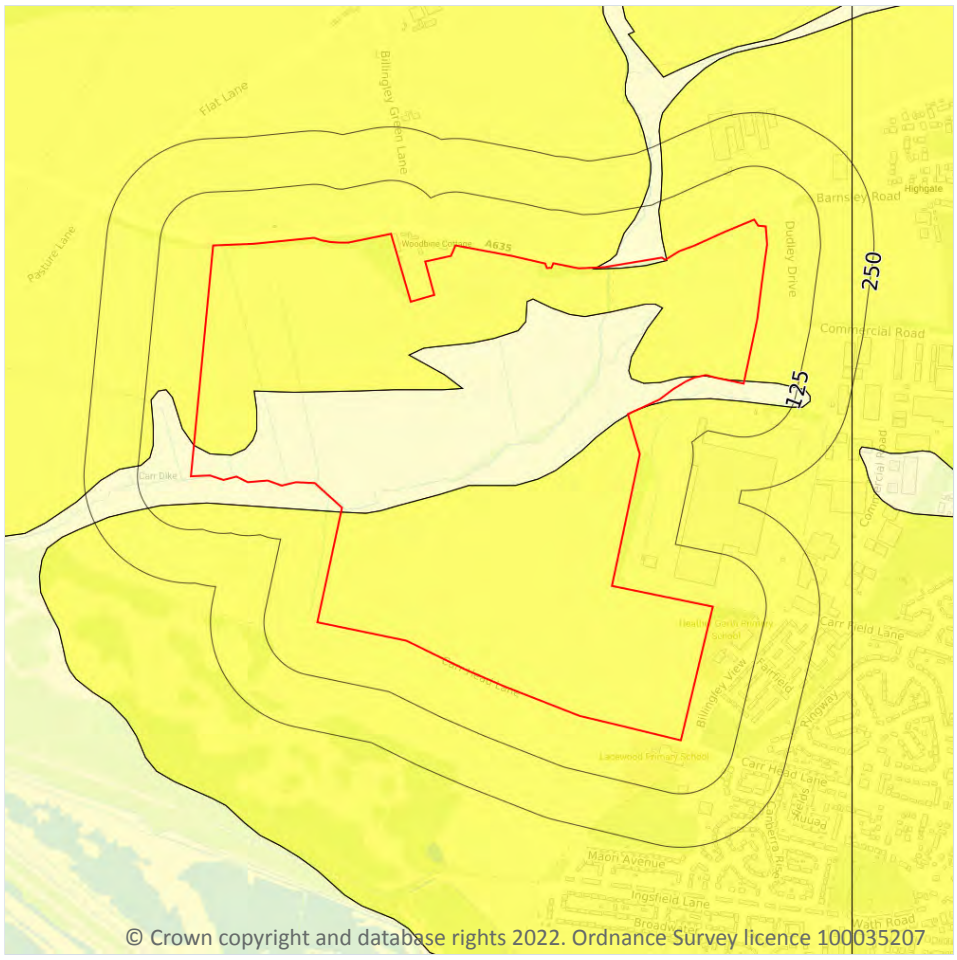
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 110**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m	2

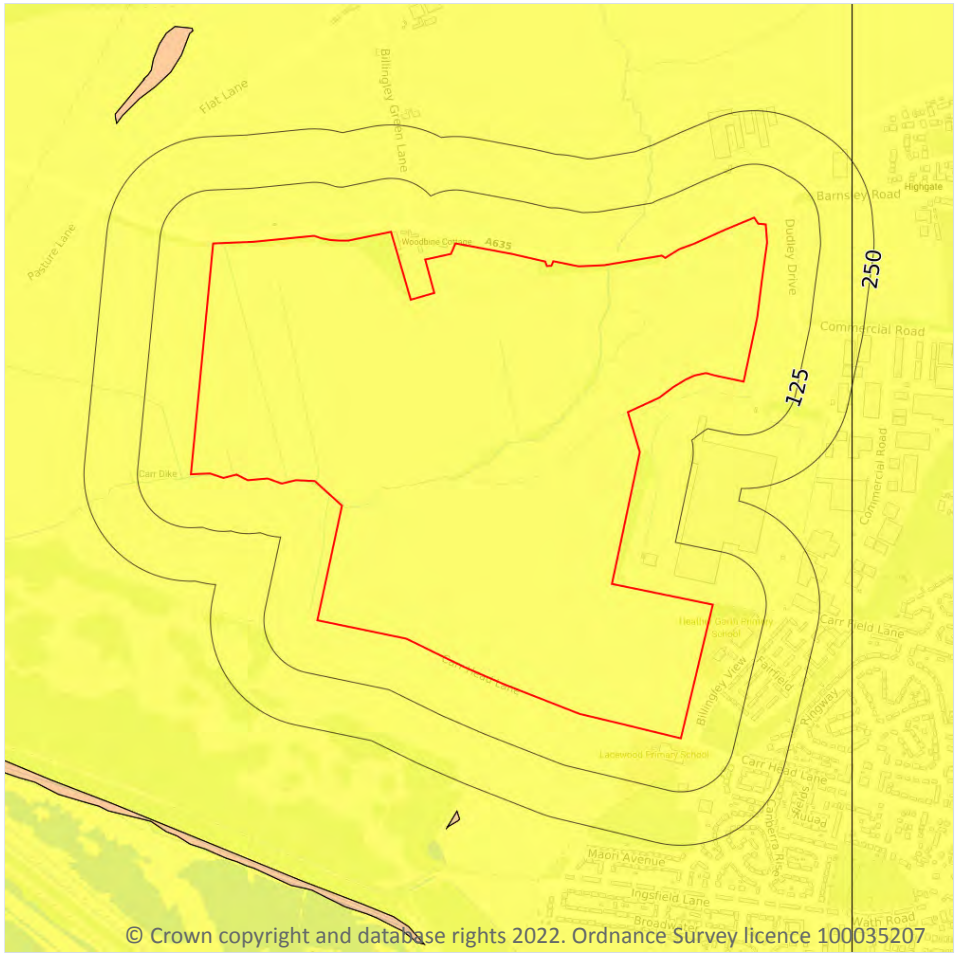
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 112**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	1

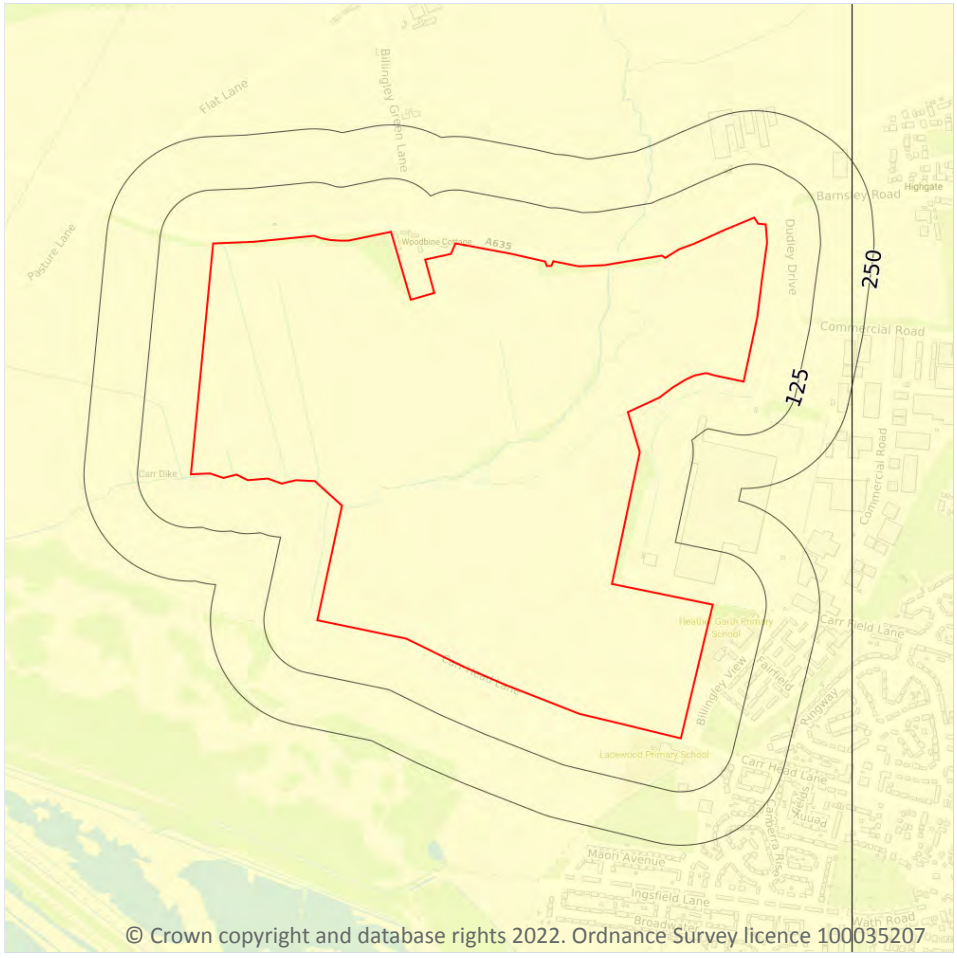
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 113**

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



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

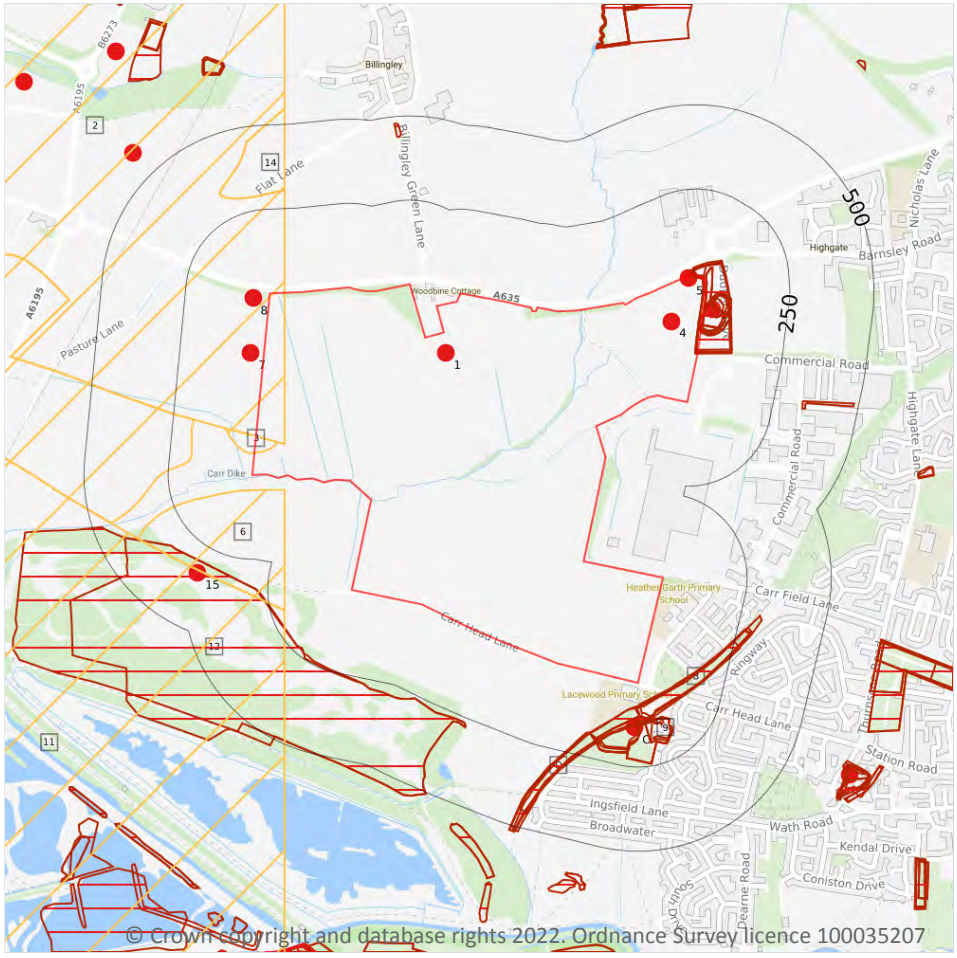
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 114**

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

This data is sourced from the British Geological Survey.

18 Mining, 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

18.1 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.

18.2 BritPits

Records within 500m	8

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 116**

ID	Location	Details	Description
1	**On site**	**Name: Woodbine OCCS** **Address: BARNSLEY, South Yorkshire** **Commodity: Coal, Surface Mined** **Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site** **Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
4	**On site**	**Name: Woodbine Extension Phase 1 OCCS** **Address: BARNSLEY, South Yorkshire** **Commodity: Coal, Surface Mined** **Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site** **Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
5	**On site**	**Name: Highgate** **Address: Highgate, Bolton-upon-Dearne, BARNSLEY, South Yorkshire** **Commodity: Sandstone** **Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site** **Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
A	25m E	Name: Goldthorpe Brick Works Address: Goldthorpe, BARNSLEY, South Yorkshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
7	38m W	Name: Woodbine OCCS Address: BARNSLEY, South Yorkshire Commodity: Coal, Deep Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

ID	Location	Details	Description
8	48m W	Name: Billingley Address: Billingley, Thurnscoe, BARNSLEY, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	132m S	Name: Wath Main Brick Works Address: BOLTON-UPON-DEARNE, South Yorkshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
15	331m SW	Name: Carr Head Address: Bolton-upon-Dearne, BARNSLEY, South Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	**36**

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 116**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Disused Brick Works**	**1948**	**1:10560**
A	**On site**	**Unspecified Heap**	**1948**	**1:10560**
A	**On site**	**Unspecified Heap**	**1948**	**1:10560**
A	**On site**	**Disused Brick Works**	**1951**	**1:10560**
A	**On site**	**Unspecified Ground Workings**	**1951**	**1:10560**
A	**On site**	**Brick Works**	**1939**	**1:10560**
A	**On site**	**Unspecified Heap**	**1939**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Brick Works**	**1904**	**1:10560**
A	**On site**	**Brick Works**	**1929**	**1:10560**
A	**On site**	**Disused Brick Works**	**1929**	**1:10560**
A	2m E	Unspecified Ground Workings	1967	1:10560
A	2m E	Unspecified Ground Workings	1988	1:10000
A	2m E	Unspecified Ground Workings	1977	1:10000
A	16m E	Unspecified Pit	1948	1:10560
A	16m E	Unspecified Pit	1948	1:10560
A	17m E	Unspecified Pit	1939	1:10560
A	28m E	Unspecified Pit	1904	1:10560
B	59m SE	Cuttings	1951	1:10560
C	63m SE	Cuttings	1901	1:10560
B	64m SE	Cuttings	1938	1:10560
B	64m S	Cuttings	1948	1:10560
C	69m SE	Cuttings	1967	1:10560
C	97m S	Brick Works	1938	1:10560
C	99m S	Brick Works	1948	1:10560
C	99m S	Unspecified Ground Workings	1948	1:10560
C	99m S	Brick Works	1948	1:10560
C	99m S	Unspecified Ground Workings	1948	1:10560
C	101m S	Refuse Heap	1938	1:10560
C	113m S	Unspecified Ground Workings	1951	1:10560
9	122m S	Unspecified Pit	1938	1:10560
C	122m S	Unspecified Pit	1938	1:10560
D	177m S	Cuttings	1938	1:10560
D	177m S	Cuttings	1951	1:10560
D	178m S	Cuttings	1948	1:10560
12	227m SW	Refuse Heap	1977	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
13	228m SW	Refuse Heap	1988	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	8

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 116**

ID	Location	Name	Commodity	Class	Likelihood
2	**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**
3	**On site**	**Sheffield Area**	**Iron Ore**	**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**

ID	Location	Name	Commodity	Class	Likelihood
6	35m S	Sheffield Area	Iron Ore	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
10	185m W	Sheffield Area	Iron Ore	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
11	209m W	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
14	291m N	Sheffield Area	Iron Ore	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
-	914m N	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
-	919m W	Sheffield Area	Iron Ore	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.

18.7 Mining cavities

Records within 1000m	**0**

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	**0**

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	1

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

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

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

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

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

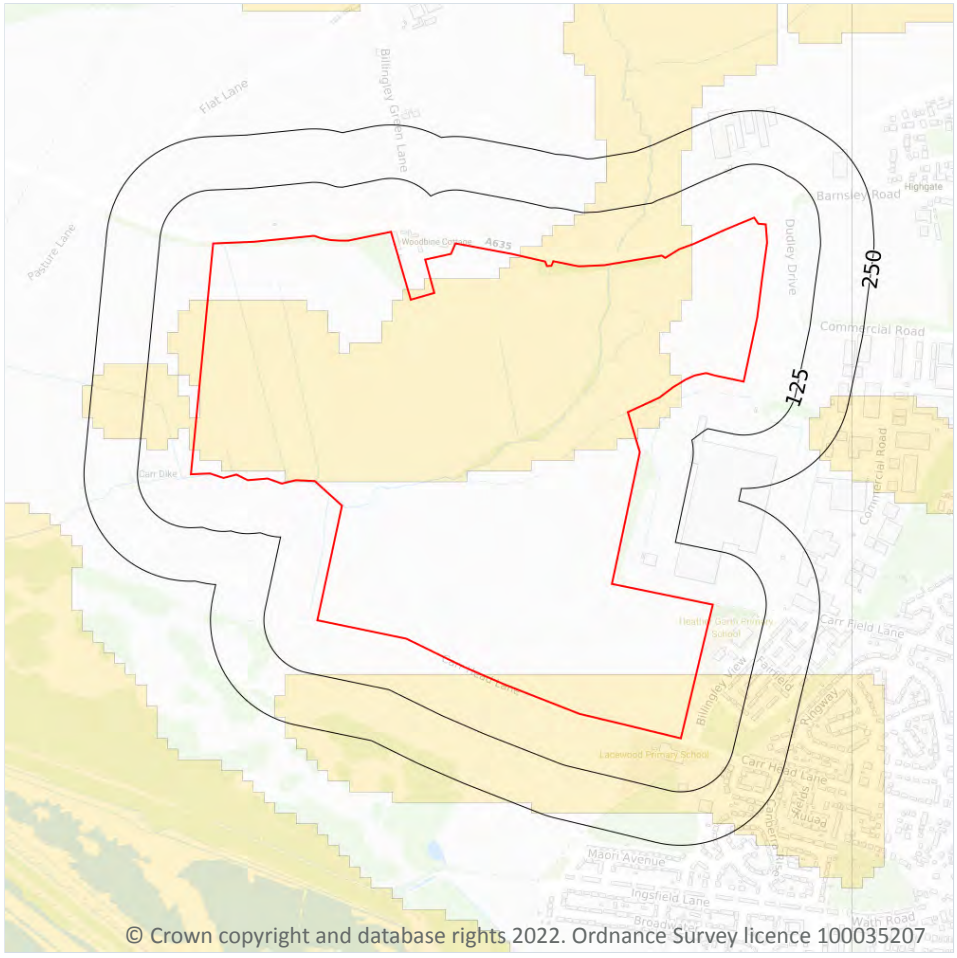
18.13 Clay mining

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).

19 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	2

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 123**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None****
On site	**Between 1% and 3%**	**None**

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	56

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 km^2. 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 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**

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**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
2m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
5m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
5m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
14m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
42m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
43m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 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 km^2).

This data is sourced from the British Geological Survey.

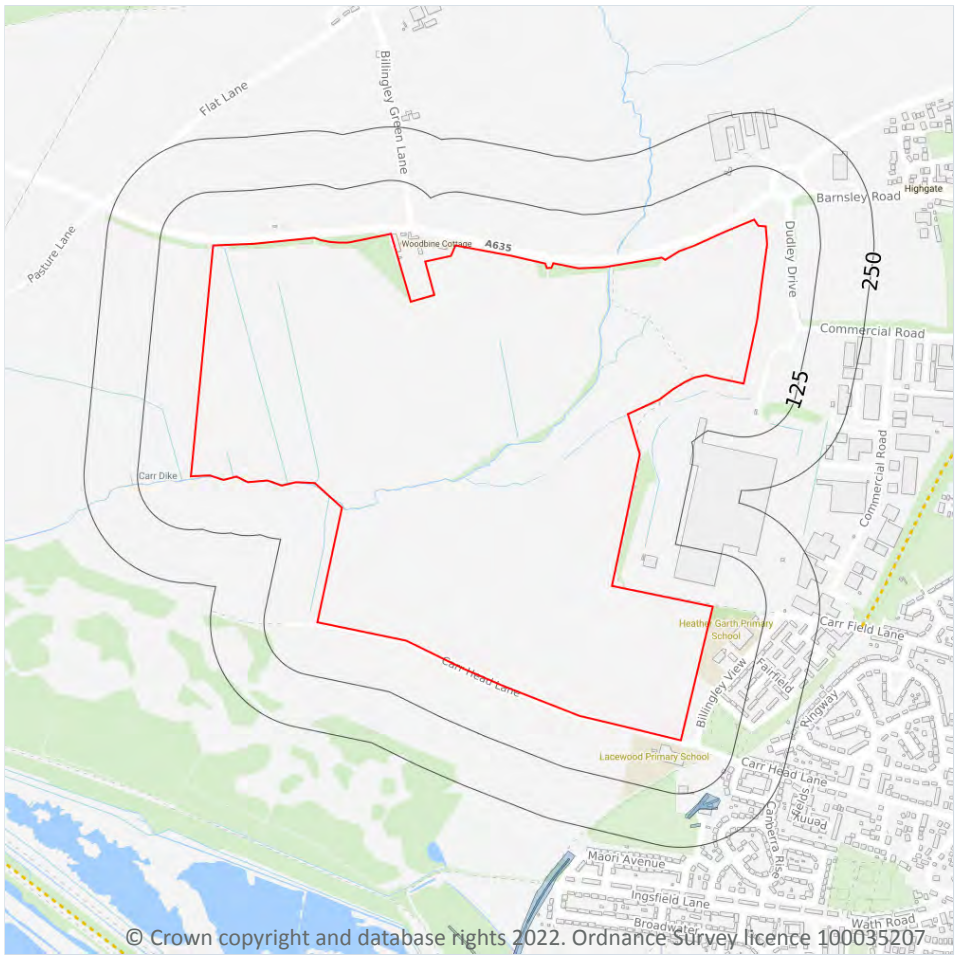
20.3 BGS Measured Urban Soil Chemistry

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 km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- 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

21.1 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.

21.2 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.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	3

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 129**

Location	Land Use	Year of mapping	Mapping scale
137m SE	Railway Sidings	1938	10560
139m SE	Railway Sidings	1930	2500
199m S	Railway Sidings	1930	2500

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.

21.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

21.7 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.

21.8 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.

21.9 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.

21.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

Zetica UXB Risk Maps

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Map Centre: 444373,403731

LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

miltary	**industry**	**UXO find**
transport	**dock**	**Luftwaffe targets**
utilities	**Bombing decoy**	**other**

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: **(https://zeticauxo.com/downloads-and-resources/risk-maps/)**

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

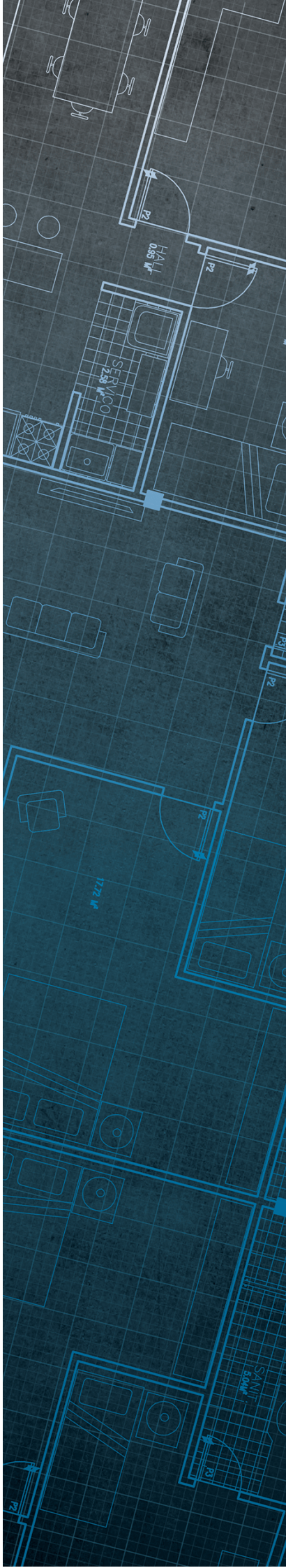
Coal Authority ‘Consultants Coal Mining Report’

The Coal Authority

Consultants

Coal Mining Report

Land South Of Dearne Valley
Parkway, Goldthorpe, Barnsley
South Yorkshire
S72 0JE



Date of enquiry:	**20 July 2022**
Date enquiry received:	**20 July 2022**
Issue date:	**20 July 2022**
Our reference:	**51003255641001**
Your reference:	**HYD-8919599**

Consultants

Coal Mining Report

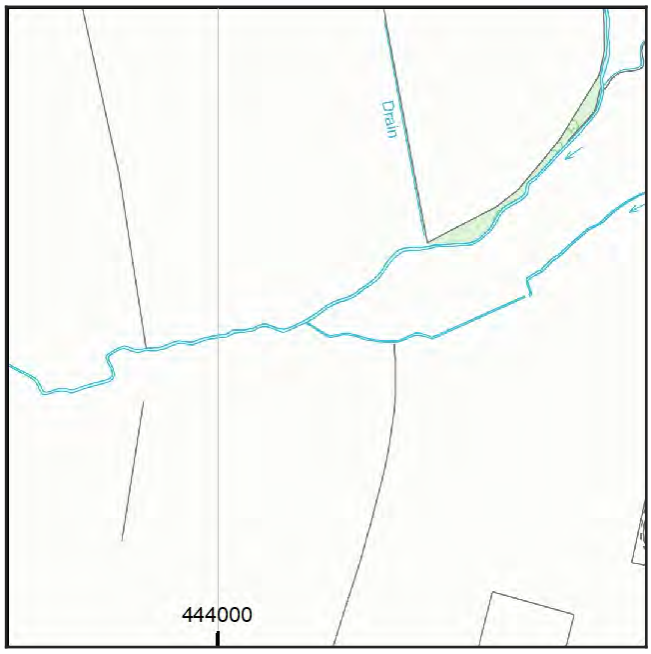
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

Land South Of Dearne Valley Parkway, Goldthorpe,
Barnsley
South Yorkshire
S72 0JE



Approximate position of property

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

@coalauthority
/company/the-coal-authority
/thecoalauthority
/thecoalauthority

Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
BILLINGLEY	SHAFTON	Coal	5TXZ	21	Beneath Property	3.4	North	132	1951
unnamed	NEWHILL	Coal	5RV5	189	South	2.1	North-East	178	1965
CORTONWOOD	NEWHILL	Coal	4Q4H	206	South-West	3.6	North-East	183	1970
WATH	NEWHILL	Coal	4P4I	208	South-West	4.0	North-West	132	1970
BARNBURGH	MELTONFIELD	Coal	5RV1	217	South	2.7	North	112	1952
unnamed	MELTONFIELD	Coal	5NPU	226	South-West	3.2	North-West	125	1952
CORTONWOOD	MELTONFIELD	Coal	4Q4G	228	South-West	4.2	North-East	118	1956
MANVERS	NEWHILL	Coal	5NP8	231	Beneath Property	2.3	North	15	1977
WATH	MELTONFIELD	Coal	4P4B	232	South-West	3.5	North	123	1953
unnamed	MELTONFIELD	Coal	5NPW	252	Beneath Property	4.4	North	116	1977
MANVERS	NEWHILL	Coal	N29	255	Beneath Property	4.2	North-West	149	1980
MANVERS	NEWHILL	Coal	7NXN	262	Beneath Property	2.7	North-West	147	1973
WATH	NEWHILL	Coal	5R1H	268	Beneath Property	4.2	North	152	1978
WATH	NEWHILL	Coal	N53	269	Beneath Property	2.8	North	152	1986
WATH	NEWHILL	Coal	N27	283	Beneath Property	4.5	North	152	1981
WATH	NEWHILL	Coal	N29	283	Beneath Property	3.8	North-West	152	1980
unnamed	MELTONFIELD	Coal	5NPX	283	Beneath Property	2.4	North-West	110	1969
MANVERS	NEWHILL	Coal	N27	286	Beneath Property	4.2	North-West	149	1981
WATH	NEWHILL	Coal	5TY4	291	Beneath Property	3.4	North	152	1979
WATH	NEWHILL	Coal	N27	292	Beneath Property	3.4	North	152	1981
WATH	NEWHILL	Coal	5TY3	292	Beneath Property	3.9	North	152	1979
BARNBURGH	MELTONFIELD	Coal	5RAG	294	Beneath Property	4.0	North-West	116	1977

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
WATH	NEWHILL	Coal	4P4K	300	Beneath Property	0.0	East	152	1978
WATH	NEWHILL	Coal	5TY5	303	Beneath Property	2.8	North	147	1978
unnamed	MELTONFIELD	Coal	5NPW	306	Beneath Property	5.0	North-West	110	1977
DARFIELD	MELTONFIELD	Coal	4P4G	312	Beneath Property	4.0	North	128	1976
WATH	MELTONFIELD	Coal	5TYF	314	Beneath Property	3.2	North	117	1976
unnamed	TOP HARD BARNSLEY	Coal	5RV6	364	South-East	2.0	North-East	195	1922
unnamed	TOP HARD BARNSLEY	Coal	5RV8	365	Beneath Property	5.4	N/A	195	1896
unnamed	TOP HARD BARNSLEY	Coal	5RV9	368	South	2.3	North	195	1896
CORTONWOOD	TOP HARD BARNSLEY	Coal	4Q4S	376	South-West	4.0	North-East	195	1886
unnamed	TOP HARD BARNSLEY	Coal	5NPD	377	Beneath Property	5.8	North	183	1929
WATH	TOP HARD BARNSLEY	Coal	4P46	381	Beneath Property	3.8	North	181	1898
unnamed	TOP HARD BARNSLEY	Coal	5RV7	392	Beneath Property	0.5	North-East	195	1908
DARFIELD	TOP HARD BARNSLEY	Coal	4P44	409	Beneath Property	4.0	North-West	181	1891
SWALLOW WOOD	SWALLOW WOOD	Coal	5RUQ	416	South-East	3.0	North	118	1941
WATH WOOD	TOP HARD BARNSLEY	Coal	4P45	419	Beneath Property	2.1	North	181	1915
unnamed	SWALLOW WOOD	Coal	5NPE	421	South-West	0.0	East	140	1940
CORTONWOOD / WATH	SWALLOW WOOD	Coal	4Q4T	429	South-West	3.7	North-East	140	1942
unnamed	SWALLOW WOOD	Coal	4P4A	430	South-West	4.3	North	145	1951
HOUGHTON MAIN	TOP HARD BARNSLEY	Coal	5R4H	442	Beneath Property	4.0	North-West	183	1904
WATH	TOP HARD BARNSLEY	Coal	5TYB	460	North-West	1.9	North-East	206	1932
WATH	TOP HARD BARNSLEY	Coal	5TYA	463	Beneath Property	3.5	North	206	1911
unnamed	PARKGATE	Coal	5RUZ	593	South	3.4	South-East	173	1933
unnamed	PARKGATE	Coal	5NPF	599	Beneath Property	7.6	North	160	1935
WATH	PARKGATE	Coal	4PAW	615	Beneath Property	3.9	North	160	1930
unnamed	PARKGATE	Coal	4MRK	615	South-West	2.2	North-West	168	1929
unnamed	PARKGATE	Coal	5RUY	622	South-West	0.0	East	152	1935

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
WATH	PARKGATE	Coal	4PAV	640	Beneath Property	5.4	North	166	1941
unnamed	PARKGATE	Coal	5NPG	643	Beneath Property	2.8	North-West	160	1946
HOUGHTON	PARKGATE	Coal	5R5H	676	Beneath Property	4.2	North-West	198	1956
unnamed	PARKGATE	Coal	4PAY	689	West	6.0	North-East	142	1948
MITCHELL	PARKGATE	Coal	5TY8	689	West	3.7	North-East	142	1942
HOUGHTON	PARKGATE	Coal	5TY7	696	North	2.0	North-East	180	1969
WATH	PARKGATE	Coal	5TY6	698	Beneath Property	3.5	North	160	1947
CORTONWOOD	SILKSTONE	Coal	4MRX	705	South-West	3.3	North-East	96	1975
CORTENWOOD	SILKSTONE	Coal	4PA7	708	South-West	3.0	North-East	110	1978
CORTONWOOD	SILKSTONE	Coal	X54	718	West	2.8	North	110	1986
HOUGHTON / DARFIELD	SILKSTONE	Coal	X53	749	Beneath Property	4.8	North-West	128	1990
HOUGHTON	SILKSTONE	Coal	X52	771	Beneath Property	4.7	North-West	120	1990
HOUGHTON	SILKSTONE	Coal	X51	773	Beneath Property	2.5	North	111	1988
HOUGHTON	SILKSTONE	Coal	X50	773	North-East	5.5	North-West	124	1986
HOUGHTON	SILKSTONE	Coal	X52	775	Beneath Property	4.6	North-West	121	1990
HOUGHTON	SILKSTONE	Coal	X51	777	Beneath Property	3.5	North	116	1988
HOUGHTON	SILKSTONE	Coal	5OVM	780	North	2.0	North-East	112	1979
HOUGHTON	SILKSTONE	Coal	X51	782	Beneath Property	4.4	North-West	119	1988
HOUGHTON	SILKSTONE	Coal	X15	788	North	1.2	East	100	1986

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	444403-007	444337 403972	has probably been totally removed by opencast mining	Coal	
Shaft	444403-008	444184 403945	has probably been totally removed by opencast mining	Coal	
Shaft	444404-003	444156 404124		Coal	

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

NE825	NE262	NE965
NE54	16528	NE209
NE999	NE1065	16924

Our records show we have more plans than those shown above which could affect the enquiry boundary.

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
SHAFTON	Coal	Yes	Within	N/A	70
SHAFTON	Coal	Yes	Within	N/A	76
SHAFTON	Coal	Yes	Within	N/A	109
SHAFTON	Coal	Yes	Within	N/A	111

Geological faults, fissures and breaklines

Please refer to the 'Summary of findings' map (on separate sheet) for details of any geological faults, fissures or breaklines either within or intersecting the enquiry boundary.

Fault under or close to the property recorded.

Opencast mines

Please refer to the “Summary of findings” map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

Distance to site investigation (m)	Direction
39.7	East
Within	N/A

See Section 4 for further information.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

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

Withdrawal of support notices
The property is in an area where notices to withdraw support were given in 1942, 1946, 1980, 1982 and 1983.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.**

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines
Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips
Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations
Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites
Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence
Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

Mine water treatment schemes
Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining
Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing
Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders
Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices
Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

Appendix E

Preliminary Geotechnical Risk Register

Geotechnical Hazard Identification – Desk Study Stage

Potential geotechnical hazards have been assessed in accordance with the general requirements of ICE/DETR Document 'Managing Geotechnical Risk' and the HE documents HD 41/15 and CD 622. The following pages set out the identified geotechnical risks and hazards which are associated with the proposed development and establish the approach which is to be taken to manage the risks including the geotechnical input and analysis.

Table E.1 is a preliminary assessment of possible geotechnical hazards at the site at Desk Study stage. This information is used to assist with site investigation design.

Table E.1: Possible geotechnical hazards

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site (i.e. Plausible)	Unlikely to be present and/or affect site
Uncontrolled Made Ground (variable strength and compressibility).	Made ground/Infilled Ground present where quarries have been backfilled.	✓	-
Soft / loose compressible ground (low strength and high settlement potential).	Alluvium present at the site and potential for loose Made Ground/Infilled Ground.	✓	-
Shrink swell of the clay fraction of soils under the influence of vegetation.	Clay layers in the Alluvium could be influenced by the vegetation at the site.	✓	-
Variable lateral and vertical changes in ground conditions.	Varying superficial and solid deposits.	✓	-
High sulfates present in the soils.	Made Ground present in the north of the site.	✓	-
Adverse chemical ground conditions, (e.g. expansive slag).	Not anticipated at this site.	-	✓
Obstructions – historical drains and coal mining features.	Historical drains marked on the historical mapping in the north of the site. The historical opencast site and buried highwall are present in the north of the site. Below ground Infrastructure is expected still be present.	✓	-
Existing below ground structures to remain (on or off-site tunnels, foundations, basements, and adjacent sub-structures).	Not a significant risk at this site.	-	✓
Shallow groundwater.	Shallow groundwater likely present within the Alluvium, Made Ground and Infilled Ground.	✓	-
Changing groundwater conditions.	Changing groundwater levels in association with Carr Dike.	✓	-

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site (i.e. Plausible)	Unlikely to be present and/or affect site
Risk from erosion.	Not a significant risk at this site.	-	✓
Risk from flooding.	Parts of the site are in a Flood zone 3 and 2.	✓	-
Running sands and / or loose Made Ground, leading to difficulty with excavation and collapse of side walls.	Potential for loose Made Ground/Infilled Ground in the north of the site.	✓	-
Slope stability issues – general slopes.	Not a significant risk at this site.	-	✓
Slope stability issues – retaining walls.	Not a significant risk at this site.	-	✓
Earthworks – settlement (due to placement of fill on soft / loose ground).	Untreated Alluvial soils/Made Ground/Infilled Ground placed as new fill would be expected to have a poor bearing capacity and could result in significant settlements.	✓	-
Earthworks – poor bearing capacity of new fill.		✓	-
Earthworks – unsuitability of site won material to be reused as fill.	If untreated, the site won Made Ground/Infilled Ground and alluvial soils may be unsuitable due to organic material content and/or presence of deleterious material.	✓	-
Solution features in Chalk.	Not a significant risk at this site.	-	✓
Cavities in the Superficial Deposits due to solution features.	Not a significant risk at this site.	-	✓
Dissolution (associated with “wet rock head”).	Not a significant risk at this site.	-	✓
Brine extraction.	Not a significant risk at this site.	-	✓
Mining.	Extensive coal mining has occurred at the site. A bindstone quarry was also present in the north-east.	✓	-
Cambered ground with gulls possibly present.	Not a significant risk at this site.	-	✓
Relict Slip Surfaces.	The fault beneath the south-western tip could lead to differential settlement of infrastructure. The nature of	✓	-

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site (i.e. Plausible)	Unlikely to be present and/or affect site
	the soils and fault zone should be investigation.		
Solifluction.	Shallow groundwater and loose deposits likely.	✓	-
Problematic soils (silts and rewetting etc.).		✓	-

Appendix F

Plausible Source-Pathway-Receptor Contaminant Linkages

Summary of Potential Contaminant Linkages

Table F.2 lists the plausible contaminant linkages which have been identified. These are considered as potentially unacceptable risks in line with guidelines published in LCRM (2021) and additional risk assessment is required.

Source – Pathway – Receptor Linkages have been assessed in general accordance with guidance in CIRIA Report C552 (Rudland et al 2001) but with the addition of a 'no linkage' category (See Table F.1). More details are given in the relevant Hydrock methodology, referenced in Appendix G, including descriptions of typical examples of probability and consequences.

It should be noted that whilst the risk assessment process undertaken in this report may identify potential risks to site demolition and redevelopment workers, consideration of occupational health and safety issues is beyond the scope of this report and need to be considered separately in the Construction Phase Health and Safety Plan.

Table F.1: Consequence versus probability assessment.

		Consequence			
Probability		Severe	Medium	Mild	Minor
	High Likelihood	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Low risk	Very low risk
	Low Likelihood	Moderate risk	Low risk	Low risk	Very low risk
	Unlikely	Low risk	Very low risk	Very low risk	Very low risk
	No Linkage	No risk			

Table F.2: Exposure model – preliminary risk assessment of source-pathway-receptor contaminant linkages

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Made Ground/Infilled Ground, associated with the backfilled quarries and mineworking's across the site, possibly including elevated concentrations of metals, metalloids, PAH, PHC, asbestos fibres, Asbestos Containing Materials (S1).	Ingestion, inhalation or direct contact.	Site users.	Likely	Medium	Moderate	There is Made Ground/Infilled Ground below the site, and there is potential for metals, metalloids, to be at levels in excess of the GAC. This risk needs to be investigated and assessed.
	Inhalation of fugitive dust.	Neighbours.	Unlikely	Medium	Very low	
	Leaching through unsaturated zone.	Groundwater within secondary A aquifer bodies in the Alluvium, Pennine Middle Coal Measures and Mexborough Rock.	Likely	Medium	Moderate	There is likely shallow groundwater present in the Alluvium and it is possible that contamination present in the Made Ground and backfill material could leach into this groundwater body. If the shallow and deep groundwater bodies are in hydraulic continuity there is potential for further leaching of contaminants.
	Surface run-off.	Carr Dike	Low likelihood	Medium	Low	Carr Dike flows north to south through the centre of the site. Surface run-off could flow into this watercourse. The lack of hardstanding and the presence of surface vegetation will inhibit overland flow.
	Base flow from contaminated groundwater.		Likely	Medium	Moderate	The groundwater within the Alluvium is likely in hydraulic continuity with Carr Dike. If the groundwater body is contaminated, this base flow could impact the surface watercourse.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Historical landfilled household waste. (S2).	Ingestion, inhalation or direct contact.	Site users.	Likely	Medium	Moderate	There is a known landfill on the site, and there is potential for metals, metalloids, PAH and PHC to be at levels in excess of the GAC.
	Leaching through unsaturated zone.	Groundwater within secondary A aquifer bodies in the Alluvium, Pennine Middle Coal Measures and Mexborough Rock.	Likely	Medium	Moderate	There is likely shallow groundwater present in the Alluvium and it is possible that contamination present in the Made Ground could leach into this groundwater body. If the shallow and deep groundwater bodies are in hydraulic continuity there is potential for further leaching of contaminants.
	Base flow from contaminated groundwater.	Carr Dike	Likely	Medium	Moderate	The groundwater within the Alluvium is likely in hydraulic continuity with Carr Dike. If the groundwater body is contaminated, this base flow could impact the surface watercourse.
Ground gases (carbon dioxide and methane) from organic materials in the Made Ground / alluvial deposits (S3).	Migration, build up and asphyxiation.	Site users.	Likely	Medium to Severe	Moderate to High	Organic material in the Alluvium and Made Ground/infilled material could produce methane and carbon dioxide which could migrate into buildings. Ground gas monitoring as part of the intrusive investigation is recommended.
		Neighbours.		Medium	Moderate	
Ground gases (carbon dioxide and methane)	Migration, build up and explosion.	Site users.	Likely	Medium to Severe	Moderate to High	Organic material in the landfilled waste is likely to produce methane and carbon dioxide which could migrate into buildings.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
from organic materials in the landfill (S4).		Neighbours.		Medium	Moderate	Ground gas monitoring as part of the intrusive investigation is recommended.
Mine gases from shallow coal workings (S5).	Migration, build up and explosion.	Site users.	Likely	Medium to Severe	Moderate to High	Shallow coal workings are present below the site with the potential to generate mine gases and migrate to surface. Ground gas monitoring as part of the intrusive investigation is recommended.
		Neighbours.		Medium	Moderate	
Historical site with a Part B permit for the processing of coal and coke (S6).	Ingestion, inhalation or direct contact.	Site users.	Likely	Medium	Moderate	Residual historical contamination may be present from the processing of coal and coke at the site.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
	Leaching through unsaturated zone.	Groundwater within secondary A aquifer bodies in the Alluvium, Pennine Middle Coal Measures and Mexborough Rock.	Likely	Medium	Moderate	There is likely shallow groundwater present in the Alluvium and it is possible that contamination present in the Made Ground could leach into this groundwater body. If the shallow and deep groundwater bodies are in hydraulic continuity there is potential for further leaching of contaminants.
Quarry backfill, associated with the former brick pit located on the eastern boundary of the site, possibly including metals, metalloids, asbestos (S7).	Leaching through unsaturated zone.	Groundwater within secondary A aquifer bodies in the Alluvium, Pennine Middle Coal Measures and Mexborough Rock.	Likely	Medium	Moderate	There is likely shallow groundwater present in the Alluvium and it is possible that contamination present in the Made Ground could leach into this groundwater body. If the shallow and deep groundwater bodies are in hydraulic continuity there is potential for further leaching of contaminants.
	Base flow from contaminated groundwater.	Carr Dike	Low likelihood	Medium	Low	The groundwater within the Alluvium is likely in hydraulic continuity with Carr Dike. If the groundwater body is contaminated, this base flow could impact the surface watercourse.
Dismantled railway 80m south east possibly containing elevated concentrations of metals,	Leaching through unsaturated zone.	Groundwater within secondary A aquifer bodies in the Alluvium, Pennine Middle Coal Measures and Mexborough Rock.	Unlikely	Medium	Very low	There is likely shallow groundwater present in the Alluvium and it is possible that contamination present in the Made Ground could leach into this groundwater body. The groundwater flow direction is assumed to be towards the south west, therefore due to the distance and direction from site any potential contaminated groundwater would not be expected to migrate onto site.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
metalloids, PAH and PHC (S8).						
Sewage, discharged into the tributary of Carr Dike located 209m east (S10).	Active discharge into surface water.	Controlled water – Carr Dike. Aquatic life.	Likely	Medium	Moderate	An active licence registered at Highgate Industrial Estate (209m east) for the discharge of sewage into the tributary of Carr Dike, which flows through the site. The discharge is upstream of the site. The discharge of sewage into Carr Dike is likely to have an adverse effect of water quality and aquatic life. As part of the ground investigation an allowance should be made for surface water sampling of the tributary of Carr Dike and Carr Dike itself.

Appendix G

Hydrock Methodologies

This appendix provides additional background information on certain approaches and methods used by Hydrock Consultants Limited in the preparation of this report.

The following Hydrock Methodologies apply to this report. These are not included, but are available on request by quoting the methodology reference, revision and date.

Reference	Name	Revision	Date
001	Desk Study	001	30/07/2018
003	Preliminary Geo-environmental Risk Assessment Rationale	001	30/07/2018
004	Preliminary geotechnical Risk Register	001	30/07/2018