JNP GROUP

CONSULTING ENGINEERS

Phase I Geo-Environmental Report

Project: Land at 894 Huddersfield Road,
Mirfield,
WF14 9HS

Client: Robert Halstead Chartered
Surveyors & Town Planners

Reference: S11674-JNP-XX-XX-RP-G-0003

Date: November 2022

DOCUMENT CONTROL SHEET

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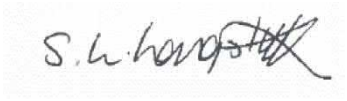

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FOR AND ON BEHALF OF JNP GROUP

Date: 11 November 2022

Document Issue Record

Rev	Date	Description	Prepared	Checked	Approved
P01	Nov 22	First Issue	SP	SLL	PT

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EXECUTIVE SUMMARY

Site location	Land at 894 Huddersfield Road, Mirfield, WF14 9HS	
Development scheme	Site is proposed to be redeveloped with 11No. residential properties.	
NGR	421584, 419960	
Current use	On-site: Large Residential Property	Off-site: Commercial, retail, residential, River Calder and road network.
Historical use And UXO	**On-Site History** From the earliest available mapping dated 1855, the site was denoted to be open land with several small trees present and a cottage in the south eastern area of the site. Further development was denoted on 1893 mapping with an access track being constructed and drainage gully's around the boundaries of the site. 1907 mapping indicates that the cottage previously denoted in the south eastern area of the site had been demolished. Four small buildings were denoted on 1951 mapping in the central western area of the site. These were removed by 1989 . **Off-Site History** From the earliest mapping, the Cleckheaton Branch of the West Riding Union Railway was denoted along the northern boundary of the site. This mapping also indicated a sandstone quarry 257m to the north of the site. In general, the surrounding area was denoted to be a mixture of residential, mills, canals and railway infrastructure. By 1888 mapping the quarry was no longer labelled. The Cleckheaton Branch of the West Riding Union Railway was noted to be dismantled on 1974 mapping. **UXO** A **LOW** UXO risk has been identified at the site.	
Geology	Alluvium – South Eastern Corner of the site Pennine Coal Measures	
Coal Mining Risk Assessment	Coal measures strata are present beneath the site. A Coal Mining Risk Assessment ref: S11674-JNP-XX-XX-RP-G-0002 was undertaken by JNP Group previously at the site. It recommended the following; - the site is in a Development High Risk Area, and the Consultants Coal Mining Report indicated that there are probable unrecorded shallow workings beneath the site. In addition, the records from a ground investigation undertaken on an adjacent site located circa 10m south-west of the site boundary encountered shallow coal from 0.60m bgl. - recommended that a rotary borehole investigation is undertaken to determine if historic workings have taken place in the Blocking Coal beneath the site. At this stage, recommended that a minimum of 4No. boreholes are drilled on site to an average depth of 10m bgl.	
Hydrogeology	The site is underlain by a **Secondary-A Aquifer 'Superficial'** aquifer in the south eastern area of the site. This is underlain by a **Secondary-A 'Bedrock'** Aquifer. The aquifer status refers to the Alluvium and Pennine Coal Measures respectively.	
Hydrology	River Calder, which flows in a west to east direction, is located 36m to the south east of the site. Six further surface water features are located within 250m of the site and are noted to be a canal, lock and inland river. These are all noted to be associated with the River Calder.	

<table>
<tr><td>Environmentally sensitive sites</td><td>The site is noted by the Groundsure Report to be located within an area of green belt.</td></tr>
<tr><td>Conceptual site model</td><td>
<table>
<tr><th>Risk Receptor</th><th colspan="2">Risk</th><th>Justification</th></tr>
<tr><td>HUMAN HEALTH</td><td>MEDIUM</td><td></td><td>Initially undeveloped land with a cottage in the south eastern area of the site. This was noted to be demolished by 1907 mapping. 4No. small buildings were noted on 1951 mapping. These were removed by 1989.
Railway track to the immediate north of the site, possibly infilled.
Refuse tip to west.
Historical sandstone quarry 257m north of the site.
Multiple areas of fly tipping and a potentially asbestos roof were noted during the site walkover.</td></tr>
<tr><td>GROUNDWATER</td><td>MEDIUM</td><td></td><td>The site is located on Secondary A Aquifers.</td></tr>
<tr><td>SURFACE WATER</td><td>MEDIUM</td><td></td><td>The nearest surface water course is 36m south east of the site and is downgradient from the site.</td></tr>
<tr><td>ECOLOGY</td><td>NONE</td><td></td><td>Based on the assumption that there are no sensitive/ protected species on site (subject to any ecological survey undertaken).</td></tr>
<tr><td>PROPERTY & INFRASTRUCURE</td><td>MEDIUM</td><td></td><td>Initially undeveloped land with a cottage in the south eastern area of the site. This was noted to be demolished by 1907 mapping. 4No. small buildings were noted on 1951 mapping. These being removed by 1989 mapping.
Railway track to the immediate north of the site possibly infilled.
Refuse tip to west.
Historical sandstone quarry 257m north of the site.</td></tr>
</table>
Based on information contained within desk study, it is the opinion of JNP Group that the potential site conditions provide a LOW to MEDIUM environmental risk and hence further investigation and assessment is required.
</td></tr>
</table>

1 INTRODUCTION

1.1 General

1.1.1 JNP Group was instructed by the client Robert Halstead Chartered Surveyors and Town Planners to undertake a desk study of:

Site Land at 894 Huddersfield Road,
Mirfield,
WF14 9HS

hereinafter referred to as 'the site'. This report is subject to the limitations presented in Appendix A:.

1.1.2 It is understood that the site is to be redeveloped with 11No. residential properties with roads and areas of hardstanding for access servicing and parking with private gardens. The proposed redevelopment layout is shown on external Drawing Reference 21/6320/P02 Rev C (Nov 2021) produced by Design House (Appendix B:).

1.1.3 All comments given are based on the understanding that the proposed redevelopment will be as detailed above.

1.2 Objectives

1.2.1 The scope of work comprised non-intrusive (desk-based) research only. This report contains details of the site, development of an initial conceptual model, and a preliminary risk assessment with regard to contaminated land issues.

1.3 Methodology

1.3.1 This report has been compiled in accordance with the on-line Land contamination: risk management (LCRM) guidance produced by the Environment Agency (June 2019). This can be found on the UK government website: https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks.

1.3.2 With regard to geotechnical aspects, reference is also made to the requirements of BS EN 1997, Eurocode 7, Geotechnical Design, and associated standards.

1.3.3 This report should be read in conjunction with the following JNP Group Reports:

- S11674-JNP-XX-XX-RP-C-0001. Flood Risk Assessment and Drainage Strategy, dated May 2022.
- S11674-JNP-XX-XX-RP-G-0002. Coal Mining Risk Assessment, dated September 2022.

2 SITE DESCRIPTION

2.1.1 The site is located off Huddersfield Road, in Mirfield, West Yorkshire approximately 7.5 km south west of Huddersfield town centre (see Figure 1 Key Plan). The centre of the site is located at National Grid Reference SE 215 199. The site covers an area of approximately 0.78 hectares.

2.1.2 An engineer from JNP Group visited the site on 09th November 2022, the weather was cloudy with damp ground conditions. Photographs of the site are included within Appendix C.

2.1.3 The boundaries of the site were a hedgerow, mature trees and a public footpath to the north, residential properties to the east, Huddersfield Road to the south. and further hedgerows and trees to the west.

2.1.4 Adjacent land uses were residential properties and open fields to the north, residential properties and a medical health clinic to the east, Huddersfield Road, River Calder and vacant land to the south, and a partially completed petrol station and commercial retail units to the west.

2.1.5 Ground levels within the development slope from north west to south east, falling from c. 51.5m above Ordnance Datum (aOD) to 43.1m aOD. Huddersfield Road to the south is at a slightly higher elevation than the site. Given the levels any site surface water is predicted to flow towards the River Calder.

2.1.6 The site is mostly areas of rough grass soft-standing with a tarmac drive entering the south western corner of the site providing access to the residential property in the eastern boundary of the site. The hardstanding was noted to be in good condition.

2.1.7 A dilapidated brick and block stables were noted to the present along the central western boundary area of the site. No further buildings were noted at the site. The roofing material used on the block of stables was noted to resemble asbestos sheeting with fragments of this material noted to have broken off.

2.1.8 A small area of fly tipping was noted in the eastern area of the site. Further small piles of rubbish and a steel barrel were noted in the north western corner of the site during the site walkover.

2.1.9 Several semi-mature and mature trees were present along the boundaries and open rough grass areas of the site.

2.1.10 The surrounding land uses are summarised in Table 2.1 below.

Table 2.1 Surrounding Land Use

Direction	Land Use
North	Residential, public footpath, open grassland
East	Residential properties, medical centre
South	Huddersfield Road, River Calder, vacant land
West	Petrol Station, commercial retail units (currently under construction) and residential

2.1.11 Reference should be made to external drawing reference No 6683/1 produced by Land Surveys, dated July 2008.

3 GEOLOGY, HYDROGEOLOGY AND HYDROLOGY

3.1 Geology

3.1.1 The geology of the site has been determined by reference to the 1:50,000 scale British Geological Survey (BGS) online Geoindex Tool (**http://mapapps2.bgs.ac.uk/geoindex/home.html**) as well as BGS 1:10,000 and 1:50,000 Series published geological maps, Sheets SE21NW (Grange Moor) and Sheet 77, Huddersfield Solid and Drift, accessed via the website (**http://www.bgs.ac.uk/data/maps/home.html**); these were both accessed on 08/11/2022.

3.1.2 No recorded artificial or made ground is indicated at the site.

3.1.3 The mapping indicates that the northern and central areas of the site do not feature any superficial deposits. The south eastern area of the site is indicated to feature superficial deposits of Alluvium. The Alluvium is described by the BGS as "*Alluvium is a general term for clay, silt, sand and gravel. It is the unconsolidated detrital material deposited by a river, stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain or delta, or as a cone or fan at the base of a mountain slope*"

1.1.1 The underlying "bedrock" geology is indicated to be strata of the Pennine Lower Coal Measures Formation, which is described by the BGS as "*dark grey, fissile mudstone of the Subcrenatum Marine Band with eponymous fossils, or at the base of the lowest coal of the coal-bearing sequence if this marker cannot be recognised. Typically, the formation rests conformably upon the Rossendale Formation (Millstone Grit Group)".*

1.1.2 Further examination of the 1:10,000 mapping indicates that the site is underlain by the Falhouse Rock and Blocking Rider Coal, these being part of the Pennine Lower Coal Measures.

1.1.3 There are no fault lines recorded at the site. A fault is noted circa 30m to the north and 200m to the west of the site. These are noted to be described as a fault at rockhead with both downthrow sides moving away from the site.

3.1.4 The following Table 3.1 summarises the potential risks from a range of geological hazards at the site as identified in a site-specific Groundsure Report which has been obtained and is included in Appendix D.

Table 3.1 Geological Hazards

Hazard	Risk
Shrinking or swelling clay	Very Low
Landslide ground	Very Low to Low
Ground dissolution	Negligible
Compressible soils	Negligible to Moderate
Collapsible soils	Very Low to Negligible
Running sand	Low to Negligible

3.1.5 Based upon the above compressible soils are indicated to present a risk. This is associated with the Alluvium deposits in the south eastern area of the site and warrant further investigation.

3.2 BGS Borehole Records

3.2.1 There are no publicly available boreholes within 250m of the site. As part of the JNP Group Coal Mining Risk Assessment, Report Ref; S11674-JNP-XX-XX-RP-G-0002 2No. rotary holes were undertaken as part of a ground investigation conducted circa 1.7m away from the western boundary of the site.

3.2.2 It was stated that the shallow soils encountered in the rotary boreholes were noted to be sandstone in the western area of the site and mudstone with shallow coal in the eastern area of the site. The hole in the east encountered coal at a shallow depth from 0.60m bgl, this is suggested to be the Blocking Bed Coal. Shallow coal deposits were also encountered, this suggesting that a coal seam outcrops within the adjacent site. No groundwater was encountered whilst drilling the boreholes.

3.3 Radon

3.3.1 The Groundsure Report states that the Health Protection Agency identified that in the northern, western and south western areas of the site, between 1% and 3% of homes could be above the action level. In the rest of the site, the report indicated less than 1% of properties would be affected. The Groundsure Report indicates that both of the levels do not require radon protection measures.

3.4 Background Soil Chemical Concentrations

3.4.1 From a review of the Groundsure Report and the UK Soil Observatory map viewer (http://mapapps2.bgs.ac.uk/ukso/home.html) the following range of background metallic soil concentrations are anticipated at the site :

- arsenic < 33 mg/kg;
- barium 262 mg/kg;
- cadmium 0.29 - 1.8 mg/kg;
- chromium 60 - 180 mg/kg;
- copper 47 mg/kg;
- lead 100 - 200 mg/kg;
- nickel 15 – 45 mg/kg
- vanadium 81 mg/kg and;
- zinc 96 mg/kg.

3.4.2 Therefore, naturally elevated concentrations of arsenic, copper and lead are anticipated.

3.5 Mining, Mineral Extraction and Natural Cavities

3.5.1 A Coal Mining Risk Assessment (ref: S11674-JNP-XX-XX-RP-G-0002) was undertaken by JNP Group for the site. The findings from this report are summarised below.

- The report indicates that there are probable unrecorded shallow workings beneath the site. This means that coal of workable thickness is present at shallow depth and as such is likely to have been worked historically.
- No spine roadways at shallow depth are indicated.

- No mine entries are recorded within 100m of the enquiry boundary.
- No outcrops were recorded.
- There are no recorded tips within 500m of the enquiry boundary.
- There are no remediated sites within 50m of the enquiry boundary.
- 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.
- Review of available desk-based information has identified that the site is in a Development High Risk Area, and the Consultants Coal Mining Report indicates that there are probable unrecorded shallow workings beneath the site; in addition, the records from a ground investigation undertaken on an adjacent site located circa 10m south-west of the site boundary encountered shallow coal from 0.60m bgl.
- Based on the findings of this report we would recommend that a rotary borehole investigation is undertaken in order to determine if historic workings have taken place in the Blocking Coal beneath the site. At this stage it is recommended that a minimum of 4No. boreholes are drilled on site to an average depth of 10m bgl. Given the shallow anticipated depth of the coal on the western boundary a trial pit / window sample investigation may be appropriate in this area.

3.6 Hydrogeology

3.6.1 The Aquifer Maps contained in the Groundsure Report indicates that the site is partially underlain by a Secondary-A Aquifer in the south eastern area of the site. This is underlain by a Secondary-A 'Bedrock' Aquifer. The aquifer status refers to the Alluvium and Pennine Coal Measures respectively.

3.6.2 The Environment Agency define a Secondary-A Aquifer as:

"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."

3.6.3 The Groundsure Report lists two licensed groundwater abstraction from the Pennine Coal Measures, located 15m to the north east of the site and 414m south of the site.

3.6.4 The abstraction located 15m to the north east is noted to have a status of historical, however no end date is provided by the Groundsure Report. The usage is described as 'general farming and domestic'.

3.6.5 The abstraction located 414m to the south of the site is noted to have a status of active with an expiry date of 31/03/2027. The abstraction is noted to be associated with Dr Reddy's Laboratories with an annual permitted abstraction volume of 13,800 m^3.

3.6.6 The site's proximity to groundwater Source Protection Zones (SPZs) was determined by reference to defra's Magic Map website (https://magic.defra.gov.uk/). These zones show the

risk of contamination of major licensed groundwater abstractions from any activities that might cause pollution in the area, with the closer the activity, the greater the associated risk. The maps show four main zones (inner, outer, total catchment and special interest) to a groundwater source.

3.6.7 The site does not lie within a Source Protection Zone (SPZ).

3.7 Hydrology

3.7.1 The nearest surface water feature is the River Calder which flows in a west to east direction and is located 36m to the south east of the site. Six further surface water features are located within 250m of the site and are noted to be a canal, lock and inland river. These are all noted to be associated with the River Calder.

3.7.2 River quality data from the publicly available River Basin Management Plans implemented by the Water Framework Directive (http://environment.data.gov.uk/catchment-planning/) indicates that this section of the River Calder recorded a chemical quality of Fail in 2019, ecological quality was reported to be Moderate in 2019. This has resulted in an overall river quality of Moderate in 2019.

3.7.3 According to the Groundsure Report, the south eastern area of the site lies in an area of low flooding risk, whilst the central southern boundary of the site is designated medium. No designation is noted for the rest of the site. Reference should be made to the FRA report for further details.

3.7.4 The Groundsure Report lists three licensed surface water abstractions from the River Calder. These are detailed in the below;

- 722m east, status historical, dust suppression, abstraction point: River Calder Ravensthorpe.
- 1059 east, status: historical, general use, River Calder Holme Bank Mills
- 1547 east, status historical, general use, River Calder Ravensing Mills

3.8 Pollution Incidents to Controlled Waters

3.8.1 Records held by the Environment Agency identified nine pollution incidents to controlled waters within 400mm of the site. These were detailed in the below;

- 84m to the south of the site (201225) in November 2003. Pollutant described as sewage materials, Category 3 (Minor);
- 265m to the south-east of the site (135183), February 2003. Pollutant described as inert materials and wastes, Category 4 (No Impact);
- 306m to the south-east of the site (144402), March 2003. Pollutant inert materials and wastes, Category 2 (significant impact);
- 336m to the south-east of the site (147733), April 2003. Pollutant inert materials and wastes, Category 3 (minor impact);
- 384m to the south-east of the site (489325), April 2007. Pollutant contaminated water. (Category 2 Significant Impact);

- 388m to the south-east of the site (33360), September 2001. Pollutant suspended solids, (category 3 minor impact).

3.9 Discharge Consents

3.9.1 The Groundsure Report identifies five licensed discharge consents within 1km of the site, summarised as follows:

Table 3.2 Summary of Discharge Consents

Location	Distance and direction from site	Date	Receiving Water Body	Discharge	Licence Status
WF14 9HS	23m East	13/04/2009	River Calder	Sewer storm overflow	Revoked 13/04/2009
Sowerby Bridge	80m South West	18/09/1968	River Calder	Sewer discharges	Assumed current
The Ship Roast Inn	166m South East	13/06/1984	River Calder	Sewer discharges	Revoked 01/10/1996
Greenwood Flood Lock House	190m East	10/07/1970	Mill Stream to River Calder	Sewage discharge	Assumed current
Sands Lane Quarry	394m South East	22/11/2010	River Calder	Trade discharge	Revoked 22/11/2010

4 SITE HISTORY

4.1 Historical Mapping

4.1.1 The history of the site and the surrounding area has been determined from a review of historical map extracts, obtained as part of the Groundsure Report. Copies of these extracts are included in Appendix E:. The historical land uses on site and in close proximity to the site are summarised as follows in Table 4.1:

Table 4.1 Site Historical Summary

Date	On-site Historical Land Use	Off-site Historical Land Use
1855	The site was denoted to be open land with several small trees in and around the site boundary. A cottage was denoted in the south eastern corner of the site.	Generally, the surrounding area was denoted to be a mixture of residential, mills and railway infrastructure. Cleckheaton Branch of the West Riding Union Railway was denoted along the northern boundary of the site. A 'Sandstone Quarry' was denoted 257m to the north of the site. Fir cottage was denoted to the immediate east of the site. Huddersfield Road was denoted to the immediate south of the site. The River Calder was mapped circa 30m to the south of the site in a similar location to current mapping. The 'Calder and Navigation' was noted to be present 150m to the south of the site. A 'Corn Mill' with weir was denoted circa 250m to the south of the site. The Swan Inn was denoted circa 30m to the west of the site. A 'Malthouse' was denoted circa 100m to the south west of the site.
1888 - 1892	No significant changes	The 'Sandstone Quarry' denoted circa 257m to the north of the site was no longer denoted. A 'colliery' was denoted circa 600m to the north of the site.
1893	The site was denoted to feature several trees in the southern area of the site. The site also featured small drainage gulley's around the boundaries of the site. An access track was denoted moving from the south western corner of the site to the central area of the site.	2No. ponds were denoted 50m to the north of the site.

Date	On-site Historical Land Use	Off-site Historical Land Use
1904 - 1905	No significant changes	A pumping station and sewage works was denoted circa 250m to the south west of the site.
1907	The cottage denoted in the south eastern corner of the site was no longer mapped.	No significant changes.
1922	No significant changes.	No significant changes.
1930 - 1931	No significant changes.	A large residential development was denoted circa 50m to the north east of the site.
1933	No significant changes.	No significant changes.
1938	No significant changes.	No significant changes.
1948	No significant changes.	Further development was noted to the housing estate located circa 50m to the north east of the site.
1951-1956	4No. small buildings were noted to be present in the central western area of the site.	A 'garage' was denoted 110m to the west of the site. The 2No. ponds denoted 50m to the north of the site have been removed.
1966 - 1967	No significant changes.	No significant changes.
1974-1976	No significant changes.	The railway denoted to the immediate north of the site was labelled 'dismantled'.
1981 - 1982	No significant changes.	In general the surrounding area was denoted to feature large residential developments.
1984 - 1989	No significant changes.	No significant changes.
1989 - 1992	2No. small buildings were denoted along the western boundary of the site. The 4No. small buildings denoted in the central western boundary of the site were no longer present.	No significant changes.
2001	No significant changes.	No significant changes.
2003	No significant changes.	No significant changes.
2010	No significant changes.	An area circa 300m to the south of the site was denoted to have been turned into a lake.
2022	No significant changes.	No significant changes.

4.2 Unexploded Ordnance Review

4.2.1 Whilst JNP Group are not experts on this, according to online mapping provided by Zetica (https://zeticauxo.com/downloads-and-resources/risk-maps/) the site lies with an area of low risk of unexploded ordnance (UXO).

4.3 Site Historical Summary

4.3.1 From the earliest available mapping dated 1855, the site was denoted to be open land with several small trees present and a cottage denoted in the south eastern area of the site. Further development was denoted on 1893 mapping with an access track being constructed and drainage gully's denoted around the boundaries of the site. 1907 mapping indicated that the cottage previously denoted in the south eastern area of the site has been demolished. Four small buildings were denoted on 1951 mapping in the central western area of the site. These were removed by 1989 mapping.

4.3.2 From the earliest mapping, the Cleckheaton Branch of the West Riding Union Railway was denoted along the northern boundary of the site. This mapping also indicated a sandstone quarry 257m to the north of the site. In general, the surrounding area was denoted to be a mixture of residential, mills, canals and railway infrastructure. By 1888 mapping the quarry was no longer labelled. The Cleckheaton Branch of the West Riding Union Railway was noted to be dismantled on 1974 mapping.

5 INFORMATION HELD BY STATUTORY AUTHORITIES

5.1 Summary

5.1.1 This section details any relevant information held in the registers maintained by statutory bodies as identified in the Groundsure Report (Appendix D:).

Table 5.1 Statutory Information Summary

	On-Site	0-250m	250-500m	Details
Waste				
Historical Landfills	0	1	0	87m west, Refuse Tip – 1973 mapping
Historical Landfill (EA/NRW)	1	0	0	On-site, Railway Cutting – 1980 mapping
Historical Waste Sites	0	0	7	252m south east – Waste Transfer Station 253m East – Conversion from waste transfer storage to refurbishment. 272m south east – Motorcycle Dismantling Facility 365m East – Waste management centre 382m south East – Waste Transfer Station 408m East – Waste Transfer station
Licensed Waste Sites	0	7	8	133m east – Mirfield Mini Skips 226m east – Low Mills 226m east –M & B Waste 295m south east – Binditbikespares – Vehicle Depollution facility 304m east – Low Mills – House hold waste 353m east – Treatment Centre – Special treatment 396m east – Chemical Treatment Centre
Sites Determined as contaminated	0	0	1	422m south west – Dr Reddy's Laboratories – polluting the River Calder.
Environmental Permits, Incidents and Registers				
Part A(1) and IPPC Authorised Activities	0	0	2	394m east – Chemwaste Limited – Disposal or recovery of haz waste with capacity exceeding 10 tonnes per day. 496m south – Halterman/Dr Reddy's Laboratories – Pharmaceutical plant.
Part A(2) and Part B Activities and Enforcements	0	0	1	226m east – Shell Ravensthorpe, Unloading Petrol
COMAH & NIHHS Sites	0	0	1	422m south west – Dr Reddy's Laboratories – polluting the River Calder.
Industrial and Contaminative Premises				

	On-Site	0-250m	250-500m	Details
Fuel Sites	0	1	0	226m east – Shell Ravensthorpe, Unloading Petrol
Historical and contemporary industrial data	0	15	0	A mixture of telecoms, waste storage, vehicle servicing, and electrical features.

5.2 Environmentally Sensitive Areas

5.2.1 The sensitive land use map within the Groundsure Report indicates:

- The site is noted by the Groundsure Report to be located within an area of green belt.

6 UK CONTAMINATED LAND LEGISLATIVE FRAMEWORK

6.1 General

6.1.1 Given that the site is being assessed with the potential for future development, the most applicable appraisal relates to the requirements of the Planning Regime as described in the National Planning Policy Framework.

6.1.2 In order to proceed with an assessment of contamination issues it is essential that there is compliance with UK guidance as detailed in the on-line Land contamination: risk management (LCRM) guidance produced by the Environment Agency (June 2019). This can be found on the UK government website: https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks.

6.1.3 Part IIA of the Environmental Protection Act, 1990, which was enacted by Section 57 of the Environment Act 1995, and the associated Contaminated Land (England) Regulations 2000 (SI 2000/227), was introduced on 1 April 2000. It created a new statutory regime for the identification and remediation of land where contamination poses an unacceptable risk to human health and the environment. The guidance was subject to a review by DEFRA in 2012, and a revision was published.

6.1.4 Part IIA provides a statutory definition of contaminated land:

6.1.5 *"any land which appears to the Local Authority in whose area it is situated to be in such a condition by reason of substances in, on or under the land, that significant harm is being caused, or that there is a significant possibility of significant harm being caused, or that pollution of controlled waters is being or is likely to be caused".*

6.1.6 Controlled waters are considered to be all groundwaters, inland surface waters, and estuarine and coastal waters.

6.1.7 To determine whether land falls under the Part IIA definition of contaminated land, the site should be evaluated in the context of a risk-based framework. The assessment of contaminated land is typically a two-phase process, which is initially based on a qualitative assessment of the likelihood of complete pollution linkages, with a quantitative element that seeks to determine the degree and the significance of the harm. Land is only defined as 'Contaminated Land' if a "significant pollutant linkage" is present.

6.1.8 A pollutant linkage must comprise the following:

Source *- a contaminant at a concentration capable of causing adverse health or environmental effects.*

Receptor *- there must be a receptor (e.g. human, controlled waters, ecological, or property) present, which may be at risk of harm or impact from the source.*

Pathway *- there must be an exposure pathway through which the receptor comes into contact with the contamination source.*

6.1.9 Each of these elements can exist independently, but they create risk only when they are linked together, so that a particular contaminant affects a particular receptor, through a particular pathway.

6.1.10 The responsible authority then needs to consider whether the identified pollution linkage:

- is resulting in significant harm being caused to the receptor in the pollutant linkage;

- presents a significant possibility of significant harm being caused to that receptor;
- is resulting in the pollution of controlled waters, which constitute the receptor; or is likely to result in such pollution.

6.1.11 If a pollutant linkage is demonstrated, then the Part IIA legislation provides powers for remedial action to be enforced by the Local Authority in whose area the contaminated land is situated.

6.1.12 In addition, JNP Group has undertaken a preliminary risk assessment based on the probability of receptor exposure to the identified source and the consequences of such exposure.

6.1.13 Risk management, which can include site surfacing, formal management systems, legal requirements; is then considered to provide an overall residual risk. The categories of environmental risk used by JNP Group are given in the table that follows.

Table 6.1 Risk Matrix

Environmental Risks		
HIGH		Issues within this category likely to provide a significant cost or liability. Further detailed investigation may be required to clarify the risk.
MEDIUM		It is possible that issues within this category may provide a cost or liability. Further investigation may be required to clarify the risk.
LOW		It is unlikely that issues within this category will provide a significant cost or liability. Basic investigation may be required to clarify the risk.
NONE		No source – pathway – receptor linkage present.

7 CONCEPTUAL SITE MODEL AND PRELIMINARY RISK ASSESSMENT

7.1 General

7.1.1 This section uses information from all the data sources presented herein to provide a conceptual model and qualitative assessment of the potential risks posed to human health and environmental receptors from potential on-site and off-site sources of contamination. The assessment is presented as a 'source-pathway-receptor' model in accordance with Part IIA of the Environmental Protection Act 1990.

7.1.2 The conceptual site model has been developed assuming that the site will be redeveloped for residential housing with private gardens.

7.2 Potential Sources of Contamination

Potential On-Site Sources of Contamination

- During the site walkover, material that had the appearance of asbestos was noted on the stables roof in the western boundary of the site. The site also features numerous areas of fly tipping and building waste.
- From the earliest mapping the site was noted to feature a cottage in the south eastern area of the site. 1907 mapping indicates that the cottage previously denoted in the south eastern area of the site has been demolished.
- Four small buildings were denoted on 1951 mapping in the central western area of the site. These were removed by 1989 mapping.
- Heavy metals, hydrocarbons, and soil gas associated with limited made ground materials may be present as a result of previous phases of development including imported and site generated fill materials.
- In accordance with C733 guidance, any structure built, refurbished or modified during the Twentieth Century has the potential to contain asbestos containing materials (ACM). In addition, any demolition material either stockpiled or used as backfill on site also has the potential to contain asbestos containing materials (intact or broken up).
- Drainage runs including gullies are a potential source of contaminated material such as hydrocarbons and heavy metals.

Potential Off-Site Sources of Contamination

- The Cleckheaton Branch of the West Riding Union Railway was denoted to the immediate north of the site from the earliest mapping until 1974 mapping. This is a potential source of metals, and hydrocarbons.
- Form the earliest mapping a sandstone quarry was denoted 257m to the north of the site. By 1888 mapping the quarry was noted to be infilled.
- The material backfilled in this sandstone quarry is unknown, therefore, it is a potential source of hazardous land gas. However, due to the age of the fill, JNP Group considers the risk of ground borne gas generation to be very low.

- The Groundsure Report indicates an on-site historical landfill (the railway cutting) and a refuse tip 87 to the west. There is therefore a potential for ground gas generation close to (or just on) site.

7.3 Receptors

7.3.1 The site is to be redeveloped for residential housing with private gardens. In addition, the site overlies both superficial and bedrock aquifers of Secondary-A classification. The River Calder is close to the south of the site. The primary receptors, considered to be potentially at risk from any identified contamination are as follows:

Human Health

- Construction workers during the redevelopment phase;
- Residential end users.

Controlled Waters

- The Alluvium and Pennine Coal Measures beneath the site are classified as a Secondary-A Aquifer. JNP Group considers groundwater to be a sensitive receptor;
- The nearest controlled surface water is 36m to the south east of the site. It is considered to be a sensitive receptor due to its distance from the site, and because it is hydrologically downgradient of the site.

Ecological

- The site is not located within an environmentally designated sensitive area;
- Given the site setting, sensitive species are considered unlikely to be present at the site (subject to any ecological survey undertaken).

Property / Infrastructure

- Concrete vulnerability to aggressive ground conditions;
- Buildings from the build-up of gases with potential for explosion;
- Water supply pipework.

7.4 Pathways

7.4.1 Potential contaminant migration pathways considered relevant to the site are:

Human Health

- Ingestion of contaminated soils and dust particles;
- Direct physical contact with near surface soils and contaminated dust particles;
- Inhalation of wind-blown contaminated dust;
- Inhalation of vapours and gases, migrating vertically into the atmosphere;
- Inhalation of vapours and gases, migrating vertically into buildings and confined spaces;
- Consumption of vegetables cultivated in contaminated soils;
- Consumption of soil attached to vegetables cultivated in contaminated soils.

- Consumption of contaminated potable water.

Controlled Waters

- Leaching of contaminants in made ground / natural ground into groundwater;
- Lateral migration of contaminated groundwater into the River Calder;
- Vertical migration of contaminated shallow groundwater impacting deeper groundwater in the aquifer sequence;
- Run-off of site-derived contamination into the River Calder during construction.

Ecological

- Migration of contamination through groundwater and subsequent uptake by plant roots;
- Direct contact between ecological receptors and contaminated surface water;
- Direct contact between ecological receptors and contaminated soils;
- Ingestion of contaminated soils/surface waters by ecological receptors;
- Inhalation of vapours or wind-blown dust by ecological receptors.

Property

- Direct physical contact with near surface soils;
- Migration of vapours and gases into buildings and confined spaces.

7.5 Pollutant Linkages

7.5.1 A 'pollutant linkage' describes the relationship between a contaminant, a pathway and a receptor, a 'pollutant' being the contaminant in a pollutant linkage. A contaminant, pathway and receptor must all be present for a pollutant linkage to exist, which forms the basis for determination that a piece of land is Contaminated Land. Potential sources, pathways and receptors have been assessed. The following Tables summarise the significant pollutant linkages potentially active at the site.

Table 7.1 Potential Source-Pathway-Receptor Linkages for Human Health Risk Assessment

Source	Pathway	Receptor
Contaminated soils and waters	Ingestion of soil	On-site female child: 0 - 6 yrs old
		On-site construction worker
	Ingestion of household dust	On-site female child: 0 - 6 yrs old
	Ingestion of contaminated vegetables	On-site female child: 0 - 6 yrs old
	Ingestion of soil attached to vegetables	On-site female child: 0 - 6 yrs old
	Dermal contact	On-site female child: 0 - 6 yrs old
		On-site construction worker
	Dermal contact with household dust	On-site female child: 0 - 6 yrs old
	Inhalation of fugitive soil dust	On-site construction worker

		On-site female child: 0 - 6 yrs old
	Inhalation of fugitive household dust	On-site female child: 0 - 6 yrs old
	Inhalation of vapours in outdoor air	On-site female child: 0 - 6 yrs old
		On-site construction worker
	Inhalation of vapours in indoor air	On-site female child: 0 - 6 yrs old
	Consumption of contaminated potable water	On-site female child: 0 - 6 yrs old
Ground gas and landfill gas	Vertical and lateral migration	End users

Table 7.2 Potential Source Pathway Receptor Linkages for Controlled Waters Risk Assessment

Source	Pathway	Receptor
Contaminated soils	Leaching mechanisms	Groundwater stored in the Alluvium and Pennine Coal Measures
	Run-off during construction works	River Calder
Contaminated groundwater	Vertical migration	Groundwater stored in the Alluvium and Pennine Coal Measures
	Lateral and vertical migration (baseflow)	River Calder

Table 7.3 Potential Source-Pathway-Receptor Linkages for Ecological Risk Assessment

Source	Pathway	Receptor
Contaminated soils and waters	Migration of contamination through groundwater and subsequent uptake by plant roots;	Ecological receptors
	Direct contact between ecological receptors and contaminated surface water;	
	Direct contact between ecological receptors and contaminated soils;	
	Ingestion of contaminated soils/surface waters by ecological receptors;	
	Inhalation of vapours or wind-blown dust by ecological receptors.	
Ground gas and landfill gas	Inhalation of gases	

Table 7.4 Potential Source-Pathway-Receptor Linkages for Property Risk Assessment

Source	Pathway	Receptor
Contaminated soils	Contact with contaminated soils	Concrete
		Water supply pipe materials
Ground gas and landfill gas	Vertical and lateral migration and accumulation in voids	Residential housing / Commercial properties

7.6 Preliminary Risk Assessment

7.6.1 From the information obtained from the desk study JNP Group has undertaken a preliminary risk assessment.

Table 7.5 Preliminary Risk Assessment

Risk Receptor	Risk		Justification
HUMAN HEALTH	MEDIUM		Initially undeveloped land with a cottage in the south eastern area of the site. This was noted to be demolished by 1907 mapping. 4No. small buildings were noted on 1951 mapping. These were removed by 1989. Railway track to the immediate north of the site, possibly infilled. Refuse tip to west. Historical sandstone quarry 257m north of the site. Multiple areas of fly tipping and a potentially asbestos roof were noted during the site walkover.
GROUNDWATER	MEDIUM		The site is located on Secondary A Aquifers.
SURFACE WATER	MEDIUM		The nearest surface water course is 36m south east of the site and is downgradient from the site.
ECOLOGY	NONE		Based on the assumption that there are no sensitive/ protected species on site (subject to any ecological survey undertaken).
PROPERTY & INFRASTRUCURE	MEDIUM		Initially undeveloped land with a cottage in the south eastern area of the site. This was noted to be demolished by 1907 mapping. 4No. small buildings were noted on 1951 mapping. These being removed by 1989 mapping. Railway track to the immediate north of the site possibly infilled. Refuse tip to west. Historical sandstone quarry 257m north of the site.

7.6.2 In line with BS ISO 18400-202:2018 based on the conceptual site model as above the site is considered to be probably contaminated.

7.6.3 Based on information contained within desk study, it is the opinion of JNP Group that the potential site conditions provide a LOW to MEDIUM environmental risk and hence further investigation and assessment is required.

8 CONCLUSIONS OF DESK STUDY / PREVIOUS REPORTS & RECOMMENDATIONS

8.1 Conclusions

8.1.1 The desk-based research has identified that:

- The geological succession below the site comprises Alluvium in the south eastern area of the site overlying the Pennine Coal Measures.
- It identifies that the site has a current non-contaminative usage as open rough grassland.
- During the site walkover, a material that had the appearance of asbestos cement sheeting was noted on the stables roof in the western boundary of the site. The site also features numerous areas of fly tipping and building waste.
- From the earliest mapping the site was noted to feature a cottage in the south eastern area of the site. 1907 mapping indicates that the cottage was demolished.
- Four small buildings were denoted on 1951 mapping in the central western area of the site. These were removed by 1989.
- Heavy metals, hydrocarbons, and soil gas associated with limited made ground materials may be present as a result of previous phases of development including imported and site generated fill materials are potentially present at the site.
- In accordance with C733 guidance, any structure built, refurbished or modified during the Twentieth Century has the potential to contain asbestos containing materials (ACM). In addition, any demolition material either stockpiled or used as backfill on site also has the potential to contain asbestos containing materials (intact or broken up).
- Drainage runs including gullies are a potential source of contaminated material such as hydrocarbons and heavy metals.
- The Cleckheaton Branch of the West Riding Union Railway was denoted to the immediate north of the site from the earliest mapping until 1974 mapping. This is a potential source of metals and hydrocarbons.
- Form the earliest mapping a sandstone quarry was denoted 257m to the north of the site. By 1888 mapping the quarry was noted to be infilled.
- The material backfilled in this sandstone quarry is unknown, therefore, it is a potential source of hazardous land gas. However, due to the age of the fill and the distance from the site, JNP Group considers the risk of ground borne gas generation to be very low.
- The Groundsure Report indicates an on-site historical landfill (the railway cutting) and a refuse tip 87 to the west. There is therefore a potential for ground gas generation close to (or just on) site.
- A low UXO risk has been identified at the site.

8.1.2 The Groundsure Report states that the Health Protection Agency identified that in the northern, western and south western areas of the site, between 1% and 3% of homes could be above the action level. In the rest of the site, the report indicated less than 1% of

properties would be affected. The Groundsure Report indicates that both of the levels do not require radon protection measures.

8.1.3 According to the Groundsure Report, the south eastern area of the site lies in an area of low flooding risk, whilst the central southern boundary of the site is designated medium. No designation is noted for the rest of the site. Reference should be made to the FRA report for further details.

8.1.4 Based on information contained within desk study, it is the opinion of JNP Group that the potential site conditions provide a LOW to MEDIUM environmental risk and hence further investigation and assessment is required.

8.2 Recommendations

8.2.1 Based on the conclusions from the desk study and the intended redevelopment of the site. JNP Group recommends that the following intrusive works are undertaken:

- Chemical testing of made ground and natural soils beneath the site. This testing should concentrate on areas in proximity to the previous locations of the demolished buildings, the current stable blocks, and the historical railway line in the northern boundary of the site. These locations are considered the most likely sources of contamination. Testing should comprise asbestos, metals, Total Petroleum Hydrocarbons, Polycyclic Aromatic Hydrocarbons, benzene, toluene, ethylbenzene, xylene and MTBE, Soil Organic Matter (SOM) and pH;
- Ground gas monitoring to determine the risk from gas generated in filled areas and from mine gas. .
- Testing of the soils to identify volume change potential of any cohesive material, concrete classification, and design CBR values;
- It is strongly recommended that the investigation described above should be undertaken in conjunction with the investigation recommended in the previous JNP Group Coal Mining Risk Assessment Report included below;
- It is recommended that a rotary borehole investigation is undertaken in order to determine if historic workings have taken place in the Blocking Coal beneath the site. At this stage we would recommend that a minimum of 4No. boreholes are drilled on site to an average depth of 10m. Given the shallow anticipated depth of the coal on the western boundary a trial pit / window sample investigation may be appropriate in this area.
- The installation of gas and groundwater monitoring standpipes.
- The geotechnical issues of compressive deposits, collapsible soils and running sands associated with the Alluvium in the south eastern corner of the site are investigation.

8.2.2 JNP Group recommend that the scope of the intrusive works is agreed with the Regulatory Authorities as they may have particular requirements that need to be taken into account.

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FIGURES / DRAWINGS

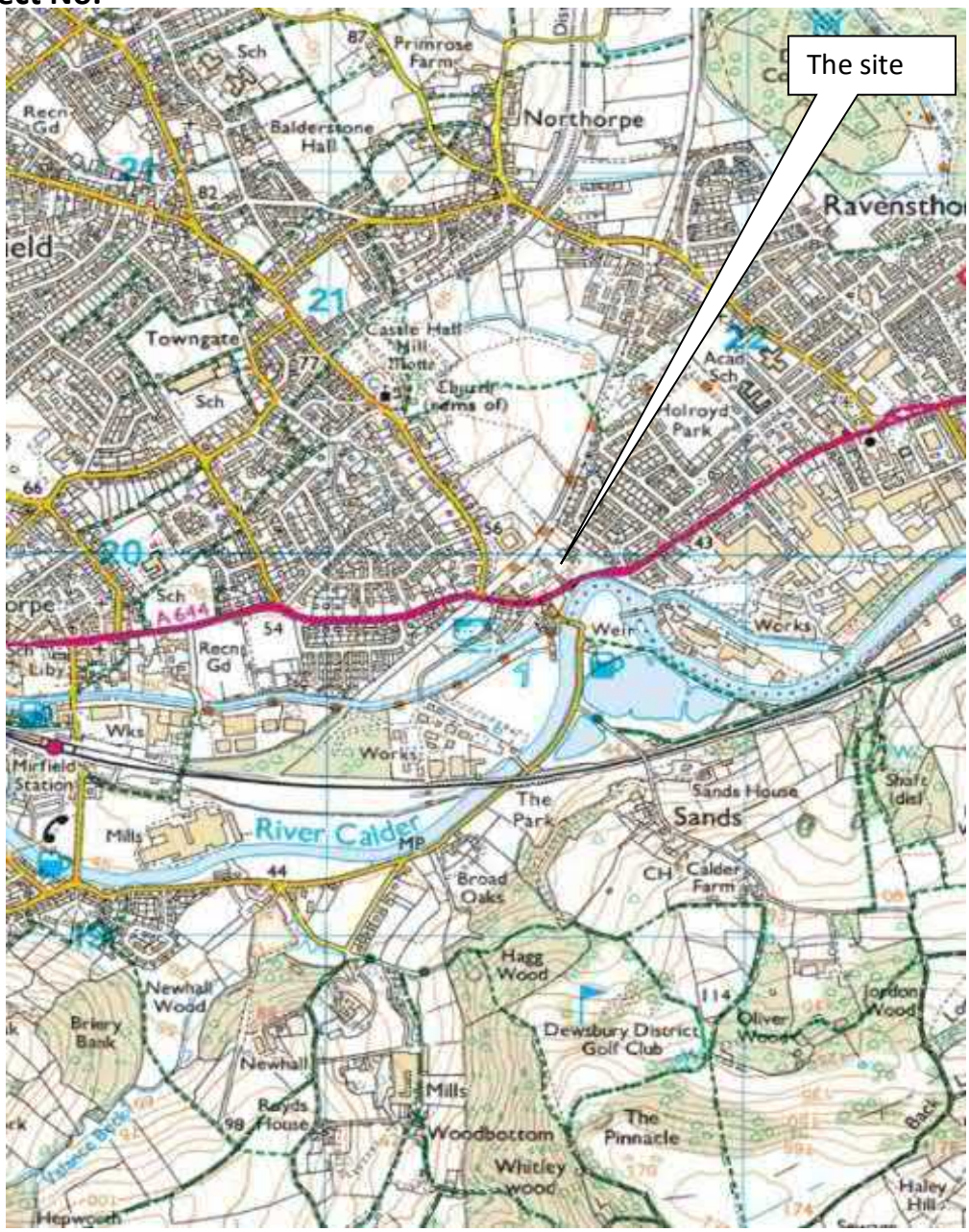
Figure 1

Site Location Plan

Project:

Land at 894 Huddersfield Riad, Mirfield

Project No: S11674



APPENDIX A: LIMITATIONS

Introduction

This report is confidential and has been prepared solely for the benefit of the client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from JNP Group; a charge may be levied against such approval. JNP Group accepts no responsibility or liability for the consequences of this document being used for any purpose or project other than for which it was commissioned, and: this document to any third party with whom and agreement has not been executed.

Any comments given within this report are based on the understanding that the proposed works to be undertaken will be as described in the introduction and the information referred to and provided by others and will be assumed to be correct and will not have been checked by JNP Group and JNP Group will not accept any liability or responsibility for any inaccuracy in such information.

Any deviation from the recommendations or conclusions contained in this report should be referred to JNP Group in writing for comment and JNP Group reserve the right to reconsider their recommendations and conclusions contained within. JNP Group will not accept any liability or responsibility for any changes or deviations from the recommendations noted in this report without prior consultation and our full approval.

The details contained within this report reflect the site conditions prevailing at the time of investigation. JNP Group warrants the accuracy of this report up to and including that date. Additional information, improved practice or changes in legislation may necessitate this report having to be reviewed in whole or in part after that date. If necessary, this report should be referred back to JNP Group for re-assessment and, if necessary, re-appraisal.

This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report. Whilst this report and the opinion made herein are correct to the best of JNP Group' belief, JNP Group cannot guarantee the accuracy or completeness of any information provided by third parties.

The report represents the finding and opinions of experience geotechnical and geo-environmental engineers. JNP Group does not provide legal advice and the advice of lawyers may also be required.

JNP Group has provided advice and made recommendations based on the findings of the work undertaken, however this is subject to the approval / acceptance by the relevant Regulatory Authorities.

Objectives

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the site. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, JNP Group reserves the right to review such information and, if warranted, to modify the opinions accordingly. It should be noted that any risks identified in this report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

Phase II Intrusive Investigations

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, and ground and groundwater conditions to allow a reasonable risk assessment to be made.

Where intrusive investigations have been undertaken, they have been designed to provide a reasonable level of assurance on the conditions. Given the discrete nature sampling, no investigation technique is capable of identifying all conditions present in all areas. The number of sampling points and the methods of sampling and testing do not preclude the existence of localised “hotspots” of contamination where concentrations may be significantly higher than those actually encountered. The risk assessment and opinions provided, inter alia, take into consideration currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

The objectives of the investigation have been linked to establishing the risks associated with potential human targets, building materials, the environment (including adjacent land), and to surface and ground water. The amount of exploratory work and chemical testing undertaken has necessarily been restricted by the short timescale available, and the locations of exploratory holes have been restricted to areas unoccupied by the building(s) on the site and by buried services.

Gas and groundwater levels may vary from those reported due to seasonal, or other effects.

Although preliminary comment has have been provided by JNP Group regarding UXO and Invasive Species, JNP Group not experts in these and as such specialist advice should be sought regarding the presence of UXO and invasive species at the site.

APPENDIX B: THIRD PARTY DRAWINGS

Ref. Description Rev. Date

KEY:

- New Tree Planting
- Site Boundary
- Flood Zone Areas
- Root Protection Areas
- Landscape Planting

NOTES

All dimensions must be checked on site and not scaled from this drawing, except for planning.

Any discrepancy found between drawings or details should be reported to DesignHouse as soon as possible where the correct information will be given.

ACCOMMODATION: (Internal Areas)

DETACHED DWELLINGS:

6No. Four bedroom detached houses (168.45m2) 4B/8P
- 1No. with 4 off street parking spaces
- 2No. with 3 off street parking spaces and
- 3No. with 2 off street parking spaces

5No. Three bedroom detached houses (180.92m2) 3B/6P
With 2No. on street parking bays

Plus additional 8No. visitor parking bays (1.4 bays per dwelling)

Original drawing size A0

Rev.	Date	Revision
A		

DesignHouse
74 Victoria Street
Dunstable
Bedfordshire
LU6 3BA
Phone/Fax: 07860 798939
e-mail :- mail@kevinpatrick.co.uk

Client
Leyton Homes Ltd

Job Title
New Residential development
At Land Adjacent To:-
894 Huddersfield Road
Mirfield
WF14 9HS

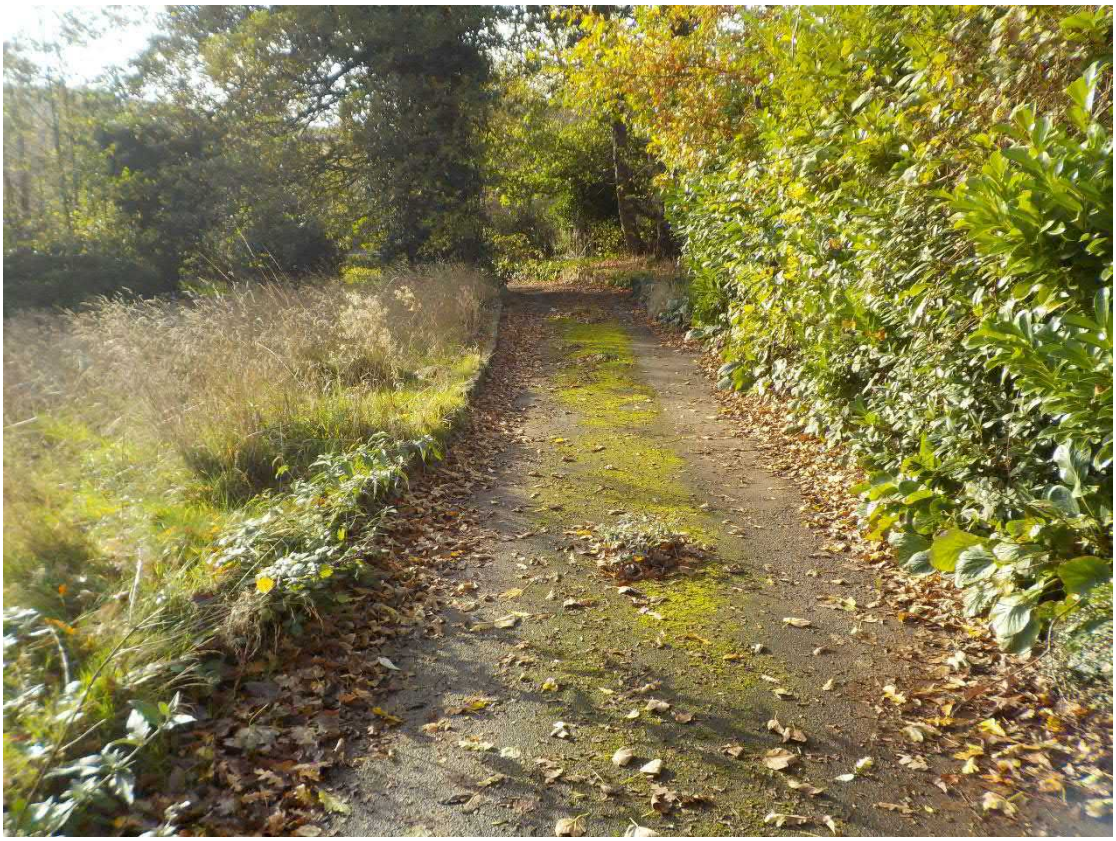
Drawing Title
Proposed Site Plan
Showing Complete Site

Scale 1:200 @ A0

Date Apr 2022 | Drawn By KJP

Dwg No. 21/6320/10 | Rev.

APPENDIX C: PHOTO DOCUMENT



Photograph 1 Looking south west towards Huddersfield Road

Photograph 2 Commercial development to the west of the site.

Photograph 3 Open rough grassland area in the south eastern part of the site

Photograph 4 Residential property in the eastern boundary of the site.

Photograph 5 Area of fly tipping in the eastern area of the site

Photograph 6 Fly tipping and barrel in north western area of the site

Photograph 7 Showing derelict stables in the western area of the site

Photograph 8 Potential asbestos roofing material

APPENDIX D: GROUNDSURE REPORT

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

894, HUDDERSFIELD ROAD, RAVENSTHORPE, DEWSBURY, WF14 9HS

Order Details

Date: 07/11/2022

Your ref: S11674_894_Huddersfield_Road_G1774

Our Ref: GS-9181555

Site Details

Location: 421584 419960

Area: 0.78 ha

Authority: Kirklees Council

Summary of findings p. 2

OS MasterMap site plan p.12

Aerial image p. 8

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	3	4	15	32	-
16	1.2	Historical tanks	0	0	5	12	-
17	1.3	Historical energy features	0	2	10	7	-
18	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	7	1	-
19	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
20	2.1	Historical industrial land uses	7	4	22	44	-
23	2.2	Historical tanks	0	0	11	23	-
25	2.3	Historical energy features	0	3	17	14	-
26	2.4	Historical petrol stations	0	0	0	0	-
27	2.5	Historical garages	0	0	10	1	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
28	3.1	Active or recent landfill	0	0	0	0	-
28	3.2	Historical landfill (BGS records)	0	0	0	0	-
29	3.3	Historical landfill (LA/mapping records)	0	0	1	0	-
29	3.4	Historical landfill (EA/NRW records)	1	0	1	0	-
30	3.5	Historical waste sites	0	0	0	7	-
31	3.6	Licensed waste sites	0	0	7	8	-
37	3.7	Waste exemptions	0	0	7	26	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
40	4.1	Recent industrial land uses	0	1	14	-	-
42	4.2	Current or recent petrol stations	0	0	1	0	-
42	4.3	Electricity cables	0	0	0	0	-
42	4.4	Gas pipelines	0	0	0	0	-
42	4.5	Sites determined as Contaminated Land	0	0	0	1	-

43	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	1	-
43	4.7	Regulated explosive sites	0	0	0	0	-
43	4.8	Hazardous substance storage/usage	0	0	0	0	-
43	4.9	Historical licensed industrial activities (IPC)	0	0	0	24	-
46	4.10	Licensed industrial activities (Part A(1))	0	0	0	49	-
55	4.11	Licensed pollutant release (Part A(2)/B)	0	0	1	0	-
55	4.12	Radioactive Substance Authorisations	0	0	0	0	-
55	4.13	Licensed Discharges to controlled waters	0	2	5	1	-
57	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
57	4.15	Pollutant release to public sewer	0	0	0	2	-
57	4.16	List 1 Dangerous Substances	0	0	0	2	-
58	4.17	List 2 Dangerous Substances	0	0	0	1	-
58	4.18	Pollution Incidents (EA/NRW)	0	0	1	8	-
59	4.19	Pollution inventory substances	0	0	0	1	-
60	4.20	Pollution inventory waste transfers	0	0	0	2	-
76	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
77	5.1	Superficial aquifer	Identified (within 500m)				
79	5.2	Bedrock aquifer	Identified (within 500m)				
81	5.3	Groundwater vulnerability	Identified (within 50m)				
82	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
82	5.5	Groundwater vulnerability- local information	None (within 0m)				
84	5.6	Groundwater abstractions	0	2	0	6	14
89	5.7	Surface water abstractions	0	0	0	0	7
91	5.8	Potable abstractions	0	0	0	0	0
91	5.9	Source Protection Zones	0	0	0	0	-
92	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
93	6.1	Water Network (OS MasterMap)	0	1	14	-	-

95	6.2	Surface water features	0	1	4	-	-
95	6.3	WFD Surface water body catchments	1	-	-	-	-
95	6.4	WFD Surface water bodies	0	1	1	-	-
96	6.5	WFD Groundwater bodies	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
97	7.1	Risk of flooding from rivers and the sea	High (within 50m)				
98	7.2	Historical Flood Events	0	3	5	-	-
99	7.3	Flood Defences	0	0	0	-	-
99	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
99	7.5	Flood Storage Areas	0	0	3	-	-
100	7.6	Flood Zone 2	Identified (within 50m)				
101	7.7	Flood Zone 3	Identified (within 50m)				

Page	Section	Surface water flooding	
102	8.1	Surface water flooding	1 in 30 year, Greater than 1.0m (within 50m)

Page	Section	Groundwater flooding	
104	9.1	Groundwater flooding	Low (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
105	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
106	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
106	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
106	10.4	Special Protection Areas (SPA)	0	0	0	0	0
106	10.5	National Nature Reserves (NNR)	0	0	0	0	0
107	10.6	Local Nature Reserves (LNR)	0	0	0	0	1
107	10.7	Designated Ancient Woodland	0	0	0	0	6
107	10.8	Biosphere Reserves	0	0	0	0	0
108	10.9	Forest Parks	0	0	0	0	0
108	10.10	Marine Conservation Zones	0	0	0	0	0
108	10.11	Green Belt	1	0	1	0	0
108	10.12	Proposed Ramsar sites	0	0	0	0	0

109	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
109	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
109	10.15	Nitrate Sensitive Areas	0	0	0	0	0
109	**10.16**	**Nitrate Vulnerable Zones**	0	0	0	0	1
111	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
112	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
113	11.1	World Heritage Sites	0	0	0	-	-
114	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
114	11.3	National Parks	0	0	0	-	-
114	**11.4**	**Listed Buildings**	0	0	3	-	-
115	11.5	Conservation Areas	0	0	0	-	-
115	11.6	Scheduled Ancient Monuments	0	0	0	-	-
115	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
116	**12.1**	**Agricultural Land Classification**	Grade 3a (within 250m)				
117	12.2	Open Access Land	0	0	0	-	-
117	12.3	Tree Felling Licences	0	0	0	-	-
117	12.4	Environmental Stewardship Schemes	0	0	0	-	-
117	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
118	**13.1**	**Priority Habitat Inventory**	0	0	5	-	-
119	13.2	Habitat Networks	0	0	0	-	-
119	**13.3**	**Open Mosaic Habitat**	0	1	0	-	-
119	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
120	**14.1**	**10k Availability**	Identified (within 500m)				
121	**14.2**	**Artificial and made ground (10k)**	0	2	3	7	-
123	**14.3**	**Superficial geology (10k)**	2	0	1	0	-

124	14.4	Landslip (10k)	0	0	0	0	-
125	**14.5**	**Bedrock geology (10k)**	2	3	2	12	-
126	**14.6**	**Bedrock faults and other linear features (10k)**	0	2	2	18	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
128	**15.1**	**50k Availability**	Identified (within 500m)				
129	**15.2**	**Artificial and made ground (50k)**	0	0	1	2	-
130	15.3	Artificial ground permeability (50k)	0	0	-	-	-
131	**15.4**	**Superficial geology (50k)**	1	0	1	0	-
132	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
132	15.6	Landslip (50k)	0	0	0	0	-
132	15.7	Landslip permeability (50k)	None (within 50m)				
133	**15.8**	**Bedrock geology (50k)**	2	2	1	9	-
134	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
135	**15.10**	**Bedrock faults and other linear features (50k)**	1	1	2	11	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
136	**16.1**	**BGS Boreholes**	0	0	1	-	-
Page	Section	Natural ground subsidence					
137	**17.1**	**Shrink swell clays**	Very low (within 50m)				
139	**17.2**	**Running sands**	Low (within 50m)				
141	**17.3**	**Compressible deposits**	Moderate (within 50m)				
143	**17.4**	**Collapsible deposits**	Very low (within 50m)				
144	**17.5**	**Landslides**	Low (within 50m)				
146	**17.6**	**Ground dissolution of soluble rocks**	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
148	18.1	Natural cavities	0	0	0	0	-
149	**18.2**	**BritPits**	0	0	0	1	-
149	**18.3**	**Surface ground workings**	7	4	16	-	-
150	**18.4**	**Underground workings**	0	0	0	4	14
151	**18.5**	**Historical Mineral Planning Areas**	0	0	1	1	-

152	18.6	Non-coal mining	0	0	0	0	0
152	18.7	Mining cavities	0	0	0	0	0
152	18.8	JPB mining areas	None (within 0m)				
152	**18.9**	**Coal mining**	Identified (within 0m)				
153	18.10	Brine areas	None (within 0m)				
153	18.11	Gypsum areas	None (within 0m)				
153	18.12	Tin mining	None (within 0m)				
153	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
154	**19.1**	**Radon**	Between 1% and 3% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
156	**20.1**	**BGS Estimated Background Soil Chemistry**	10	6	-	-	-
157	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
157	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
158	21.1	Underground railways (London)	0	0	0	-	-
158	21.2	Underground railways (Non-London)	0	0	0	-	-
159	21.3	Railway tunnels	0	0	0	-	-
159	21.4	Historical railway and tunnel features	0	0	0	-	-
159	21.5	Royal Mail tunnels	0	0	0	-	-
159	**21.6**	**Historical railways**	0	1	1	-	-
160	21.7	Railways	0	0	0	-	-
160	21.8	Crossrail 1	0	0	0	0	-
160	21.9	Crossrail 2	0	0	0	0	-
160	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 30/05/2021

Site Area: 0.78ha

Recent site history - 2018 aerial photograph

Capture Date: 01/07/2018

Site Area: 0.78ha

Recent site history - 2012 aerial photograph

Capture Date: 26/03/2012

Site Area: 0.78ha

Recent site history - 1999 aerial photograph

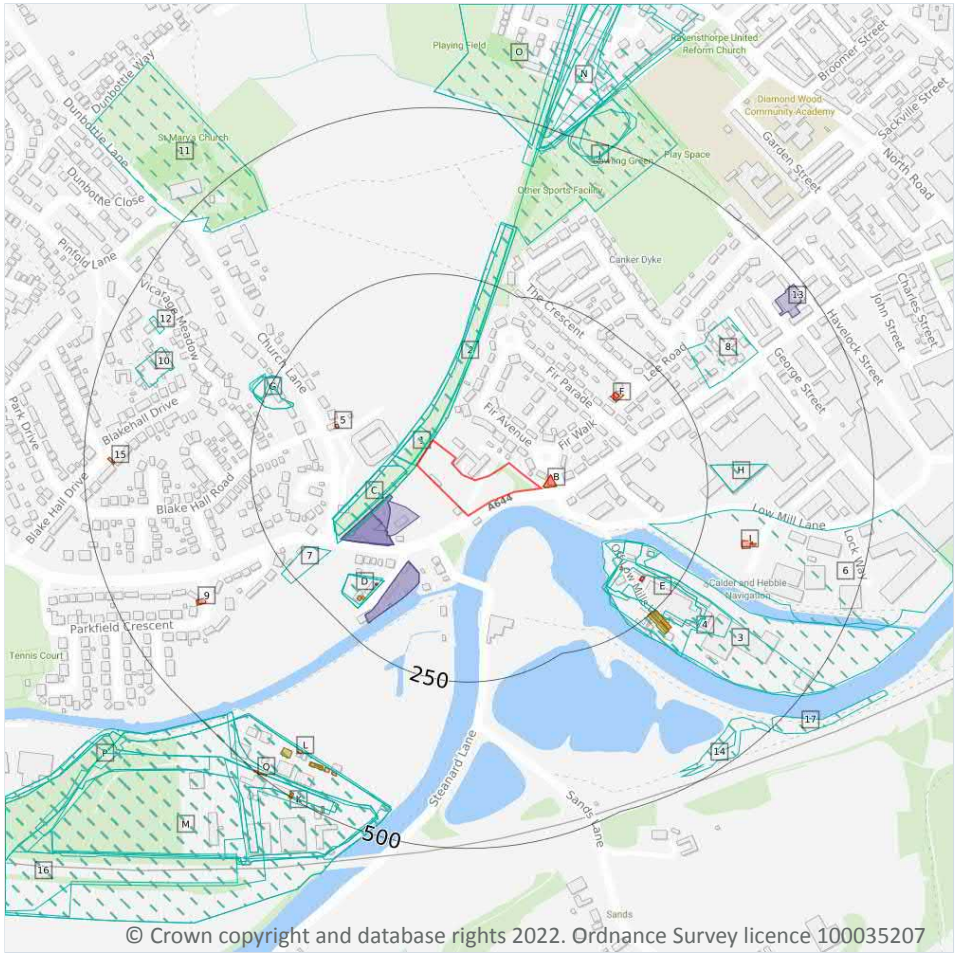
Capture Date: 10/07/1999

Site Area: 0.78ha

OS MasterMap site plan

Site Area: 0.78ha

1 Past land use



1.1 Historical industrial land uses

Records within 500m	54

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
1	**On site**	**Cuttings**	**1967 - 1981**	**1473757**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Cuttings**	**1948**	**1502720**
A	**On site**	**Cuttings**	**1892 - 1931**	**1542613**
2	3m NW	Cuttings	1955	1497410
A	6m NW	Cuttings	1938	1495761
C	17m W	Cuttings	1966	1482996
C	17m W	Cuttings	1951	1528226
3	122m SE	Unspecified Works	1982 - 1993	1534758
4	127m SE	Unspecified Mills	1951 - 1966	1485882
E	149m E	Unspecified Mills	1948	1480542
E	149m E	Unspecified Mills	1931	1555349
D	157m SW	Pumping Station	1938	1524674
D	158m SW	Pumping Station	1948	1478750
D	158m SW	Pumping Station	1905 - 1931	1524602
E	163m SE	Unspecified Mills	1938	1487966
6	171m E	Unspecified Works	1982 - 1993	1491489
E	172m SE	Unspecified Mills	1892	1526094
7	182m SW	Cuttings	1892 - 1905	1471292
E	187m E	Chimney	1966	1448233
G	205m NW	Unspecified Pit	1892 - 1931	1483229
G	205m NW	Unspecified Pit	1948	1488548
G	243m NW	Unspecified Pit	1938	1512795
G	252m W	Unspecified Pit	1955	1542973
H	256m E	Unspecified Warehouse	1982	1534185
H	256m E	Unspecified Warehouse	1993	1534730
8	294m E	Unspecified Malthouse	1892	1436351
J	326m N	Colliery	1948	1531098
10	392m W	Nursery	1967	1439934
11	426m NW	Grave Yard	1892	1428170

ID	Location	Land use	Dates present	Group ID
K	429m SW	Unspecified Works	1982 - 1993	1547820
12	431m NW	Nursery	1974	1439933
M	432m SW	Railway Sidings	1966	1458282
M	432m SW	Railway Sidings	1965	1458283
M	432m SW	Chemical Works	1966	1484877
N	438m N	Railway Sidings	1938	1480613
14	450m SE	Sand Pit	1892 - 1905	1520940
M	459m SW	Railway Sidings	1951	1472841
M	459m SW	Chemical Works	1951	1517305
N	460m N	Colliery	1892 - 1905	1500005
J	464m N	Refuse Heap	1955	1516431
N	464m N	Colliery	1931	1534984
M	465m S	Chemical Works	1931 - 1948	1552476
N	468m N	Colliery	1938	1485713
O	468m N	Unspecified Mills	1892 - 1931	1513594
O	468m N	Unspecified Mills	1948	1513901
N	471m N	Railway Sidings	1931	1458512
J	475m N	Refuse Heap	1931 - 1948	1474526
J	475m N	Unspecified Heap	1967 - 1974	1459186
P	475m SW	Railway Sidings	1948	1528317
P	475m SW	Railway Sidings	1931	1549129
16	476m SW	Railway Sidings	1938	1493011
N	484m N	Railway Sidings	1905	1500503
N	484m N	Railway Sidings	1892	1522697
17	489m SE	Railway Sidings	1905	1409298

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	17

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
E	167m SE	Unspecified Tank	1954	247823
D	197m SW	Tanks	1954 - 1974	236840
D	199m SW	Tanks	1907 - 1933	241544
E	249m SE	Tanks	1907 - 1954	237124
E	249m SE	Tanks	1922	237861
E	252m SE	Tanks	1954	248213
L	432m SW	Unspecified Tank	1989 - 1993	237470
L	434m SW	Tanks	1989 - 1993	233684
L	435m SW	Tanks	1989	241140
L	436m SW	Tanks	1993	247831
L	442m SW	Tanks	1989 - 1993	243745
K	488m SW	Tanks	1954	235111
K	493m SW	Unspecified Tank	1989	244405
K	493m SW	Unspecified Tank	1993	233443
Q	493m SW	Tanks	1954	237566
Q	498m SW	Tanks	1954 - 1967	246165
K	499m SW	Unspecified Tank	1989	233452

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	19

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
B	4m E	Electricity Substation	1954 - 1984	141785
B	4m E	Electricity Substation	1954	141646
5	130m W	Electricity Substation	1975 - 1994	137779
D	168m SW	Electricity Substation	1967	132929
D	168m SW	Electricity Substation	1974	132933
D	168m SW	Electricity Substation	1993	133239
D	170m SW	Electricity Substation	1989	132330
D	170m SW	Electricity Substation	1989	133677
F	172m NE	Electricity Substation	1994	137432
F	176m NE	Electricity Substation	1955 - 1967	145265
E	201m SE	Electricity Substation	1984 - 1989	143616
E	201m SE	Electricity Substation	1954 - 1997	145188
I	311m E	Electricity Substation	1984 - 1989	138605
I	325m E	Electricity Substation	1997	133389
I	327m E	Electricity Substation	1996	132694
I	327m E	Electricity Substation	1989	132603
9	377m SW	Electricity Substation	1967 - 1993	145586
L	435m SW	Electricity Substation	1989 - 1993	142141
15	454m W	Electricity Substation	1975 - 1994	146342

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	8

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'.

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

ID	Location	Land use	Dates present	Group ID
C	52m SW	Garage	1993	44062
C	59m W	Garage	1954	42056
C	60m W	Garage	1954	43583
C	98m SW	Garage	1989	45005
C	98m W	Garage	1967 - 1974	46355
D	111m SW	Maintenance Depot	1974	44113
D	112m SW	Maintenance Depot	1989	44759
13	444m NE	Garage	1996	41102

This data is sourced from Ordnance Survey / Groundsure.

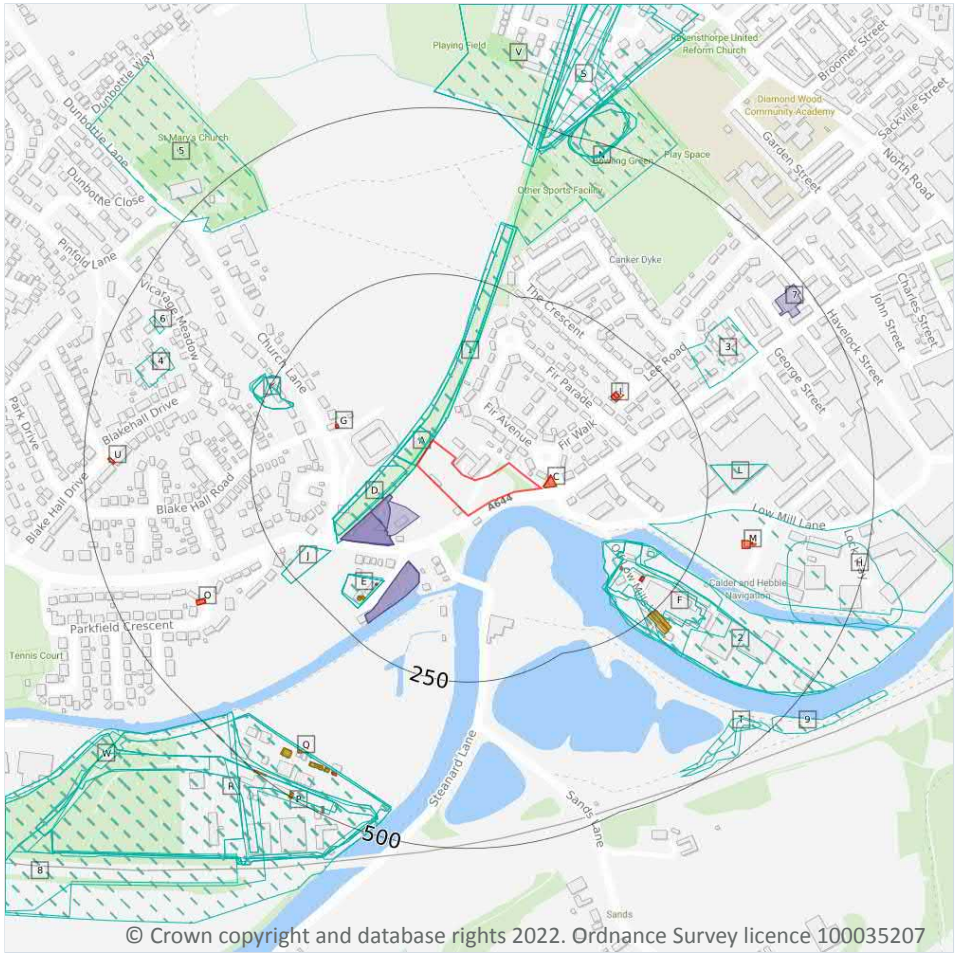
1.6 Historical military land

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

Historical garages

2.1 Historical industrial land uses

Records within 500m	77

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 20**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Cuttings**	**1981**	**1473757**
A	**On site**	**Cuttings**	**1974**	**1473757**
A	**On site**	**Cuttings**	**1967**	**1473757**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Cuttings**	**1948**	**1502720**
B	**On site**	**Cuttings**	**1905**	**1542613**
B	**On site**	**Cuttings**	**1892**	**1542613**
B	**On site**	**Cuttings**	**1931**	**1542613**
1	3m NW	Cuttings	1955	1497410
B	6m NW	Cuttings	1938	1495761
D	17m W	Cuttings	1966	1482996
D	17m W	Cuttings	1951	1528226
2	122m SE	Unspecified Works	1982	1534758
F	123m SE	Unspecified Works	1993	1534758
F	127m SE	Unspecified Mills	1966	1485882
F	149m E	Unspecified Mills	1948	1480542
F	149m E	Unspecified Mills	1931	1555349
F	149m E	Unspecified Mills	1951	1485882
E	157m SW	Pumping Station	1938	1524674
E	158m SW	Pumping Station	1948	1478750
E	158m SW	Pumping Station	1905	1524602
E	158m SW	Pumping Station	1931	1524602
F	163m SE	Unspecified Mills	1938	1487966
H	171m E	Unspecified Works	1982	1491489
F	172m SE	Unspecified Mills	1892	1526094
J	182m SW	Cuttings	1905	1471292
J	182m SW	Cuttings	1892	1471292
F	187m E	Chimney	1966	1448233
K	205m NW	Unspecified Pit	1948	1488548
K	205m NW	Unspecified Pit	1905	1483229
K	205m NW	Unspecified Pit	1892	1483229
K	205m NW	Unspecified Pit	1931	1483229

ID	Location	Land Use	Date	Group ID
K	243m NW	Unspecified Pit	1938	1512795
K	243m NW	Unspecified Pit	1938	1512795
K	252m W	Unspecified Pit	1955	1542973
L	256m E	Unspecified Warehouse	1993	1534730
L	256m E	Unspecified Warehouse	1982	1534185
3	294m E	Unspecified Malthouse	1892	1436351
N	326m N	Colliery	1948	1531098
H	384m E	Unspecified Works	1993	1491489
4	392m W	Nursery	1967	1439934
5	426m NW	Grave Yard	1892	1428170
P	429m SW	Unspecified Works	1993	1547820
P	429m SW	Unspecified Works	1982	1547820
6	431m NW	Nursery	1974	1439933
R	432m SW	Chemical Works	1966	1484877
R	432m SW	Railway Sidings	1966	1458282
S	438m N	Railway Sidings	1938	1480613
T	450m SE	Sand Pit	1905	1520940
T	459m SE	Sand Pit	1892	1520940
R	459m SW	Railway Sidings	1951	1472841
R	459m SW	Chemical Works	1951	1517305
S	460m N	Colliery	1905	1500005
S	460m N	Colliery	1892	1500005
N	464m N	Refuse Heap	1955	1516431
S	464m N	Colliery	1931	1534984
R	465m S	Chemical Works	1938	1552476
S	468m N	Colliery	1938	1485713
S	468m N	Colliery	1938	1485713
V	468m N	Unspecified Mills	1948	1513901

ID	Location	Land Use	Date	Group ID
V	468m N	Unspecified Mills	1905	1513594
V	468m N	Unspecified Mills	1892	1513594
V	468m N	Unspecified Mills	1931	1513594
S	471m N	Railway Sidings	1931	1458512
R	473m S	Chemical Works	1948	1552476
R	473m S	Chemical Works	1931	1552476
N	475m N	Refuse Heap	1948	1474526
N	475m N	Refuse Heap	1931	1474526
N	475m N	Unspecified Heap	1974	1459186
N	475m N	Unspecified Heap	1967	1459186
W	475m SW	Railway Sidings	1948	1528317
W	475m SW	Railway Sidings	1931	1549129
N	476m N	Refuse Heap	1938	1474526
N	476m N	Refuse Heap	1938	1474526
8	476m SW	Railway Sidings	1938	1493011
S	484m N	Railway Sidings	1905	1500503
S	484m N	Railway Sidings	1892	1522697
9	489m SE	Railway Sidings	1905	1409298

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**34**

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 20**

ID	Location	Land Use	Date	Group ID
F	167m SE	Unspecified Tank	1954	247823
F	168m SE	Unspecified Tank	1954	247823

ID	Location	Land Use	Date	Group ID
E	197m SW	Tanks	1954	236840
E	197m SW	Tanks	1954	236840
E	197m SW	Tanks	1967	236840
E	197m SW	Tanks	1974	236840
E	199m SW	Tanks	1907	241544
E	200m SW	Tanks	1933	241544
E	202m SW	Tanks	1922	241544
F	249m SE	Tanks	1907	237124
F	249m SE	Tanks	1922	237861
F	251m SE	Tanks	1954	237124
F	252m SE	Tanks	1954	248213
Q	432m SW	Unspecified Tank	1989	237470
Q	432m SW	Unspecified Tank	1989	237470
Q	433m SW	Unspecified Tank	1993	237470
Q	434m SW	Tanks	1989	233684
Q	434m SW	Tanks	1989	233684
Q	435m SW	Tanks	1993	233684
Q	435m SW	Tanks	1989	241140
Q	435m SW	Tanks	1989	241140
Q	436m SW	Tanks	1993	247831
Q	442m SW	Tanks	1989	243745
Q	442m SW	Tanks	1989	243745
Q	443m SW	Tanks	1993	243745
P	488m SW	Tanks	1954	235111
P	488m SW	Tanks	1954	235111
P	493m SW	Unspecified Tank	1989	244405
P	493m SW	Unspecified Tank	1989	244405
P	493m SW	Unspecified Tank	1993	233443

ID	Location	Land Use	Date	Group ID
Q	493m SW	Tanks	1954	237566
Q	498m SW	Tanks	1954	246165
Q	498m SW	Tanks	1967	246165
P	499m SW	Unspecified Tank	1989	233452

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**34**

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 20**

ID	Location	Land Use	Date	Group ID
C	4m E	Electricity Substation	1954	141785
C	4m E	Electricity Substation	1954	141646
C	4m E	Electricity Substation	1984	141785
G	130m W	Electricity Substation	1975	137779
G	131m W	Electricity Substation	1994	137779
E	168m SW	Electricity Substation	1967	132929
E	168m SW	Electricity Substation	1974	132933
E	168m SW	Electricity Substation	1993	133239
E	170m SW	Electricity Substation	1989	132330
E	170m SW	Electricity Substation	1989	133677
I	172m NE	Electricity Substation	1994	137432
I	176m NE	Electricity Substation	1967	145265
I	176m NE	Electricity Substation	1955	145265
I	176m NE	Electricity Substation	1967	145265
I	176m NE	Electricity Substation	1955	145265
F	201m SE	Electricity Substation	1989	143616

ID	Location	Land Use	Date	Group ID
F	201m SE	Electricity Substation	1984	143616
F	201m SE	Electricity Substation	1997	145188
F	201m SE	Electricity Substation	1954	145188
F	202m SE	Electricity Substation	1954	145188
M	311m E	Electricity Substation	1989	138605
M	311m E	Electricity Substation	1984	138605
M	325m E	Electricity Substation	1997	133389
M	327m E	Electricity Substation	1996	132694
M	327m E	Electricity Substation	1989	132603
O	377m SW	Electricity Substation	1967	145586
O	377m SW	Electricity Substation	1974	145586
O	377m SW	Electricity Substation	1993	145586
O	378m SW	Electricity Substation	1989	145586
Q	435m SW	Electricity Substation	1989	142141
Q	435m SW	Electricity Substation	1989	142141
Q	436m SW	Electricity Substation	1993	142141
U	454m W	Electricity Substation	1994	146342
U	454m W	Electricity Substation	1975	146342

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	11

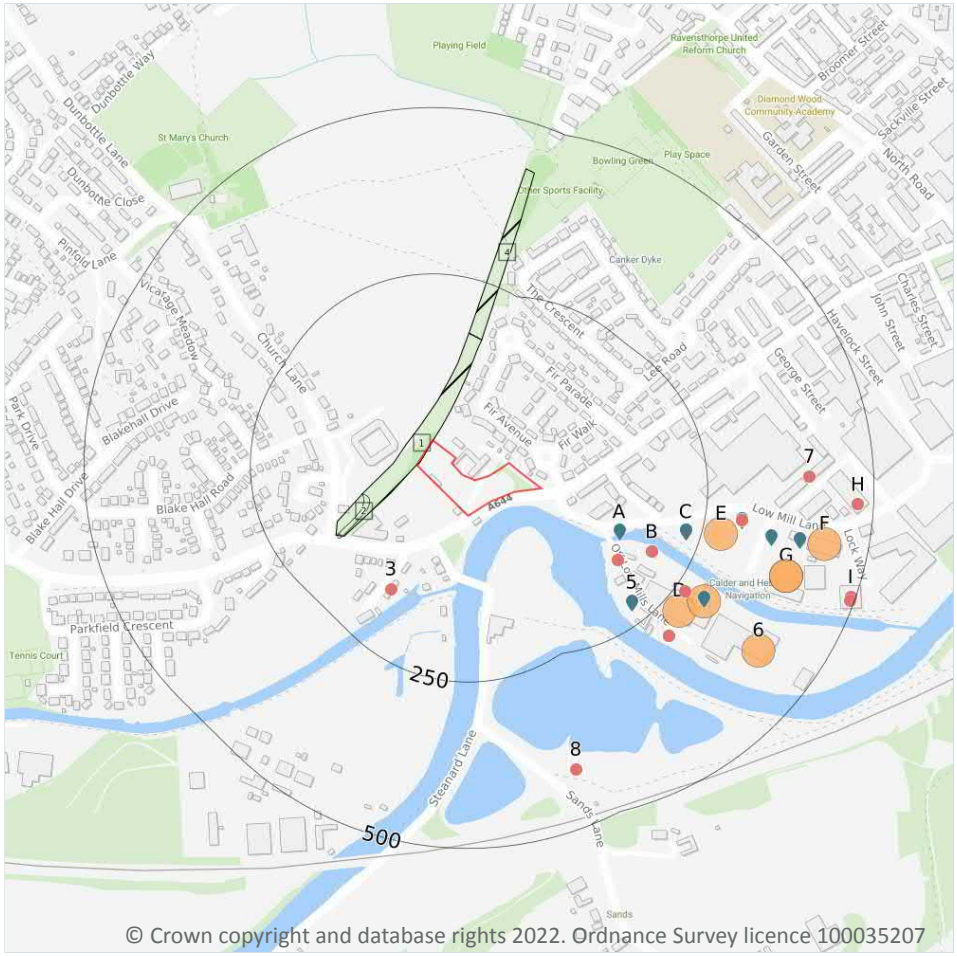
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
D	52m SW	Garage	1993	44062
D	59m W	Garage	1954	42056
D	60m W	Garage	1954	43583
D	98m SW	Garage	1989	45005
D	98m SW	Garage	1989	45005
D	98m W	Garage	1967	46355
D	98m W	Garage	1974	46355
E	111m SW	Maintenance Depot	1974	44113
E	112m SW	Maintenance Depot	1989	44759
E	112m SW	Maintenance Depot	1989	44759
7	444m NE	Garage	1996	41102

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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	0

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.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	1

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

Features are displayed on the Waste and landfill map on **page 28**

ID	Location	Site address	Source	Data type
2	87m W	Refuse Tip	1973 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	2

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 28**

ID	Location	Details		
1	**On site**	**Site Address: Railway Cutting, Church Lane, Mirfield Licence Holder Address: 851 Bradford Road, Batley, Kirklees**	**Waste Licence: Yes Site Reference: 4700/0094 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/06/1978 Licence Surrender: 14/03/1980**	**Operator: - Licence Holder: G Richardson and Sons Limited First Recorded 01/01/1971 Last Recorded: 31/12/1980**
4	167m N	Site Address: Railway Cutting, Church Lane, Mirfield Licence Holder Address: 215 Bradford Road, East Ardsley, near Wakefield	Waste Licence: Yes Site Reference: 4700/0219 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 22/02/1980 Licence Surrender: 06/12/1988	Operator: - Licence Holder: J Jeffery Builder Limited and G Richardson Dewsbury Limited First Recorded 31/12/1980 Last Recorded: 31/12/1988

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

3.5 Historical waste sites

Records within 500m	**7**

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

Features are displayed on the Waste and landfill map on **page 28**

ID	Location	Address	Further Details	Date
D	252m SE	Site Address: Biffa Waste Services Ltd Low, Low Mill Lane, Dewsbury, West Yorkshire, WF13 3LX	Type of Site: Waste Transfer Station (Conversion) Planning application reference: 2016/62/90072/E Description: Scheme comprises change of use of garage workshop building to waste transfer station building. Data source: Historic Planning Application Data Type: Point	26/01/2018
E	253m E	Site Address: Low Mills, Low Mills Lane, Ravensthorpe, DEWSBURY, West Yorkshire, WF13 3LN	Type of Site: Waste Transfer (Conversion) Planning application reference: 2001/62/93682/E0 Description: Scheme comprises of conversion to waste transfer from storage. Construction - internal refurbishment. An application (ref: 2001/62/93682/E0) for Detailed Planning permission was submitted to Kirklees B.C. on 31st December 2001. Data source: Historic Planning Application Data Type: Point	-
D	272m SE	Site Address: 3a, Low Mills, Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LX	Type of Site: Motorcycle Dismantling Facility (Conversion) Planning application reference: 2017/62/91437/E Description: Scheme comprises change of use from joiner's workshop/storage to motorcycle dismantling facility. Data source: Historic Planning Application Data Type: Point	28/06/2017
G	365m E	Site Address: Chemical Distribution Centre, Ladywood Way, Ravensthorpe, DEWSBURY, West Yorkshire, WF13 3SX	Type of Site: Waste Management Centre Planning application reference: 02/62/90857E0 Description: Scheme comprises of a waste management centre for the acceptance, sorting, bulking and blending of waste materials. An application (ref: 02/62/90857E0) for Detailed Planning permission was submitted to Kirklees B.C. on 19th March 2002. Data source: Historic Planning Application Data Type: Point	-

ID	Location	Address	Further Details	Date
G	365m E	Site Address: Ravensthorpe Industrial, Ravensthorpe Industrial Estate, Ladywood Way,Ravensthorpe, DEWSBURY, West Yorkshire, WF13 3LN	Type of Site: Haulage/Waste Transfer Station Planning application reference: 94/62/90791/EO Description: c/u from vacant engineering works into haulage depot, storage of skips & special waste transfer station. Offices included. 12 car parking spaces. An application (ref: 94/62/90791/EO) for Detailed Planning permission was submitted to Kirklees B.C. on 9 th March 1994. Data source: Historic Planning Application Data Type: Point	-
6	382m SE	Site Address: Low Mill, Low Mills Lane, Ravensthorpe, DEWSBURY, West Yorkshire, WF13 3LN	Type of Site: Waste Transfer Station (Cou) Planning application reference: 91025 Description: An application (ref: 91025) for Detailed Planning permission was submitted to Kirklees B.C. on 15th April 1996. Data source: Historic Planning Application Data Type: Point	-
F	408m E	Site Address: Low Mills,Low Mill Lane, Ravensthorpe, DEWSBURY, West Yorkshire, WF13 3LX	Type of Site: Waste transfer station Planning application reference: 90020/E0 Description: Scheme includes hard surfacing. An application (ref: 90020/E0) for Detailed Planning permission was submitted to Kirklees B.C. on 10th February 2001. Data source: Historic Planning Application Data Type: Point	-

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

3.6 Licensed waste sites

Records within 500m	**15**

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

Features are displayed on the Waste and landfill map on **page 28**

ID	Location	Details		
A	133m E	Site Name: Mirfield Mini Skips Site Address: Low Mills Ind Est, Ravensthorpe, Dewsbury, West Yorkshire, WF14 8DF Correspondence Address: 12, Fenton Street, Mirfield, West Yorkshire, WF14 8DF	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MRK002 EPR reference: - Operator: Mr Kenneth Hickman Waste Management licence No: 65029 Annual Tonnage: 0	Issue Date: 15/12/1998 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
5	218m SE	Site Name: Mirfield Mini Skips Site Address: Land/premises At, Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MRK002 EPR reference: EA/EPR/HP3694ZA/S002 Operator: Mr Kenneth Hickman Waste Management licence No: 65029 Annual Tonnage: 0	Issue Date: 15/12/1998 Effective Date: - Modified: - Surrendered Date: Sep 3 2021 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered
C	226m E	Site Name: Low Mills Site Address: Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: Woodthorpe Manor, 9, Sandal, Wakefield, West Yorkshire, WF2 6SY	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: - Operator: M & B Haulage & Waste Paper Co Ltd Waste Management licence No: 65552 Annual Tonnage: 0	Issue Date: 11/07/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
C	226m E	Site Name: M & B Waste Management & Transport Logistics Site Address: Land/premises At, Low Mills Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/TP3395ZS/V002 Operator: M & B Waste Management And Transport Logistics Waste Management licence No: 61029 Annual Tonnage: 75000	Issue Date: 04/11/1996 Effective Date: - Modified: 08/01/2007 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	226m E	Site Name: Low Mills Site Address: Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/TP3395ZS/V Operator: Biffa G S (M & B) Limited Waste Management licence No: 61029 Annual Tonnage: 75000	Issue Date: 04/11/1996 Effective Date: - Modified: 19/08/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	226m E	Site Name: Low Mills Site Address: Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/TP3395ZS/V007 Operator: Biffa G S (M & B) Limited Waste Management licence No: 61029 Annual Tonnage: 75000	Issue Date: 04/11/1996 Effective Date: - Modified: 19/07/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
C	226m E	Site Name: Low Mills Site Address: Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/TP3395ZS/V007 Operator: Biffa G S (M & B) Limited Waste Management licence No: 61029 Annual Tonnage: 75000	Issue Date: 04/11/1996 Effective Date: - Modified: 19/07/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	295m SE	Site Name: Binditbikespares Site Address: Unit 3 A Low Mills, Off Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Vehicle Depollution Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SYK001 EPR reference: EA/EPR/FB3702GX/A001 Operator: Paul Sykes And Philip Ineson Waste Management licence No: 404419 Annual Tonnage: 4999	Issue Date: 12/01/2018 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	304m E	Site Name: Low Mills Site Address: Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/LP3596ZP/A001 Operator: Greenstar (M & B) Ltd Waste Management licence No: 65552 Annual Tonnage: 100000	Issue Date: 11/07/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
E	304m E	Site Name: Low Mills Site Address: Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: Woodthorpe Manor, 9, Sandal, Wakefield, West Yorkshire, WF2 6SY	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: - Operator: Greenstar (M & B) Ltd Waste Management licence No: 65552 Annual Tonnage: 0	Issue Date: 7/11/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	304m E	Site Name: Dewsbury Transfer Station Site Address: Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/LP3596ZP/V005 Operator: Greenstar (M & B) Ltd Waste Management licence No: 65552 Annual Tonnage: 100000	Issue Date: 11/07/2007 Effective Date: - Modified: 26/05/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
E	304m E	Site Name: Adewsbury Transfer Station Site Address: Dewsbury Transfer Station, Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/LP3596ZP/V009 Operator: Biffa G S (M & B) Limited Waste Management licence No: 65552 Annual Tonnage: 74999	Issue Date: 11/07/2007 Effective Date: - Modified: 11/12/2019 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
E	304m E	Site Name: Dewsbury Transfer Station Site Address: Dewsbury Transfer Station, Low Mills, Raventhorpe, Dewsbury, West Yorkshire, WF13 3LX Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBH001 EPR reference: EA/EPR/LP3596ZP/V009 Operator: Biffa G S (M & B) Limited Waste Management licence No: 65552 Annual Tonnage: 74999	Issue Date: 11/07/2007 Effective Date: - Modified: 11/12/2019 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
F	353m E	Site Name: West Yorkshire Treatment Centre Site Address: Ladywood Way, Raventhorpe Ind Est, Dewsbury, West Yorkshire, WF13 3SG Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHE002 EPR reference: EA/EPR/LP3137SU/V003 Operator: Chemwaste Limited Waste Management licence No: 61052 Annual Tonnage: 24000	Issue Date: 23/09/1994 Effective Date: - Modified: 15/10/2010 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
F	396m E	Site Name: Chemwaste Ltd Site Address: Ladywood Way, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LN Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHE001 EPR reference: EA/EPR/FP3994ZJ/A001 Operator: Chemwaste Ltd Waste Management licence No: 65039 Annual Tonnage: 10000	Issue Date: 12/01/1999 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC

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

3.7 Waste exemptions

Records within 500m	33

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 28**

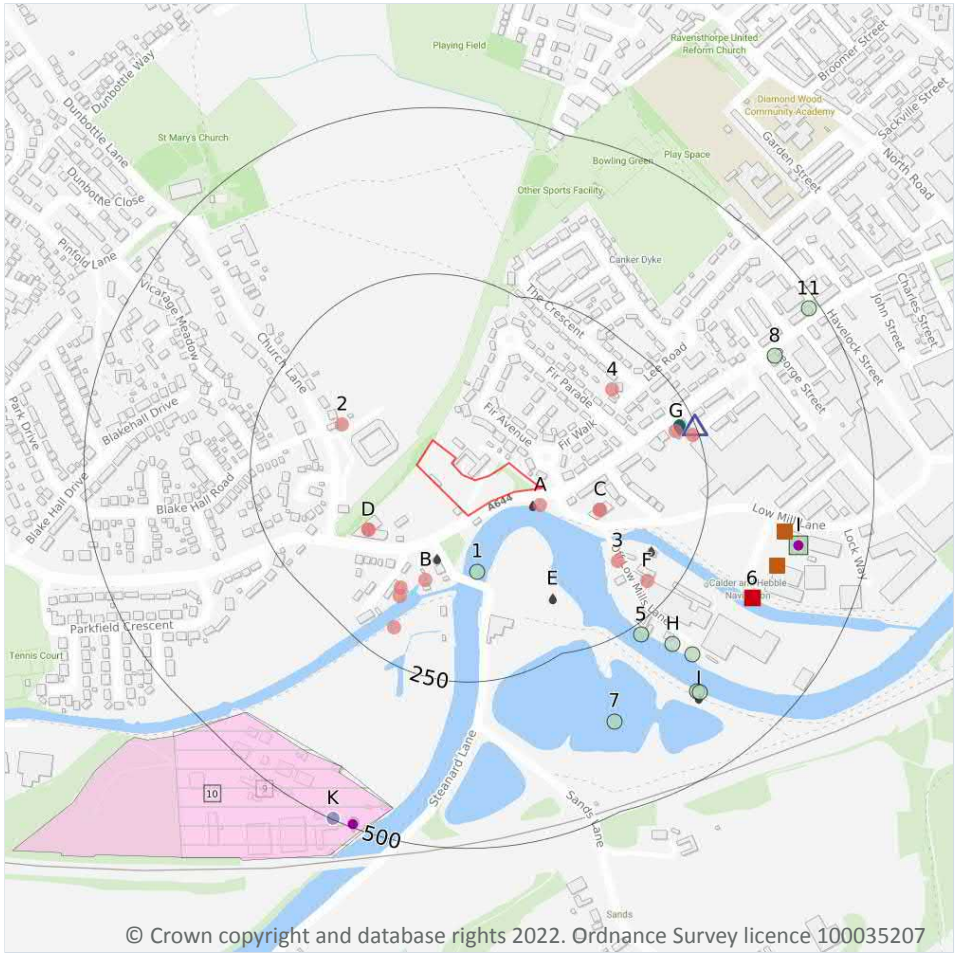
ID	Location	Site	Reference	Category	Sub-Category	Description
A	158m SE	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX285641	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
A	158m SE	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX285641	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	158m SE	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX285641	Storing waste exemption	Not on a farm	Storage of waste in secure containers
3	161m SW	SHEPLEY BRIDGE, MIRFIELD, WF14 9HR	WEX179148	Disposing of waste exemption	Not on a farm	Burning waste in the open
B	191m E	Dewsbury Transfer Station, LOW MILL LANE, DEWSBURY, WF13 3LX	WEX286083	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	191m E	Dewsbury Transfer Station, LOW MILL LANE, DEWSBURY, WF13 3LX	WEX286083	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
B	191m E	Dewsbury Transfer Station, LOW MILL LANE, DEWSBURY, WF13 3LX	WEX286083	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	265m SE	Link Tyre Sales Ltd, Unit 1 Low Mill Lane, Ravensthorpe Ind Est, Dewsbury, WF13 3LX	WEX136346	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	293m SE	LOW MILL LANE, DEWSBURY, WF13 3LX	WEX145589	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	293m SE	LOW MILL LANE, DEWSBURY, WF13 3LX	WEX145589	Storing waste exemption	Not on a farm	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
D	293m SE	LOW MILL LANE, DEWSBURY, WF13 3LX	WEX145589	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	304m E	Dewsbury Transfer Station Low Mills Dewsbury West Yorkshire WF13 3LX	EPR/JE5545NG/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in secure containers
E	304m E	Dewsbury Transfer Station Low Mills Dewsbury West Yorkshire WF13 3LX	EPR/JE5545NG/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
E	304m E	Dewsbury Transfer Station Low Mills Dewsbury West Yorkshire WF13 3LX	EPR/JE5545NG/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
7	403m E	14-15, RIVERSIDE WAY, DEWSBURY, WF13 3LG	WEX019475	Disposing of waste exemption	Not on a farm	Depositing samples of waste for the purposes of testing or analysing them
8	415m S	Lady Wood Lakes, Sands Lane, Mirfield, Wakefield, WF14 8HJ	WEX164014	Using waste exemption	Not on a Farm	Use of waste in construction
H	476m E	-	WEX241024	Treating waste exemption	Not on a farm	Recovery of scrap metal
H	476m E	-	WEX241023	Storing waste exemption	Not on a farm	Storage of waste in a secure place
H	476m E	-	WEX241024	Treating waste exemption	Not on a farm	Sorting mixed waste
H	476m E	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX148304	Storing waste exemption	Not on a farm	Storage of waste in secure containers
H	476m E	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX148304	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
H	476m E	amb environmental services ltd, Unit 1A, low mill lane, ravansthorpe, wf13 3ln	WEX148304	Storing waste exemption	Not on a farm	Storage of waste in a secure place
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX278476	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)

ID	Location	Site	Reference	Category	Sub-Category	Description
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX278476	Treating waste exemption	Not on a farm	Recovery of scrap metal
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX278476	Treating waste exemption	Not on a farm	Sorting mixed waste
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX278476	Storing waste exemption	Not on a farm	Storage of waste in secure containers
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX278476	Storing waste exemption	Not on a farm	Storage of waste in a secure place
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX137588	Treating waste exemption	Not on a farm	Recovery of scrap metal
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX137588	Treating waste exemption	Not on a farm	Sorting mixed waste
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX137588	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX137588	Storing waste exemption	Not on a farm	Storage of waste in a secure place
I	493m E	BRITANNIA HOUSE, LOCK WAY, DEWSBURY, WF13 3SX	WEX137588	Storing waste exemption	Not on a farm	Storage of waste in secure containers
I	494m E	BRITANNIA HOUSE LOCK WAY DEWSBURY WF13 3SX	EPR/SF0907HE/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)

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
- Current or recent petrol stations
- Sites determined as Contaminated Land
- Control of Major Accident Hazards
- Historical licensed industrial activities
- Part A(1) 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)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m	15

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Company	Address	Activity	Category
A	25m E	Mast	West Yorkshire, WF14	Telecommunications Features	Infrastructure and Facilities
C	94m E	Rushlift Doosan	Unit 1 Ravensthorpe Industrial Estate, Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LN	Lifting and Handling Equipment	Industrial Products

ID	Location	Company	Address	Activity	Category
C	94m E	A M B Environmental	Unit 1 Ravensthorpe Industrial Estate, Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LN	Waste Storage, Processing and Disposal	Infrastructure and Facilities
B	116m SW	Dry Dock	West Yorkshire, WF14	Moorings and Unloading Facilities	Water
D	121m SW	Elams of Mirfield	Bridge Garage, Huddersfield Road, Mirfield, West Yorkshire, WF14 9HS	Secondhand Vehicles	Motoring
D	121m SW	Luxury Motors Garage	Unit 3 Bridge Garage, Huddersfield Road, Mirfield, West Yorkshire, WF14 9HS	Sports and Leisure Equipment Repair	Repair and Servicing
2	128m NW	Electricity Sub Station	West Yorkshire, WF14	Electrical Features	Infrastructure and Facilities
B	148m SW	Marina	West Yorkshire, WF14	Moorings and Unloading Facilities	Water
3	158m SE	Tanvic Tyres	Unit 1 Low Mills, Low Mill Lane, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LX	Vehicle Parts and Accessories	Motoring
B	158m SW	Crane	West Yorkshire, WF14	Travelling Cranes and Gantries	Industrial Features
4	182m NE	Electricity Sub Station	West Yorkshire, WF13	Electrical Features	Infrastructure and Facilities
B	201m SW	Mooring Posts	West Yorkshire, WF14	Moorings and Unloading Facilities	Water
F	211m SE	Electricity Sub Station	West Yorkshire, WF13	Electrical Features	Infrastructure and Facilities
G	220m E	Shell	Shell Petrol Station 791-811, Huddersfield Road, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LR	Petrol and Fuel Stations	Road and Rail
G	241m E	Mfg Ravensthorpe	791, Huddersfield Road, Dewsbury, West Yorkshire, WF13 3LR	Vehicle Cleaning Services	Personal, Consumer and Other Services

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Company	Address	LPG	Status
G	249m E	SHELL	791, Huddersfield Road, Ravensthorpe, Dewsbury, West Yorkshire, WF13 3LR	No	Open

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	1

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

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Description	Site name	Category	Year identified
10	422m SW	Chemicals Site, part-owned by Dow Chemical, polluting River Calder. Remedial works in 2001	Dr Reddys Laboratories, Former Mirfield Chemical Works, Steanard Lane, Mirfield, WF14 8HZ	Contaminated Land	2002

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Company	Address	Operational status	Tier
9	422m SW	Dr Reddy's Laboratories (EU) Limited	Dr Reddy's Laboratories (EU) Limited, Mirfield, Po Box 6, Steanard Lane, Mirfield, West Yorkshire, WF14 8HZ	Current COMAH Site	COMAH Lower Tier Operator

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	24

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 40**

ID	Location	Details	
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: AI2384	Original Permit Number: IPCAIRAPP Date Approved: 13-9-1993 Effective Date: 13-9-1993 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: AK8015	Original Permit Number: IPCAIRAPP Date Approved: 20-1-1994 Effective Date: 1-2-1994 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: AN3575	Original Permit Number: IPCAIRAPP Date Approved: 31-8-1994 Effective Date: 12-9-1994 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: AR7246	Original Permit Number: IPCMINVAR Date Approved: 1-6-1995 Effective Date: 10-7-1995 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: AW8050	Original Permit Number: IPCMINVAR Date Approved: 30-9-1996 Effective Date: 7-10-1996 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BC7051	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: BC8651	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: BD7073	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BH2227	Original Permit Number: IPCMAJVAR Date Approved: 20-4-2000 Effective Date: 28-4-2000 Status: Superseded By Variation

ID	Location	Details	
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: BH2235	Original Permit Number: IPCMAJVAR Date Approved: 20-4-2000 Effective Date: 28-4-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: BH2243	Original Permit Number: IPCMAJVAR Date Approved: 20-4-2000 Effective Date: 28-4-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BI4721	Original Permit Number: IPCMINVAR Date Approved: 11-5-2000 Effective Date: 12-5-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BI7623	Original Permit Number: IPCMINVAR Date Approved: 11-7-2000 Effective Date: 11-7-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BJ4167	Original Permit Number: IPCMINVAR Date Approved: 16-9-2000 Effective Date: 16-9-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BJ5562	Original Permit Number: IPCMINVAR Date Approved: 16-11-2000 Effective Date: 16-11-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: BJ6216	Original Permit Number: IPCMINVAR Date Approved: 17-11-2000 Effective Date: 17-11-2000 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BK4588	Original Permit Number: IPCMINVAR Date Approved: 1-2-2001 Effective Date: 2-2-2001 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Processes Involving Halogens Permit Number: BK8982	Original Permit Number: IPCMINVAR Date Approved: 5-4-2001 Effective Date: 5-4-2001 Status: Revoked - Now Ippc

ID	Location	Details	
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: BK9008	Original Permit Number: IPCMINVAR Date Approved: 5-4-2001 Effective Date: 5-4-2001 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BL3129	Original Permit Number: IPCMINVAR Date Approved: 31-7-2001 Effective Date: 1-8-2001 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Inorganic Chemical Processes Permit Number: BM5828	Original Permit Number: IPCMINVAR Date Approved: 23-11-2001 Effective Date: 23-11-2001 Status: Revoked - Now Ippc
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BZ3482	Original Permit Number: IPCMINVAR Date Approved: 27-5-2005 Effective Date: 27-5-2005 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BZ4403	Original Permit Number: IPCMINVAR Date Approved: 5-7-2005 Effective Date: 5-7-2005 Status: Superseded By Variation
K	498m S	Operator: Ascot Chemicals Ltd Address: P O Box 6, Steanard Lane, Mirfield, Wakefield, West Yorkshire, WF14 8QB Process: Manufacture And Use Of Organic Chemicals Permit Number: BZ4454	Original Permit Number: IPCMINVAR Date Approved: 11-7-2005 Effective Date: 11-7-2005 Status: Revoked - Now Ippc

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	**49**

Records of Part A(1) 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 40**

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; WASTE OILS >10 T/D Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D BY USE AS A FUEL Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: ASSOCIATED PROCESS Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D RECOVERY FOR POLLUTION ABATEMENT Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: ASSOCIATED PROCESS Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D BY USE AS A FUEL Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D RECOVERY FOR POLLUTION ABATEMENT Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D SOLVENT RECLAMATION Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: DP3434EG Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 09/01/2014 Effective Date: 09/01/2014 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; WASTE OILS >10 T/D Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D OF COMPONENTS FROM CATALYSTS Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D RECOVERY FOR POLLUTION ABATEMENT Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: ASSOCIATED PROCESS Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; WASTE OILS >10 T/D Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D BY USE AS A FUEL Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D OF COMPONENTS FROM CATALYSTS Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D RECOVERY FOR POLLUTION ABATEMENT Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: DP3434EG Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 09/01/2014 Effective Date: 09/01/2014 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: DP3434EG Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 09/01/2014 Effective Date: 09/01/2014 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D SOLVENT RECLAMATION Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D SOLVENT RECLAMATION Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: ASSOCIATED PROCESS Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D OF COMPONENTS FROM CATALYSTS Permit Number: CP3034UN Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2007 Effective Date: 15/10/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: ASSOCIATED PROCESS Permit Number: DP3434EG Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 09/01/2014 Effective Date: 09/01/2014 Last date noted as effective: 13/06/2022 Status: EFFECTIVE

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: DISPOSAL OR RECOVERY OF HAZ WASTE WITH CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OTHER ACTIVITIES LISTED IN THIS SECTION OR IN SECTION 5.1 Permit Number: DP3434EG Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 09/01/2014 Effective Date: 09/01/2014 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D BY USE AS A FUEL Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D SOLVENT RECLAMATION Permit Number: FP3834CE Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 24/04/2012 Effective Date: 24/04/2012 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: RECOVERY OF WASTE; HAZARDOUS WASTE >10T/D OF COMPONENTS FROM CATALYSTS Permit Number: LP3137SU Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 26/06/2006 Effective Date: 26/06/2006 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
I	395m E	Operator: CHEMWASTE LIMITED Installation Name: WEST YORKSHIRE TREATMENT CENTRE EPR/LP3137SU Process: OTHER WASTE DISPOSAL; WASTE OILS >10 T/D Permit Number: AP3835KD Original Permit Number: LP3137SU	EPR Reference: - Issue Date: 15/10/2010 Effective Date: 15/10/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: HALTERMANN LIMITED Installation Name: MIRFIELD PHARMACUETICAL PLANT Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: HP3433XM Original Permit Number: WP3338LE	EPR Reference: - Issue Date: 05/11/2007 Effective Date: 05/11/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: DP3134FS Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 12/01/2012 Effective Date: 12/01/2012 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT EAEPRYP3231XZT001 Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: YP3231XZ Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 19/09/2008 Effective Date: 19/09/2008 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: VP3338TJ Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 07/06/2010 Effective Date: 07/06/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: ZP3137GG Original Permit Number: YP3231XZ	EPR Reference: EA/EPR/YP3231XZ/V002 Issue Date: 27/05/2009 Effective Date: 27/05/2009 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: VP3338TJ Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 07/06/2010 Effective Date: 07/06/2010 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT EAEPRYP3231XZT001 Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: YP3231XZ Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 19/09/2008 Effective Date: 19/09/2008 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: HALTERMANN LTD Installation Name: MIRFIELD PHARMACUETICAL PLANT Process: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES Permit Number: ZP3036MT Original Permit Number: WP3338LE	EPR Reference: - Issue Date: 22/01/2007 Effective Date: 22/01/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: HALTERMANN LTD Installation Name: MIRFIELD PHARMACUETICAL PLANT Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: ZP3036MT Original Permit Number: WP3338LE	EPR Reference: - Issue Date: 22/01/2007 Effective Date: 22/01/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: DP3134FS Original Permit Number: YP3231XZ	EPR Reference: - Issue Date: 12/01/2012 Effective Date: 12/01/2012 Last date noted as effective: 13/06/2022 Status: EFFECTIVE
K	496m S	Operator: DR REDDY'S LABORATORIES (EU) LTD Installation Name: MIRFIELD PHARMACEUTICAL PLANT Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: ZP3137GG Original Permit Number: YP3231XZ	EPR Reference: EA/EPR/YP3231XZ/V002 Issue Date: 27/05/2009 Effective Date: 27/05/2009 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

ID	Location	Details	
K	496m S	Operator: HALTERMANN LIMITED Installation Name: MIRFIELD PHARMACUETICAL PLANT Process: PLANT HEALTH AND BIOCIDES; PRODUCING PLANT HEALTH PRODUCTS/BIOCIDES Permit Number: HP3433XM Original Permit Number: WP3338LE	EPR Reference: - Issue Date: 05/11/2007 Effective Date: 05/11/2007 Last date noted as effective: 13/06/2022 Status: SUPERCEDED

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 40**

ID	Location	Address	Details	
G	226m E	Shell Ravensthorpe, 791/811 Huddersfield Road, Ravensthorpe, Dewsbury, WF3 3LR	Process: Unloading of Petrol into Storage at Service Stations Status: Current 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	**8**

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 40**

ID	Location	Address	Details	
A	23m E	FIR COTTAGE CSO, HUDDERSFIELD ROAD, MIRFIELD, WEST YORKSHIRE, WF14 9HS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WADC929 Permit Version: 1 Receiving Water: RIVER CALDER	Status: TRANSFERRED FROM WATER ACT 1989 Issue date: 18/09/1989 Effective Date: 18/09/1989 Revocation Date: 13/04/2009
A	23m E	FIR COTTAGE CSO, HUDDERSFIELD ROAD, MIRFIELD, WEST YORKSHIRE, WF14 9HS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WADC929 Permit Version: 2 Receiving Water: RIVER CALDER	Status: TRANSFERRED FROM WATER ACT 1989 Issue date: 14/04/2009 Effective Date: 14/04/2009 Revocation Date: 08/06/2017
B	80m SW	BRITISH WATERWAYS, CALDER HOUSE, SOWERBY BRIDGE, .	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 2425 Permit Version: 1 Receiving Water: RIVER CALDER	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 18/09/1968 Effective Date: 18/09/1968 Revocation Date: -
E	166m SE	THE SHIP ROAST INN, STEANNARD LANE, SHEPLEY BRIDGE, MIRFIELD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 3800 Permit Version: 1 Receiving Water: RIVER CALDER	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 13/06/1984 Effective Date: 13/06/1984 Revocation Date: 30/07/1984
E	166m SE	THE SHIP ROAST INN, STEANNARD LANE, SHEPLEY BRIDGE, MIRFIELD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 3800 Permit Version: 2 Receiving Water: RIVER CALDER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 31/07/1984 Effective Date: 31/07/1984 Revocation Date: 01/10/1996
E	166m SE	THE SHIP ROAST INN, STEANNARD LANE, SHEPLEY BRIDGE, MIRFIELD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: WRA7285 Permit Version: 1 Receiving Water: RIVER CALDER	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 28/01/1997 Effective Date: 28/01/1997 Revocation Date: 19/05/2003
F	190m E	BRITISH WATERWAYS BOARD, GREENWOOD FLOOD LOCK HOUSE, RAVENSTHORPE, .	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 2657 Permit Version: 1 Receiving Water: MILL STREAM TO RIVER CALDER	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 10/07/1970 Effective Date: 10/07/1970 Revocation Date: -

ID	Location	Address	Details	
J	394m SE	SANDS LANE QUARRY, SANDS LANE, MIRFIELD, WEST YORKSHIRE, ENGLAND	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: WRA7749 Permit Version: 1 Receiving Water: RIVER CALDER	Status: REVOKED UNDER EPR 2010 Issue date: 04/10/2001 Effective Date: 04/10/2001 Revocation Date: 22/11/2010

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	**2**

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Address	Details	
I	372m E	YORKSHIRE WATER SERVICES LTD, LADYWOOD WAY, RAVENSTHORPE IND EST, RAVENSTHORPE, DEWSBURY, WEST YORKSHIRE, WF13 3LN	Permission reference: BM7774 Local Authority: WAKEFIELD CITY COUNCIL First received date: 01/06/2003	Last received date: 01/01/2018 Status: RECEIVED
I	372m E	CHEMWASTE LTD, LADYWOOD WAY, RAVENSTHORPE IND EST, RAVENSTHORPE, DEWSBURY, WEST YORKSHIRE, WF13 3LN	Permission reference: AY3253 Local Authority: KIRKLEES METROPOLITAN BOROUGH COUNCIL First received date: 01/06/2001	Last received date: 01/01/2018 Status: RECEIVED

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

4.16 List 1 Dangerous Substances

Records within 500m	**2**

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 40**

ID	Location	Name	Status	Receiving Water	Authorised Substances
6	357m SE	Chemwaste Ltd. Ravensthorpe	Active	Dummy Site	Mercury (other), Cadmium
I	396m E	Chemwaste Ltd Low Mill Lane Wf13 3ln	Active	Dummy Site	Mercury (other), Cadmium

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

4.17 List 2 Dangerous Substances

Records within 500m **1**

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 40**

ID	Location	Name	Status	Receiving Water	Authorised Substances
I	396m E	Chemwaste Ltd Low Mill Lane Wf13 3ln	Not Active	Unknown	Arsenic, Chromium, Zinc

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m **9**

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 40**

ID	Location	Details	
1	84m S	Incident Date: 12/11/2003 Incident Identification: 201225 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	265m SE	Incident Date: 06/02/2003 Incident Identification: 135183 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
H	306m SE	Incident Date: 20/03/2003 Incident Identification: 144402 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 2 (Significant) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)

ID	Location	Details	
H	336m SE	Incident Date: 01/04/2003 Incident Identification: 147733 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
7	366m SE	Incident Date: 14/06/2002 Incident Identification: 84854 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
J	384m SE	Incident Date: 25/04/2007 Incident Identification: 489325 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
J	388m SE	Incident Date: 27/09/2001 Incident Identification: 33360 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	403m E	Incident Date: 13/09/2002 Incident Identification: 107713 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
11	483m NE	Incident Date: 23/07/2001 Incident Identification: 18170 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m	**1**

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.

Features are displayed on the Current industrial land use map on **page 40**

ID: I, Location: 396m E, Permit: LP3137SU
Operator: Chemwaste Limited
Activity: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT
Address: West Yorkshire Treatment Centre Low Mill Lane Dewsbury West Yorkshire WF13 3LN

Sector Releases: Hazardous Waste, Sub-sector: Hazardous Waste

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Wastewater	Nitrogen - as total N	50000kg	Below Reporting Threshold
Air	Ammonia	1000kg	Below Reporting Threshold
Wastewater	Arsenic	5kg	Below Reporting Threshold
Wastewater	Cadmium	1kg	Below Reporting Threshold
Wastewater	Chromium	20kg	Below Reporting Threshold
Wastewater	Copper	20kg	Below Reporting Threshold
Wastewater	Lead	20kg	Below Reporting Threshold
Wastewater	Mercury	0.1kg	Below Reporting Threshold
Wastewater	Nickel	20kg	Below Reporting Threshold
Wastewater	Zinc	100kg	Below Reporting Threshold

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

4.20 Pollution inventory waste transfers

Records within 500m	**2**

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.

Features are displayed on the Current industrial land use map on **page 40**

ID: I, Location: 396m E, Permit: LP3137SU
Operator: Chemwaste Limited
Activity: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT
Address: West Yorkshire Treatment Centre Low Mill Lane Dewsbury West Yorkshire WF13 3LN
Sector Releases: Hazardous Waste, Sub-sector: Hazardous Waste

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D2	Land treatment (eg biodegradation of liquid or sludgy discards in soils, etc.)	13.9	Absolute Value	02 06 01	materials unsuitable for consumption or processing	0
D2	Land treatment (eg biodegradation of liquid or sludgy discards in soils, etc.)	474.64	Absolute Value	04 02 10	organic matter from natural products (for example grease, wax)	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	49.2	Absolute Value	04 02 10	organic matter from natural products (for example grease, wax)	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	27.93	Absolute Value	06 01 01	sulphuric acid and sulphurous acid	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	5.83	Absolute Value	06 01 02	hydrochloric acid	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.355	Absolute Value	06 01 04	phosphoric and phosphorous acid	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	2	Absolute Value	06 01 05	nitric acid and nitrous acid	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	35.74	Absolute Value	06 01 06	other acids	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.04	Absolute Value	06 01 06	other acids	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	2.3	Absolute Value	06 02 01	calcium hydroxide	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.025	Absolute Value	06 02 03	ammonium hydroxide	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	44.98	Absolute Value	06 02 04	sodium and potassium hydroxide	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.025	Absolute Value	06 02 05	other bases	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	2.4	Absolute Value	06 03 15	metallic oxides containing heavy metals	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	6.82	Absolute Value	07 01 01	aqueous washing liquids and mother liquors	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	2	Absolute Value	07 01 01	aqueous washing liquids and mother liquors	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	35.9	Absolute Value	07 01 04	other organic solvents, washing liquids and mother liquors	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.3	Absolute Value	07 01 08	other still bottoms and reaction residues	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	2	Absolute Value	07 01 08	other still bottoms and reaction residues	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	19.18	Absolute Value	07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1.26	Absolute Value	07 02 01	aqueous washing liquids and mother liquors	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.26	Absolute Value	07 02 14	wastes from additives containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	2.57	Absolute Value	07 06 01	aqueous washing liquids and mother liquors	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	3.46	Absolute Value	07 06 01	aqueous washing liquids and mother liquors	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.88	Absolute Value	07 06 01	aqueous washing liquids and mother liquors	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.05	Absolute Value	07 06 04	other organic solvents, washing liquids and mother liquors	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.825	Absolute Value	07 06 04	other organic solvents, washing liquids and mother liquors	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	10	Absolute Value	07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	5.72	Absolute Value	08 01 11	waste paint and varnish containing organic solvents or other dangerous substances	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	7.565	Absolute Value	08 01 11	waste paint and varnish containing organic solvents or other dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	20.58	Absolute Value	08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.6	Absolute Value	08 03 12	waste ink containing dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.5	Absolute Value	08 03 12	waste ink containing dangerous substances	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	10.12	Absolute Value	08 03 13	waste ink other than those mentioned in 08 03 12	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	1.2	Absolute Value	08 03 13	waste ink other than those mentioned in 08 03 12	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	10.16	Absolute Value	08 04 09	waste adhesives and sealants containing organic solvents or other dangerous substances	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	2.11	Absolute Value	08 04 09	waste adhesives and sealants containing organic solvents or other dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.8	Absolute Value	08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	2.05	Absolute Value	08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1	Absolute Value	08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.8	Absolute Value	11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.74	Absolute Value	13 02 04	mineral-based chlorinated engine, gear and lubricating oils	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	36.12	Absolute Value	13 02 05	mineral-based non-chlorinated engine, gear and lubricating oils	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.74	Absolute Value	13 02 08	other engine, gear and lubricating oils	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	4	Absolute Value	13 08 02	other emulsions	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.2	Absolute Value	14 06 02	other halogenated solvents and solvent mixtures	1
R1	Use principally as a fuel or other means to generate energy	23	Absolute Value	14 06 02	other halogenated solvents and solvent mixtures	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.823	Absolute Value	15 01 01	paper and cardboard packaging	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	5.2	Absolute Value	15 01 02	plastic packaging	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	59.8	Absolute Value	15 01 10	packaging containing residues of or contaminated by dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.1	Absolute Value	15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	1
D1	Deposit into or onto land (eg landfill, etc.)	1.92	Absolute Value	15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.36	Absolute Value	16 02 11	discarded equipment containing chlorofluorocarbons, HCFC, HFC	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.48	Absolute Value	16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	13.76	Absolute Value	16 03 03	inorganic wastes containing dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	1.145	Absolute Value	16 03 03	inorganic wastes containing dangerous substances	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.795	Absolute Value	16 03 03	inorganic wastes containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	110.84	Absolute Value	16 03 04	inorganic wastes other than those mentioned in 16 03 03	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	2.15	Absolute Value	16 03 04	inorganic wastes other than those mentioned in 16 03 03	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	6.035	Absolute Value	16 03 05	organic wastes containing dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	21.345	Absolute Value	16 03 05	organic wastes containing dangerous substances	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	10.945	Absolute Value	16 03 05	organic wastes containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	23.825	Absolute Value	16 03 06	organic wastes other than those mentioned in 16 03 05	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	12.189	Absolute Value	16 03 06	organic wastes other than those mentioned in 16 03 05	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	2.864	Absolute Value	16 03 06	organic wastes other than those mentioned in 16 03 05	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.32	Absolute Value	16 05 04	gases in pressure containers (including halons) containing dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.225	Absolute Value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.6	Absolute Value	16 05 06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.8	Absolute Value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	18.14	Absolute Value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	6.72	Absolute Value	16 05 08	discarded organic chemicals consisting of or containing dangerous substances	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	2.47	Absolute Value	16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	6.89	Absolute Value	16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.11	Absolute Value	16 06 01	lead batteries	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.05	Absolute Value	16 06 02	Ni-Cd batteries	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.025	Absolute Value	16 06 04	alkaline batteries (except 16 06 03)	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	9.7	Absolute Value	16 07 08	wastes containing oil	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1.4	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	1

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	31.72	Absolute Value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.5	Absolute Value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	3.8	Absolute Value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.58	Absolute Value	18 02 05	chemicals consisting of or containing dangerous substances	1
D2	Land treatment (eg biodegradation of liquid or sludgy discards in soils, etc.)	593.32	Absolute Value	19 02 03	premixed wastes composed only of non-hazardous wastes	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	86.85	Absolute Value	19 02 03	premixed wastes composed only of non-hazardous wastes	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	21.2	Absolute Value	19 02 03	premixed wastes composed only of non-hazardous wastes	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.6	Absolute Value	19 02 04	premixed wastes composed of at least one hazardous waste	1
D5	Specially engineered landfill (eg placement into lined discrete cells which are capped and isolated from one another and the environment, etc)	384.07	Absolute Value	19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.8	Absolute Value	19 02 07	oil and concentrates from separation	1
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	3	Absolute Value	19 02 08	liquid combustible wastes containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	6.02	Absolute Value	19 12 11	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances	1
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	2.5	Absolute Value	19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	0.4	Absolute Value	20 01 02	glass	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.2	Absolute Value	20 01 02	glass	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	3.1	Absolute Value	20 01 25	edible oil and fat	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	0.717	Absolute Value	20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	0.01	Absolute Value	20 01 34	batteries and accumulators other than those mentioned in 20 01 33	0
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	1.7	Absolute Value	20 01 35	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components (6)	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	2.12	Absolute Value	20 03 01	mixed municipal waste	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	1.6	Absolute Value	20 03 04	septic tank sludge	0

ID: K, Location: 496m S, Permit: YP3231XZ
Operator: Dr Reddy's Laboratories (EU) Ltd
Activity: PHARMACEUTICALS; PRODUCING PHARMACEUTICALS USING CHEMICAL/BIOLOGICAL PROCESSES
Address: Dowpharma Steanard Lane Mirfield West Yorkshire WF14 8HZ
Sector: Chemicals, Sub-sector: Chemicals
Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R2	Solvant reclamation/regeneration	104.03	Absolute Value	07 05 04	other organic solvents, washing liquids and mother liquors	1
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	5.8	Absolute Value	07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11	0
R11	Use of wastes obtained from any of the operations numbered R1 to R10	8.64	Absolute Value	15 01 06	mixed packaging	0
D9	Physio-chemical treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numberes D1 to D12 (eg evaporation, drying, calcination, etc.)	103.26	Absolute Value	16 10 01	aqueous liquid wastes containing dangerous substances	1
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	150	Absolute Value	20 01 01	paper and cardboard	0

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	8.32	Absolute Value	20 01 08	biodegradable kitchen and canteen waste	0
R3	Recycling/Reclamation of organic substances which are not used as solvents (including composting and other biological transformatin processes)	5.98	Absolute Value	20 01 38	wood other than that mentioned in 20 01 37	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	2.09	Absolute Value	20 01 40	metals	0
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	323.68	Absolute Value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	0
D8	Biological treatment not specified elsewhere in this Table which results in final compounds or mixtures which are discarded by means of any of the operations numbers D1 to D12	170.52	Absolute Value	16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01	0

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

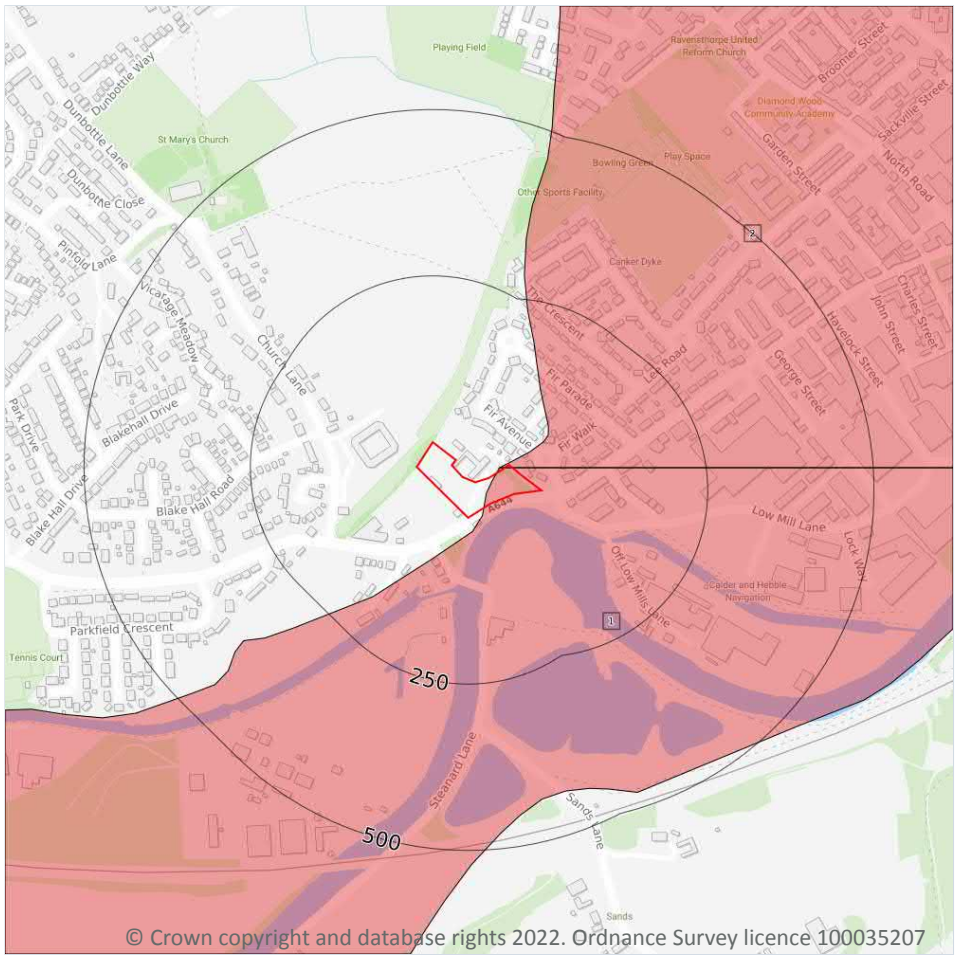
4.21 Pollution inventory radioactive waste

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	2

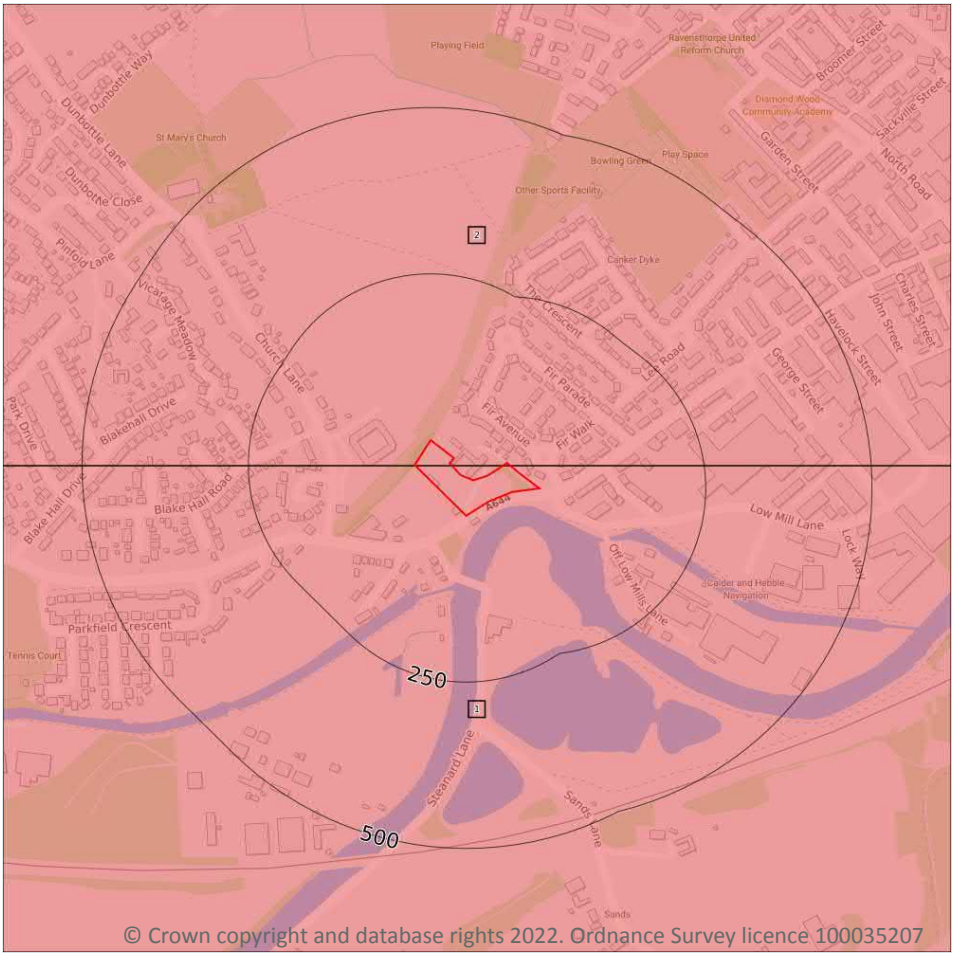
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 77**

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

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

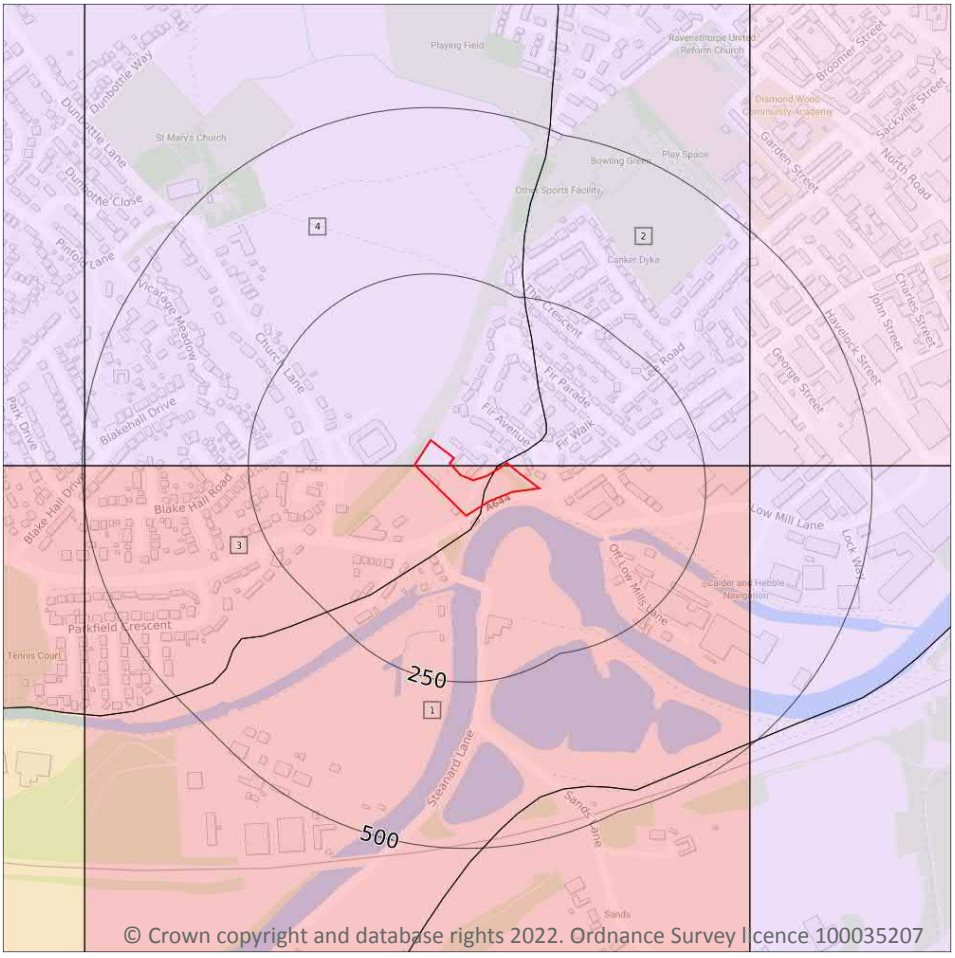
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 79**

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

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	4

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 81**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	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, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m 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 - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	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.

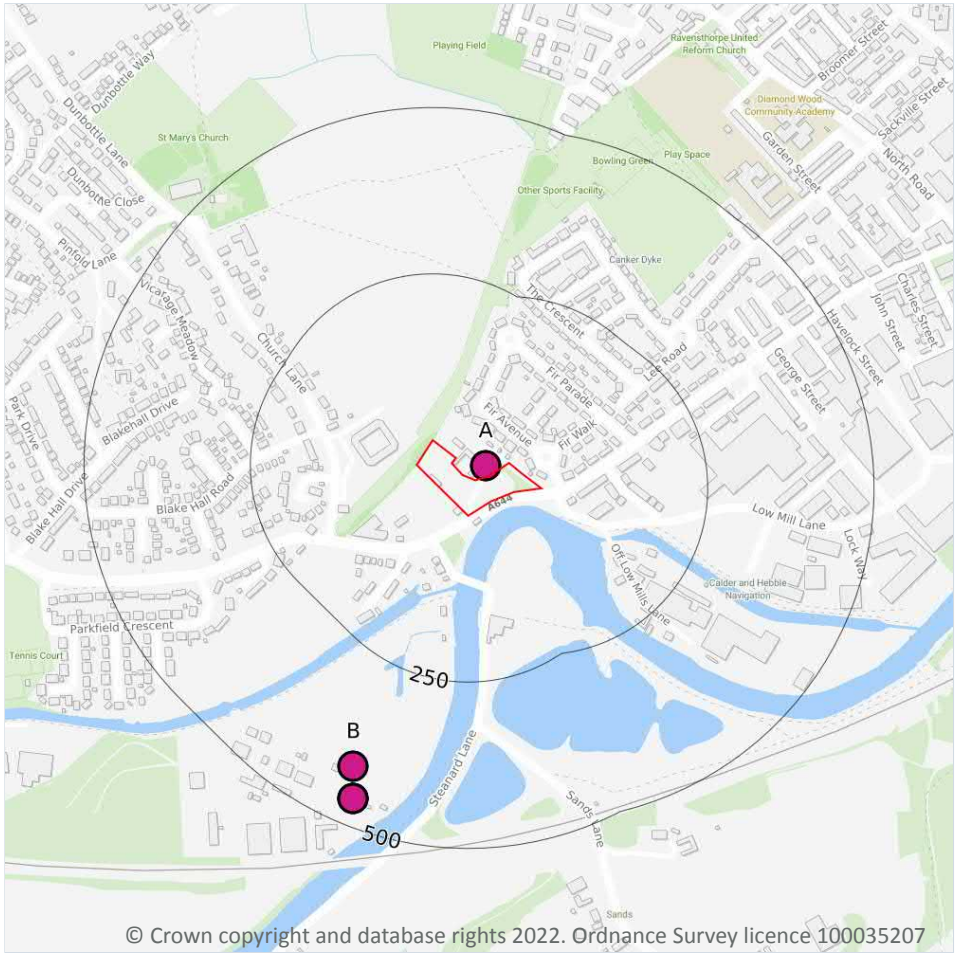
5.5 Groundwater vulnerability- local information

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	22

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 84**

ID	Location	Details	
A	15m NE	Status: Historical Licence No: 2/27/13/063 Details: General Farming & Domestic Direct Source: GROUNDWATERS Point: WELL Data Type: Point Name: BROOK Easting: 421600 Northing: 420000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 12/01/1972 Version End Date: -
A	15m NE	Status: Historical Licence No: 2/27/13/063 Details: General Farming & Domestic Direct Source: GROUNDWATERS Point: WELL - COAL MEASURES - MIRFIELD Data Type: Point Name: BROOK Easting: 421600 Northing: 420000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 12/01/1972 Version End Date: -
B	414m S	Status: Active Licence No: NE/027/0013/014 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: DR REDDY'S LABORATORIES (EU) LTD Easting: 421401 Northing: 419548	Annual Volume (m^3): 13,800 Max Daily Volume (m^3): 80 Original Application No: NPS/WR/015219 Original Start Date: 08/07/2014 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 08/07/2014 Version End Date: -
B	414m S	Status: Active Licence No: NE/027/0013/014 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: DR REDDY'S LABORATORIES (EU) LTD Easting: 421401 Northing: 419548	Annual Volume (m^3): 13,800 Max Daily Volume (m^3): 80 Original Application No: NPS/WR/015219 Original Start Date: 08/07/2014 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 08/07/2014 Version End Date: -
B	458m S	Status: Historical Licence No: 2/27/13/192 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: MITCHELL COTTS CHEMICALS LIMITED Easting: 421400 Northing: 419500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/09/1997 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 03/09/1997 Version End Date: -

ID	Location	Details	
B	458m S	Status: Historical Licence No: 2/27/13/192 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: MITCHELL COTTS CHEMICALS LIMITED Easting: 421400 Northing: 419500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/09/1997 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 03/09/1997 Version End Date: -
B	458m S	Status: Historical Licence No: 2/27/13/192 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: MITCHELL COTTS CHEMICALS LTD Easting: 421400 Northing: 419500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/09/1997 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 03/09/1997 Version End Date: -
B	458m S	Status: Historical Licence No: 2/27/13/192 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: MITCHELL COTTS CHEMICALS LTD Easting: 421400 Northing: 419500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/09/1997 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 03/09/1997 Version End Date: -
-	730m E	Status: Historical Licence No: 2/27/13/215 Details: Process water Direct Source: GROUNDWATERS Point: BOREHOLE-COAL MEASURES-RAVENSTHORPE,DEWSBURY Data Type: Point Name: DEWSBURY DYEING CO LTD Easting: 422390 Northing: 420150	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/12/2003 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 24/12/2003 Version End Date: -
-	730m E	Status: Historical Licence No: 2/27/13/215 Details: Process Water Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - RAVENSTHORPE - DEWSBURY Data Type: Point Name: DEWSBURY DYEING CO LTD Easting: 422390 Northing: 420150	Annual Volume (m^3): 65000 Max Daily Volume (m^3): 270 Original Application No: - Original Start Date: 24/12/2003 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 24/12/2003 Version End Date: -

ID	Location	Details	
-	952m E	Status: Historical Licence No: 2/27/13/202 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - DEWSBURY - COAL MEASURES Data Type: Point Name: RIVERSTONE SPINNING LTD Easting: 422620 Northing: 420140	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/04/2000 Expiry Date: 31/12/2005 Issue No: 2 Version Start Date: 23/04/2002 Version End Date: -
-	952m E	Status: Historical Licence No: 2/27/13/218 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - DEWSBURY - COAL MEASURES Data Type: Point Name: ULSTER YARNS LTD Easting: 422620 Northing: 420140	Annual Volume (m^3): 100000 Max Daily Volume (m^3): 500 Original Application No: - Original Start Date: 01/01/2006 Expiry Date: 31/12/2010 Issue No: 2 Version Start Date: 23/03/2007 Version End Date: -
-	952m E	Status: Historical Licence No: NE/027/0013/005 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE AT RAVENSTHORPE MILLS, DEWSBURY Data Type: Point Name: ULSTER YARNS LTD Easting: 422620 Northing: 420140	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 250 Original Application No: - Original Start Date: 01/01/2011 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/01/2011 Version End Date: -
-	952m E	Status: Historical Licence No: NE/027/0013/005 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - RAVENSTHORPE MILLS, DEWSBURY Data Type: Point Name: ULSTER YARNS LTD Easting: 422620 Northing: 420140	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 250 Original Application No: - Original Start Date: 01/01/2011 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/01/2011 Version End Date: -

ID	Location	Details	
-	1352m S	Status: Historical Licence No: 2/27/13/182 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: INTERFACE FABRICS LIMITED Easting: 421300 Northing: 418600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 26/08/1996 Expiry Date: 31/12/2005 Issue No: 101 Version Start Date: 14/09/1999 Version End Date: -
-	1352m S	Status: Historical Licence No: 2/27/13/182 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: INTERFACE FABRICS LTD Easting: 421300 Northing: 418600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 26/08/1996 Expiry Date: 31/12/2005 Issue No: 101 Version Start Date: 14/09/1999 Version End Date: -
-	1397m S	Status: Historical Licence No: 2/27/13/219 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE-COAL MEASURES-MIRFIELD Data Type: Point Name: HOPTON MILLS LTD Easting: 421160 Northing: 418590	Annual Volume (m^3): 100000 Max Daily Volume (m^3): 400 Original Application No: - Original Start Date: 01/01/2006 Expiry Date: 31/03/2015 Issue No: 3 Version Start Date: 02/06/2009 Version End Date: -
-	1397m S	Status: Historical Licence No: 2/27/13/219 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE-COAL MEASURES-MIRFIELD Data Type: Point Name: YCPD (Wheatley Park) Ltd Easting: 421160 Northing: 418590	Annual Volume (m^3): 15100 Max Daily Volume (m^3): 145 Original Application No: - Original Start Date: 01/01/2006 Expiry Date: 31/03/2015 Issue No: 6 Version Start Date: 24/03/2013 Version End Date: -
-	1397m S	Status: Active Licence No: 2/27/13/219/R01 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE-COAL MEASURES-MIRFIELD Data Type: Point Name: Wheatley Park Management Ltd Easting: 421160 Northing: 418590	Annual Volume (m^3): 15,100 Max Daily Volume (m^3): 145 Original Application No: NPS/WR/030859 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 4 Version Start Date: 03/05/2019 Version End Date: -

ID	Location	Details	
-	1484m E	Status: Historical Licence No: 2/27/13/200 Details: General Washing/Process Washing Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: WILLIAM S GRAHAM LIMITED Easting: 423080 Northing: 420470	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 23/06/1999 Expiry Date: - Issue No: 100 Version Start Date: 23/06/1999 Version End Date: -
-	1484m E	Status: Active Licence No: 2/27/13/200 Details: General Washing/Process Washing Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - RAVENSTHORPE - DEWSBURY Data Type: Point Name: Lawton Yarns Ltd Easting: 423080 Northing: 420470	Annual Volume (m^3): 28,800 Max Daily Volume (m^3): 960 Original Application No: NPS/WR/016408 Original Start Date: 23/06/1999 Expiry Date: - Issue No: 102 Version Start Date: 06/08/2014 Version End Date: -
-	1673m N	Status: Historical Licence No: 2/27/13/231 Details: General Farming & Domestic Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - MIRFIELD Data Type: Point Name: JOHN L BARBER & SON Easting: 420920 Northing: 421600	Annual Volume (m^3): 25000 Max Daily Volume (m^3): 103 Original Application No: - Original Start Date: 08/09/2008 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 08/09/2008 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**7**

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 84**

ID	Location	Details	
-	722m E	Status: Historical Licence No: 2/27/13/229 Details: Dust Suppression Direct Source: SURFACE WATER Point: RIVER CALDER - RAVENSTHORPE Data Type: Line Name: FORTICRETE LTD Easting: 422400 Northing: 419870	Annual Volume (m^3): 22000 Max Daily Volume (m^3): 80 Original Application No: - Original Start Date: 08/01/2008 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	722m E	Status: Historical Licence No: 2/27/13/229 Details: General Use Relating To Secondary Category (High Loss) Direct Source: SURFACE WATER Point: RIVER CALDER - RAVENSTHORPE Data Type: Line Name: FORTICRETE LTD Easting: 422400 Northing: 419870	Annual Volume (m^3): 22000 Max Daily Volume (m^3): 80 Original Application No: - Original Start Date: 08/01/2008 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1059m SW	Status: Active Licence No: 2/27/13/050 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER CALDER - HOLME BANK MILLS Data Type: Point Name: James Walker Textiles Ltd Easting: 420800 Northing: 419200	Annual Volume (m^3): 36,368 Max Daily Volume (m^3): 227.30 Original Application No: NPS/WR/001627 Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 15/06/2009 Version End Date: -
-	1159m E	Status: Historical Licence No: 2/27/13/179 Details: Non-Evaporative Cooling Direct Source: SURFACE WATER Point: RIVER CALDER Data Type: Point Name: BRITISH WATERWAYS Easting: 422830 Northing: 420140	Annual Volume (m^3): 25842000 Max Daily Volume (m^3): 70800 Original Application No: - Original Start Date: 22/04/1996 Expiry Date: - Issue No: 100 Version Start Date: 28/08/1996 Version End Date: -
-	1159m E	Status: Active Licence No: 2/27/13/179 Details: Non-Evaporative Cooling Direct Source: SURFACE WATER Point: RIVER CALDER - THORNHILL POWER STATION - DEWSBURY Data Type: Point Name: Canal and River Trust Easting: 422830 Northing: 420140	Annual Volume (m^3): 25,842,000 Max Daily Volume (m^3): 70,800 Original Application No: 6708 Original Start Date: 22/04/1996 Expiry Date: - Issue No: 101 Version Start Date: 21/01/2008 Version End Date: -

ID	Location	Details	
-	1547m E	Status: Historical Licence No: 2/27/13/211 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER CALDER-RAVENSING MILLS-RAVENSTHORPE Data Type: Point Name: Lawton Yarns Ltd Easting: 423140 Northing: 420490	Annual Volume (m^3): 350000 Max Daily Volume (m^3): 960 Original Application No: - Original Start Date: 21/11/2002 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 06/08/2014 Version End Date: -
-	1548m E	Status: Active Licence No: 2/27/13/211/R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RIVER CALDER-RAVENSING MILLS-RAVENSTHORPE Data Type: Point Name: Lawton Yarns Ltd Easting: 423140 Northing: 420493	Annual Volume (m^3): 350,000 Max Daily Volume (m^3): 960 Original Application No: NPS/WR/017905 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2015 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.

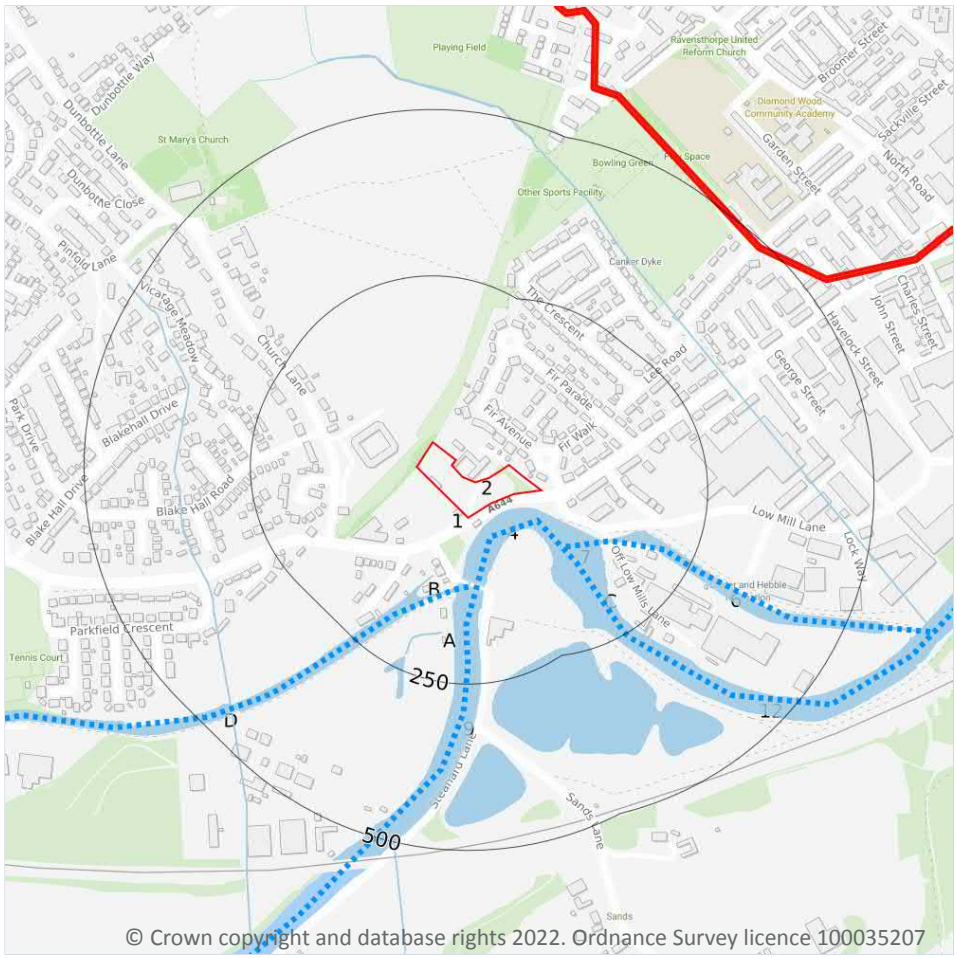
5.10 Source Protection Zones (confined aquifer)

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	15

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 93**

ID	Location	Type of water feature	Ground level	Permanence	Name
4	36m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder

ID	Location	Type of water feature	Ground level	Permanence	Name
6	89m SE	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
7	89m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
B	102m S	Lock or flight of locks. An enclosure in a canal or navigable river with gates and sluices at either end.	On ground surface	Watercourse may not contain water all year round	-
9	108m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
B	108m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
B	114m S	Lock or flight of locks. An enclosure in a canal or navigable river with gates and sluices at either end.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
C	118m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
C	118m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
B	128m SW	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	137m S	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
D	153m SW	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder
A	176m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	177m S	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
12	239m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Calder

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	5

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 93**

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 93**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Calder from River Colne to River Chald**	**GB104027062631**	**Calder Lower**	**Aire and Calder**

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

6.4 WFD Surface water bodies

Records identified	2

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 93**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	42m S	River	Calder from River Colne to River Chald	GB104027062631	Moderate	Fail	Moderate	2019
A	93m SE	Canal	Calder and Hebble Navigation (river and canal sections)	GB70410521	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**

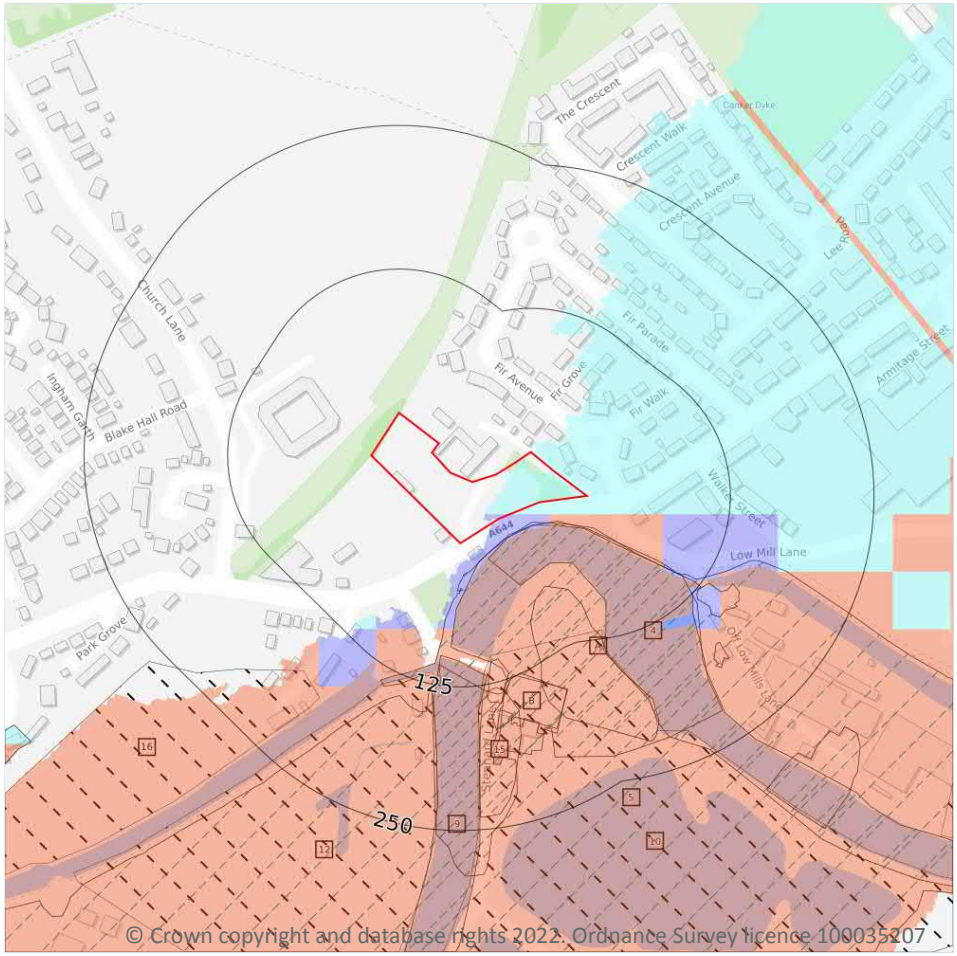
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 93**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**Aire & Calder Carb Limestone / Millstone Grit / Coal Measures.**	**GB40402G700400**	**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	3

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 97**

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

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

7.2 Historical Flood Events

Records within 250m	**8**

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 97**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
4	14m SE	2020 February Flood Incident - Storm Ciara/dennis	2020-02-08 2020-03-19	Main river	Channel capacity exceeded (no raised defences)	Fluvial
5	16m SE	December 2015 Flood Event	2015-12-25 2015-12-29	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	17m SE	2020 February Flood Incident - Storm Ciara	2020-02-08 2020-02-14	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	69m SE	River Calder. Brighouse To Dewsbury	2002-02-10 2002-02-13	Main river	Channel capacity exceeded (no raised defences)	Fluvial
9	99m S	2020 February Flood Incident - Storm Ciara/dennis	2020-02-08 2020-03-19	Main river	Channel capacity exceeded (no raised defences)	Fluvial
B	123m S	2019 March Flooding Yorkshire	2019-03-14 2019-03-17	Main river	Unknown	Fluvial
B	124m S	123 Autumn 2000	2000-11-06 2000-12-04	Main river	Unknown	No data
15	129m S	River Calder. Brighouse To Dewsbury	2002-02-10 2002-02-13	Main river	Channel capacity exceeded (no raised defences)	Fluvial

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	3

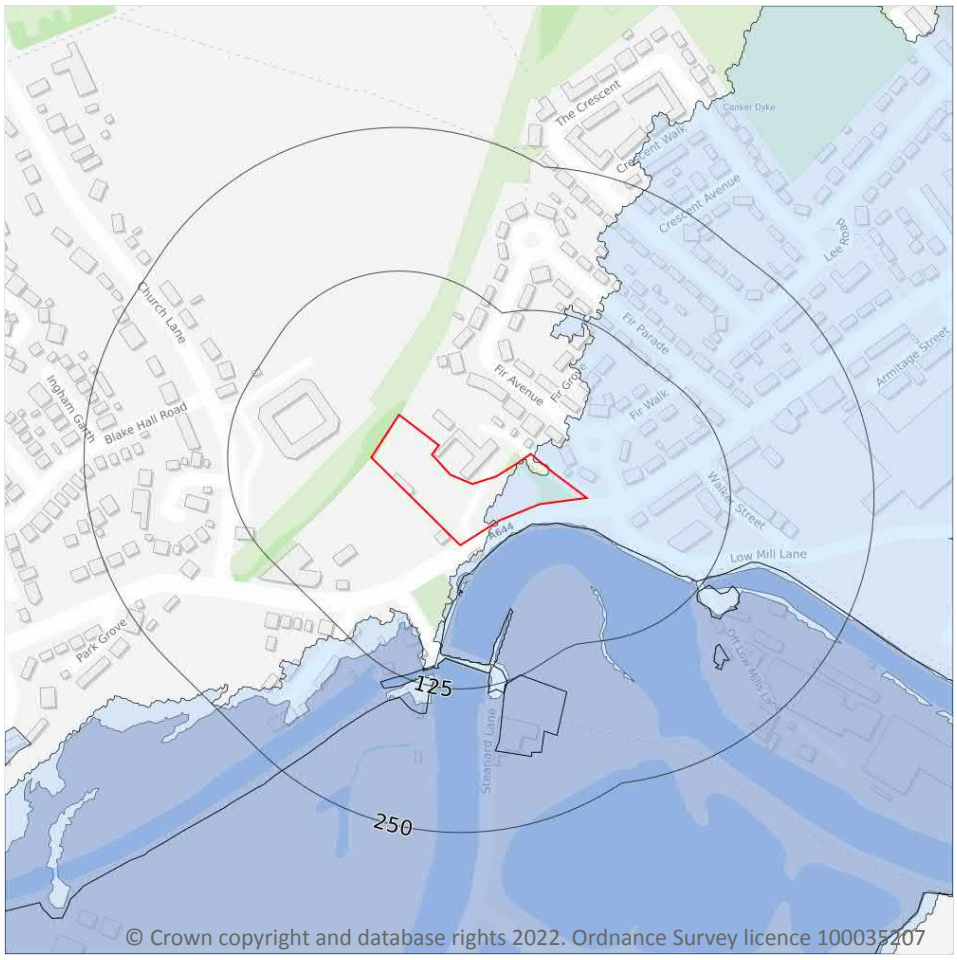
Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

Features are displayed on the River and coastal flooding map on **page 97**

ID	Location	Update
10	101m S	Flood Storage Area
12	116m S	Flood Storage Area
16	175m SW	Flood Storage Area

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 97**

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

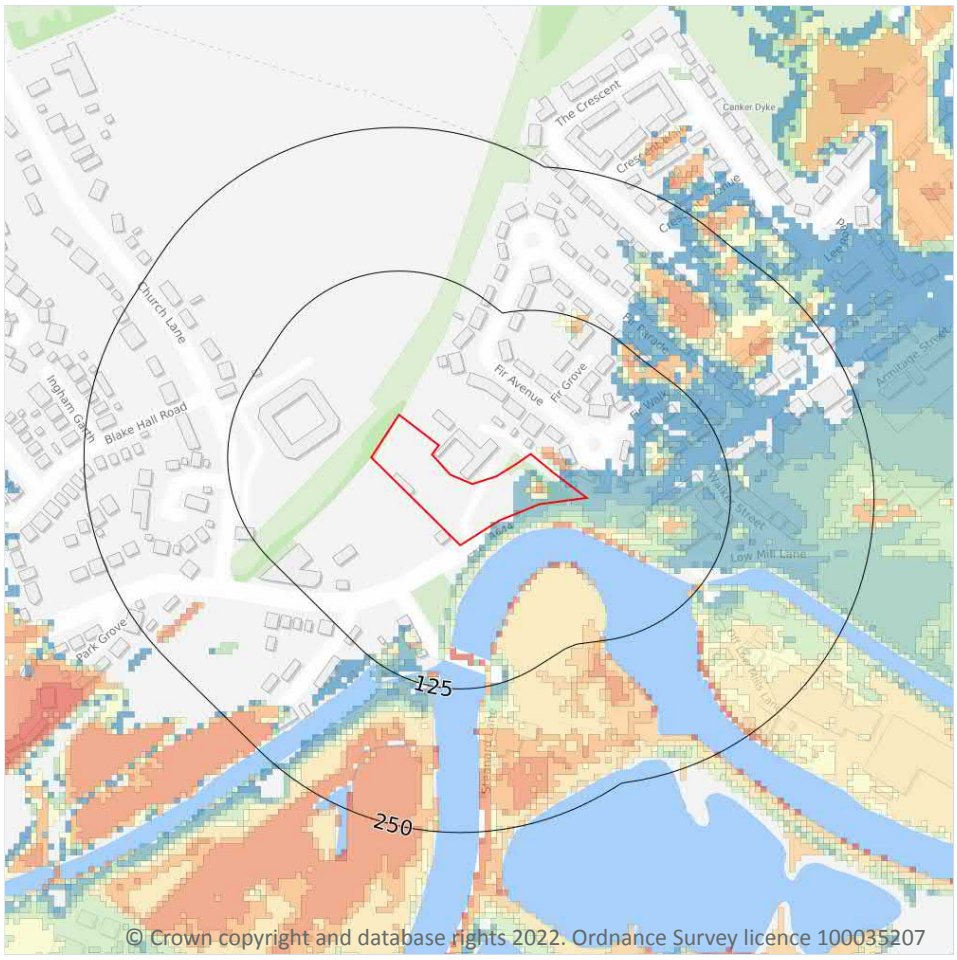
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 97**

Location	Type
14m SE	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, 0.3m - 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 102**

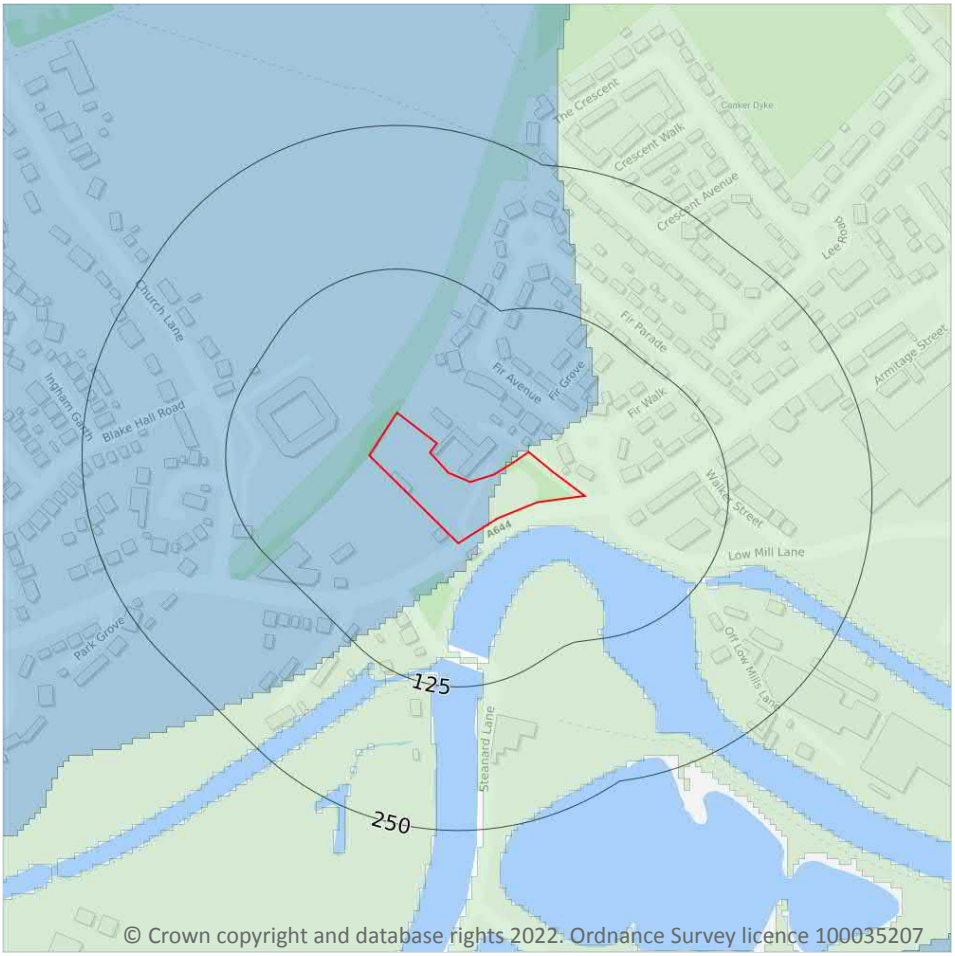
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 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

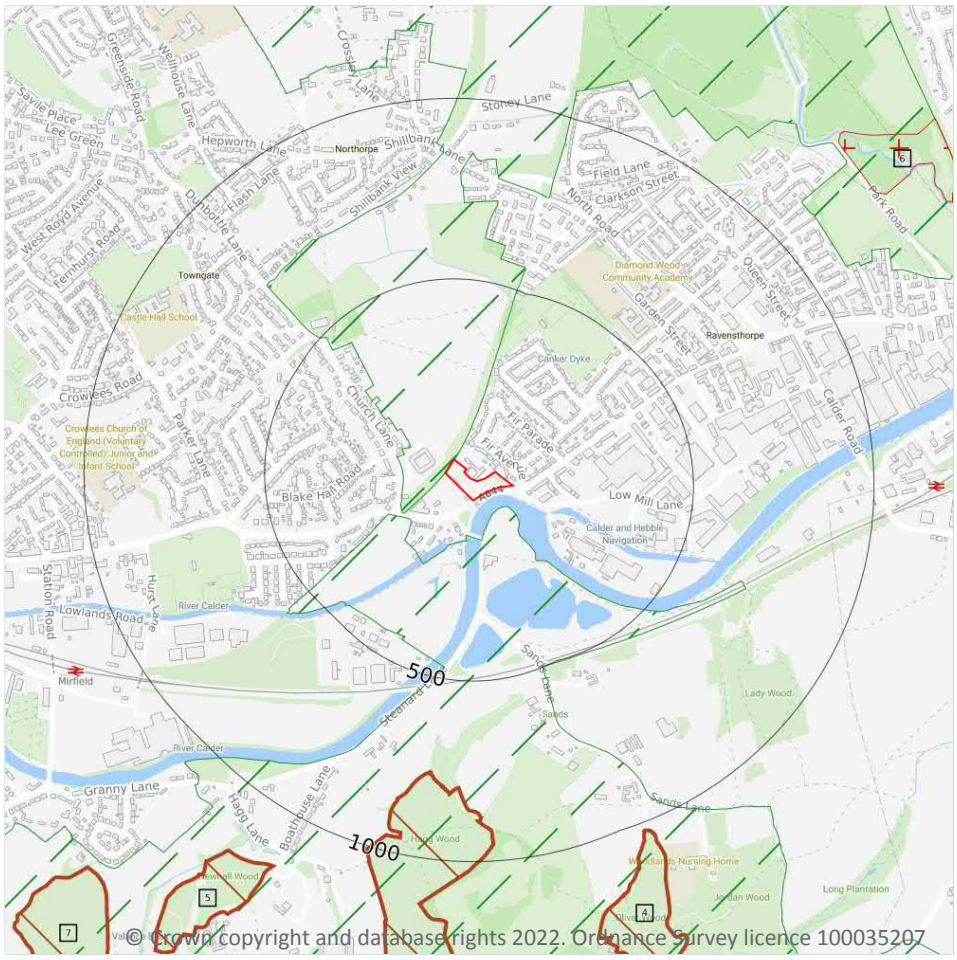
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 104**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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.

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	1

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.

Features are displayed on the Environmental designations map on **page 105**

ID	Location	Name	Data source
6	1291m NE	Lower Spen Wildlife Area	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	6

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.

Features are displayed on the Environmental designations map on **page 105**

ID	Location	Name	Woodland Type
3	762m S	Whitley Wood/hagg Wood	Ancient Replanted Woodland
4	1022m SE	Oliver Wood	Ancient Replanted Woodland
5	1154m SW	Newhall Wood	Ancient Replanted Woodland
7	1469m SW	Briery Bank	Ancient Replanted Woodland
-	1817m S	Gregory Spring	Ancient Replanted Woodland
-	1996m SW	Hepworth Wood	Ancient Replanted Woodland

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	2

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

Features are displayed on the Environmental designations map on **page 105**

ID	Location	Name	Local Authority name
1	**On site**	**South and West Yorkshire**	**Kirklees**
2	54m SE	South and West Yorkshire	Kirklees

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

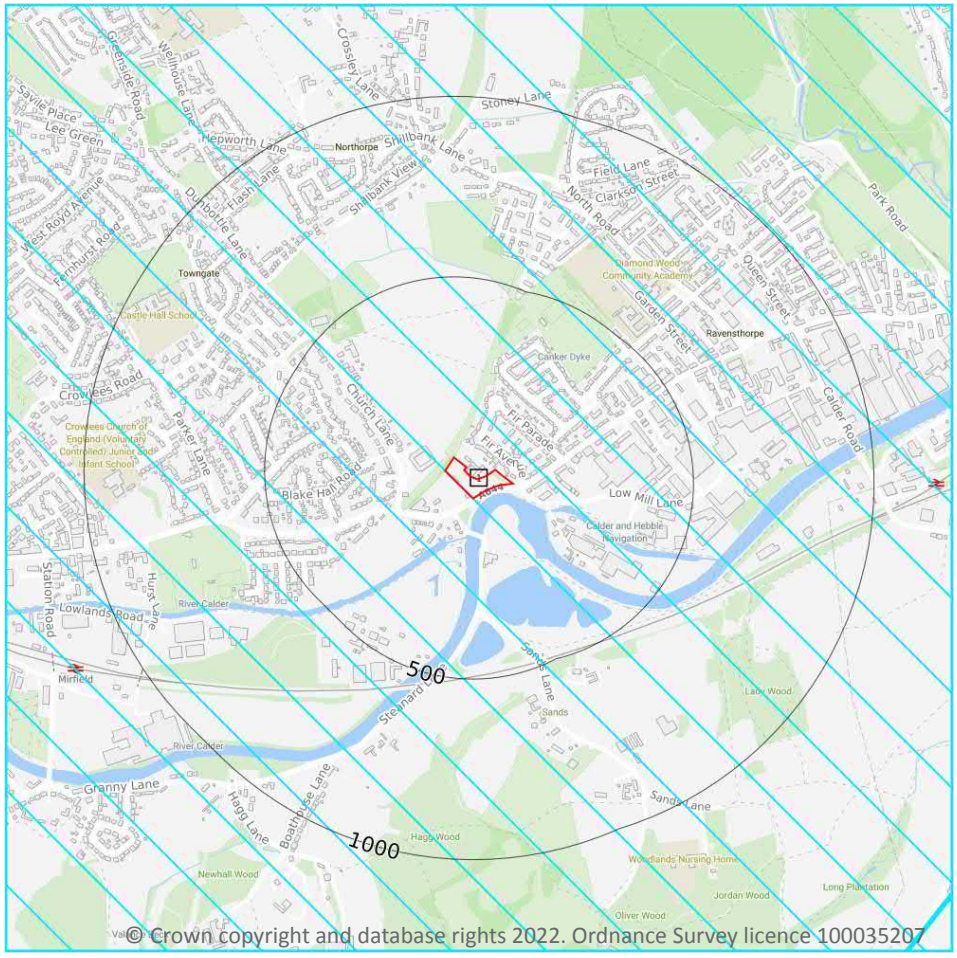
Records within 2000m	1

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
618m N	Spen Beck from Source to River Calder NVZ	Surface Water	271	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	1

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 111**

ID	Location	Type of developments requiring consultation
1	On site	**Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m². Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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.

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

11 Visual and cultural designations

Site Outline

Search buffers in metres (m)

- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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	3

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.

Features are displayed on the Visual and cultural designations map on **page 113**

ID	Location	Name	Grade	Reference Number	Listed date
A	113m S	Calder and Hebble Navigation Cottage At Shepley Bridge Locks, Mirfield, Kirklees, WF14	II	1183890	03/07/1985
A	118m S	Calder and Hebble Navigation Double Lock At Shepley Bridge, Mirfield, Kirklees, WF14	II	1313673	03/07/1985
1	119m SE	Calder and Hebble Navigation Low Mill Lane Bridge and Entrance Gate To Cut Low Mill Lane Bridge and Entrance Gate To Cut, Dewsbury, Kirklees, WF13	II	1313654	03/07/1985

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.

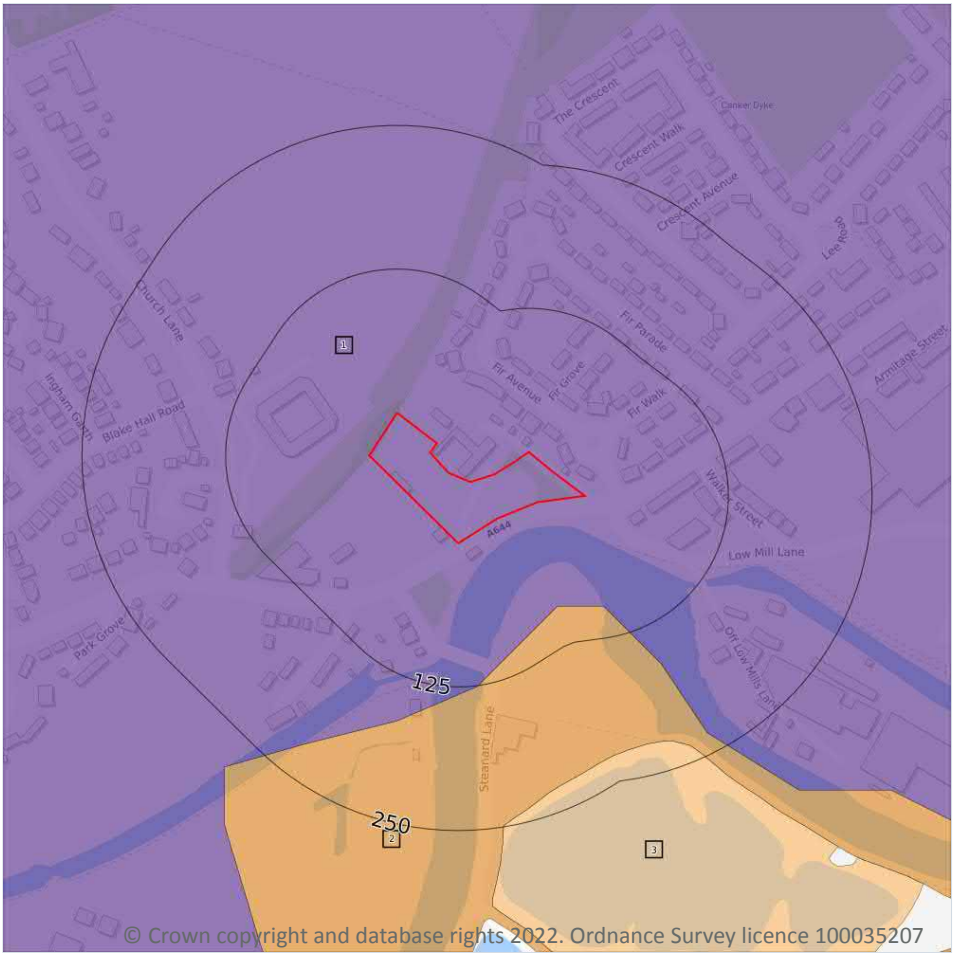
11.7 Registered Parks and Gardens

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	3

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 116**

ID	Location	Classification	Description
1	**On site**	**Urban**	-
2	90m SE	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.

ID	Location	Classification	Description
3	223m SE	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	0

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.

This data is sourced from Natural England.

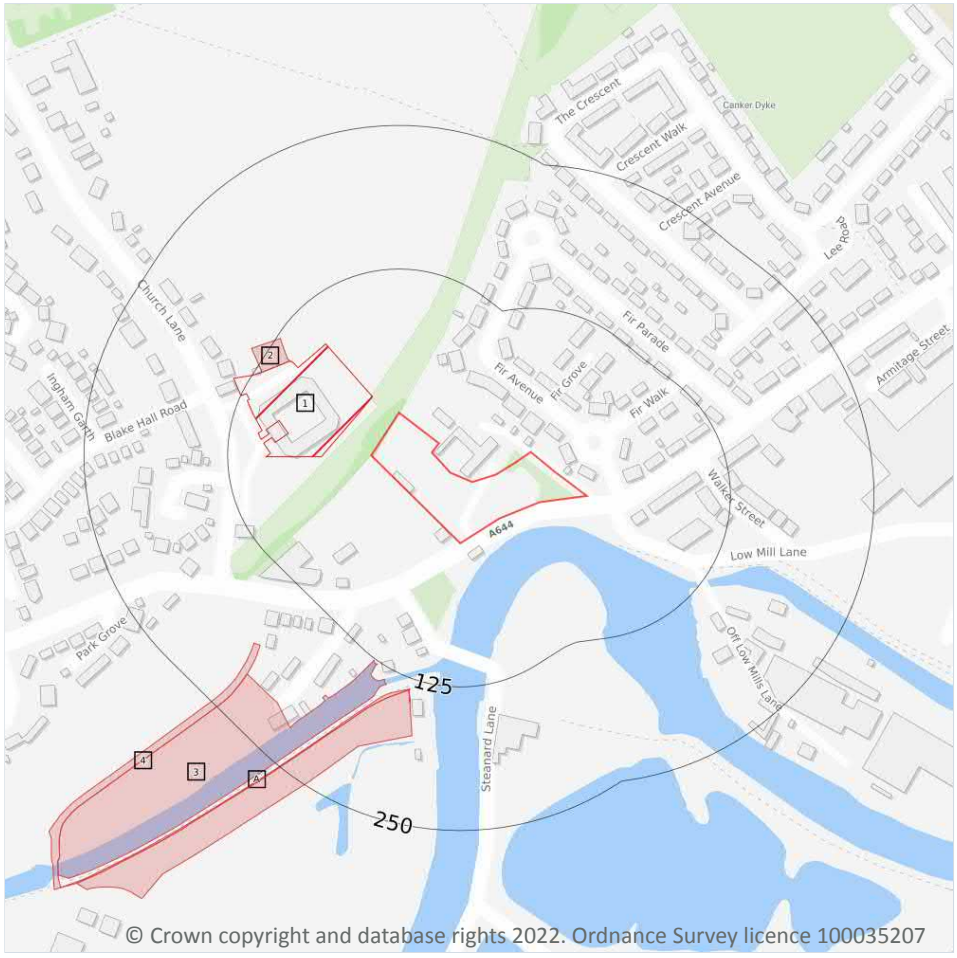
12.5 Countryside Stewardship Schemes

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



13.1 Priority Habitat Inventory

Records within 250m	5

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

Features are displayed on the Habitat designations map on **page 118**

ID	Location	Main Habitat	Other habitats
2	103m NW	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
3	127m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	134m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	135m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
4	186m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

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	1

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 118**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	27m NW	NLUD Ref: 471801709	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

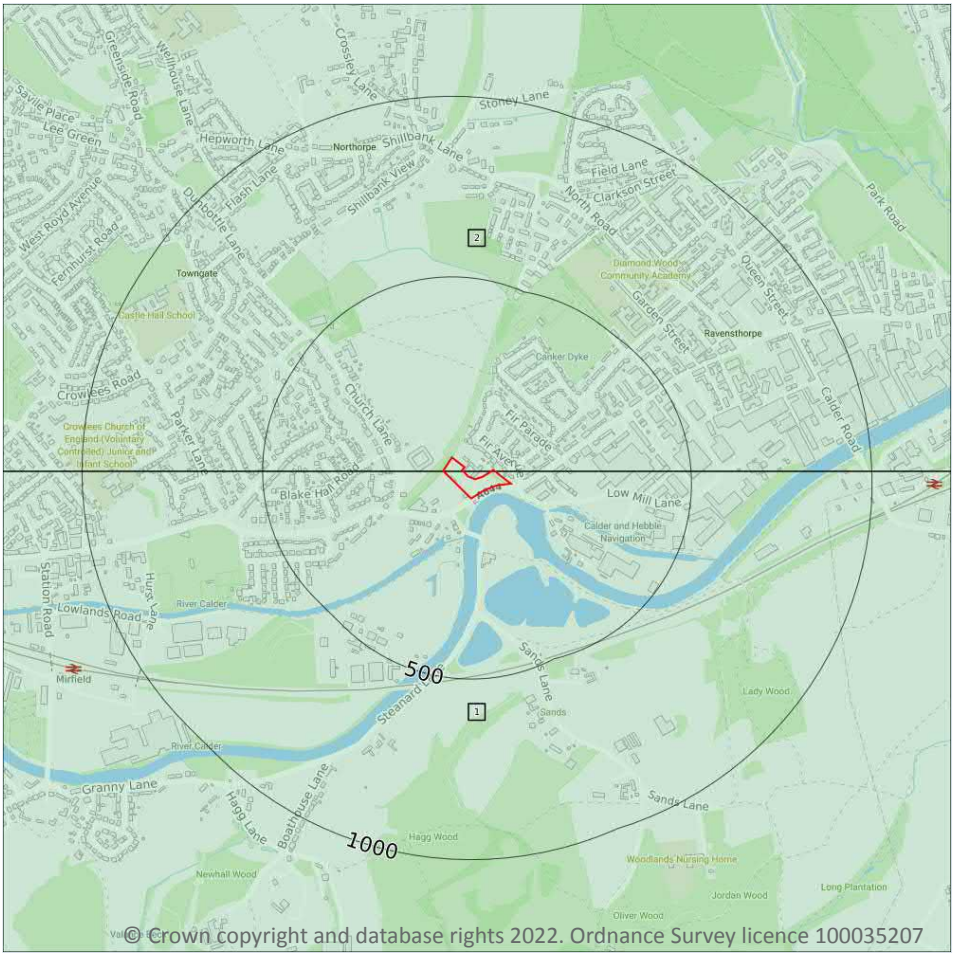
13.4 Limestone Pavement Orders

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

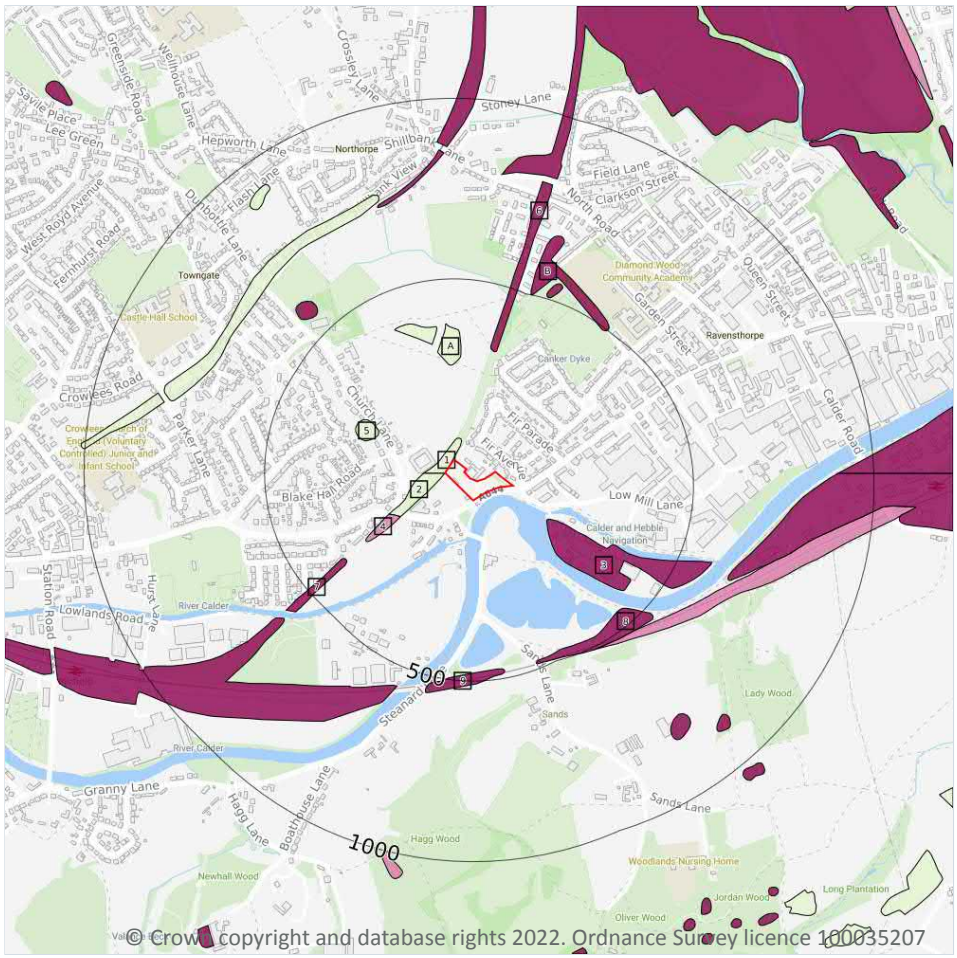
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 120**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**SE21NW**
2	**On site**	**Full**	**Full**	**Full**	**Full**	**SE22SW**

This data is sourced from the British Geological Survey.

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



14.2 Artificial and made ground (10k)

Records within 500m	12

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.

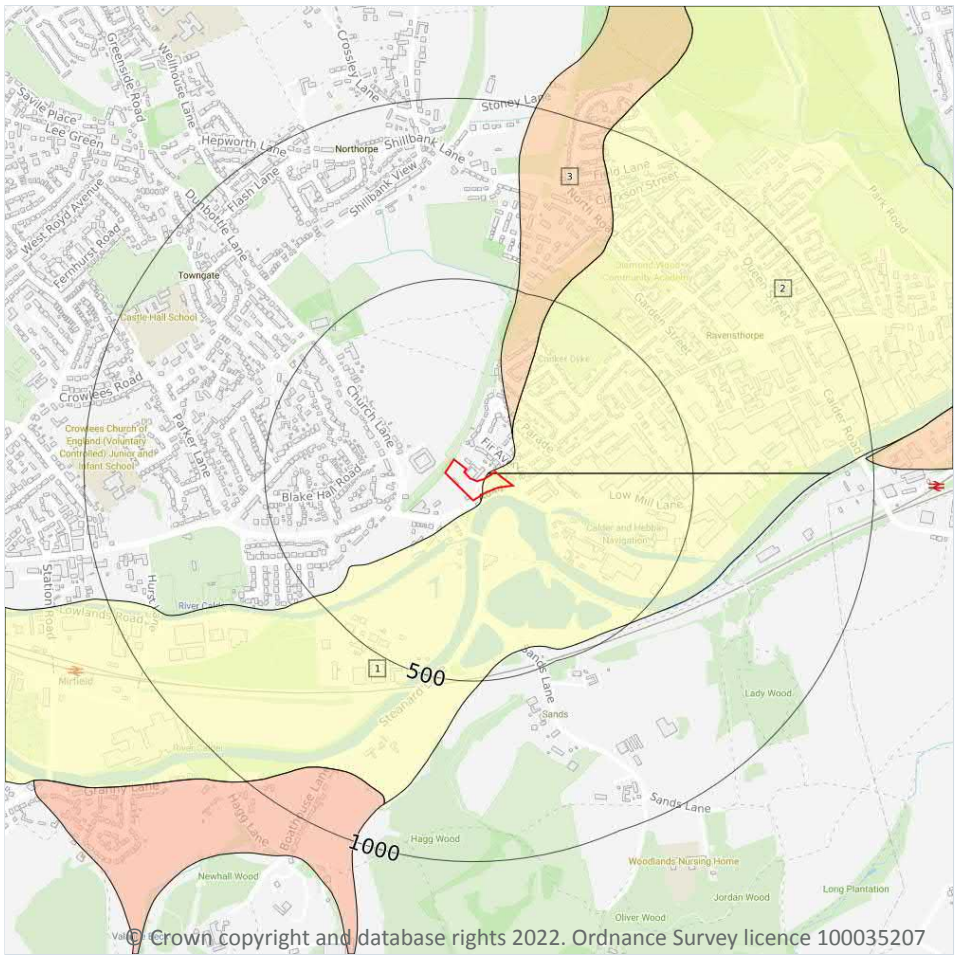
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 121**

ID	Location	LEX Code	Description	Rock description
1	1m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	2m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	134m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	173m SW	WGR-VOID	Worked Ground (Undivided)	Void

ID	Location	LEX Code	Description	Rock description
5	213m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
A	261m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	319m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	324m N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
7	364m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	453m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	471m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	492m NE	MGR-ARTDP	Made Ground (Undivided)	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 123**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCSV**	**Alluvium - Clay, Sand And Gravel**	**Clay, Sand And Gravel**
2	**On site**	**ALV-XCSV**	**Alluvium - Clay, Sand And Gravel**	**Clay, Sand And Gravel**
3	107m NE	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

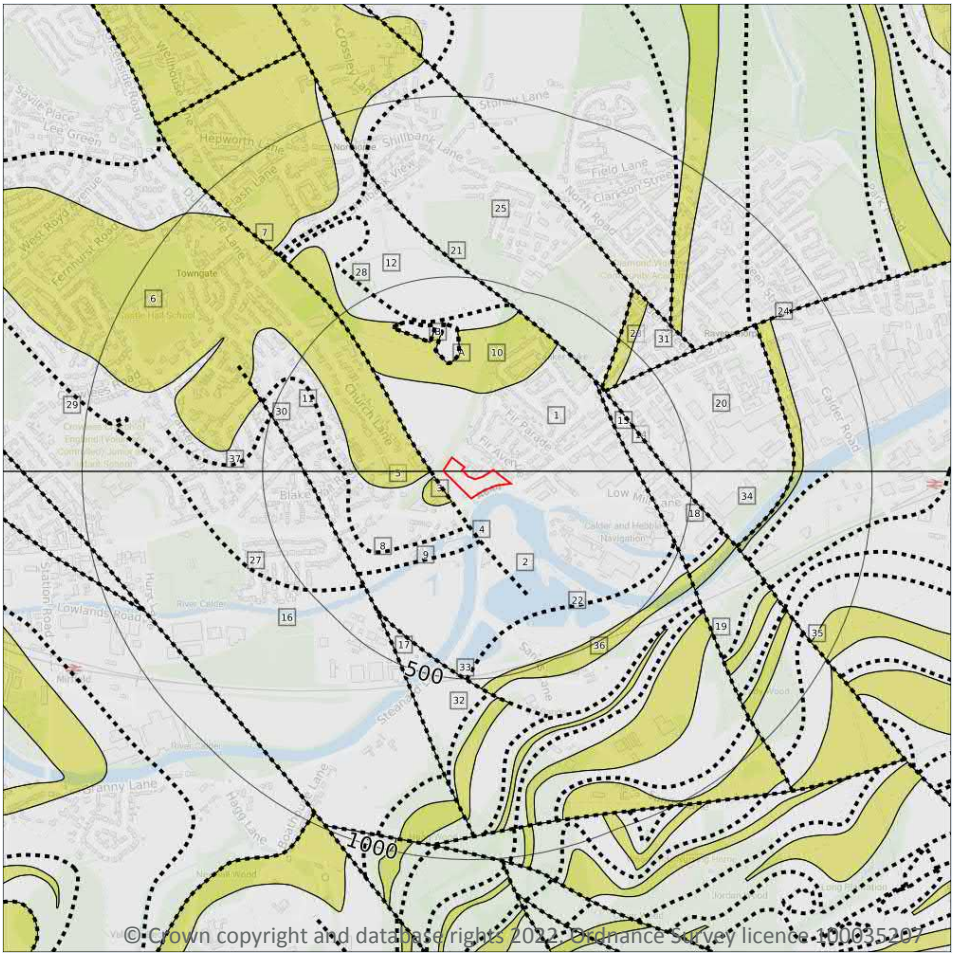
14.4 Landslip (10k)

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 **19**

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 125**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**PLCM-MDSS**	**Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone**	**Langsettian Sub-age**
2	**On site**	**PLCM-MDSS**	**Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone**	**Langsettian Sub-age**
3	29m W	FHR-SDST	Falhouse Rock - Sandstone	Langsettian Sub-age

ID	Location	LEX Code	Description	Rock age
5	34m W	FHR-SDST	Falhouse Rock - Sandstone	Langsettian Sub-age
6	34m W	FHR-SDST	Falhouse Rock - Sandstone	Langsettian Sub-age
10	191m N	FHR-SDST	Falhouse Rock - Sandstone	Langsettian Sub-age
11	239m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
12	261m N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
14	327m E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
16	343m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
18	351m E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
20	363m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
23	365m NE	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
25	366m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
29	386m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
31	394m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
32	406m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
34	437m E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
36	487m SE	FHR-SDST	Falhouse Rock - Sandstone	Langsettian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m **22**

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 125**

ID	Location	Category	Description
4	29m W	FAULT	Normal fault, inferred; downthrow not specified
7	34m W	FAULT	Normal fault, inferred; downthrow not specified
8	76m S	ROCK	Coal seam, inferred
9	120m S	ROCK	Coal seam, inferred
A	261m N	ROCK	Coal seam, observed
A	261m N	ROCK	Coal seam, observed
13	278m W	ROCK	Coal seam, inferred
B	324m N	ROCK	Coal seam, observed
B	324m N	ROCK	Coal seam, observed
15	327m E	FAULT	Normal fault, inferred; downthrow not specified
17	343m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
19	351m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
21	363m NE	FAULT	Normal fault, inferred; downthrow not specified
22	364m S	ROCK	Coal seam, inferred
24	365m NE	FAULT	Normal fault, inferred; downthrow not specified
26	366m NE	ROCK	Coal seam, inferred
27	380m SW	ROCK	Coal seam, inferred
28	380m N	ROCK	Coal seam, inferred
30	386m W	FAULT	Normal fault, inferred; downthrow not specified
33	406m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
35	437m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
37	497m W	ROCK	Coal seam, 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

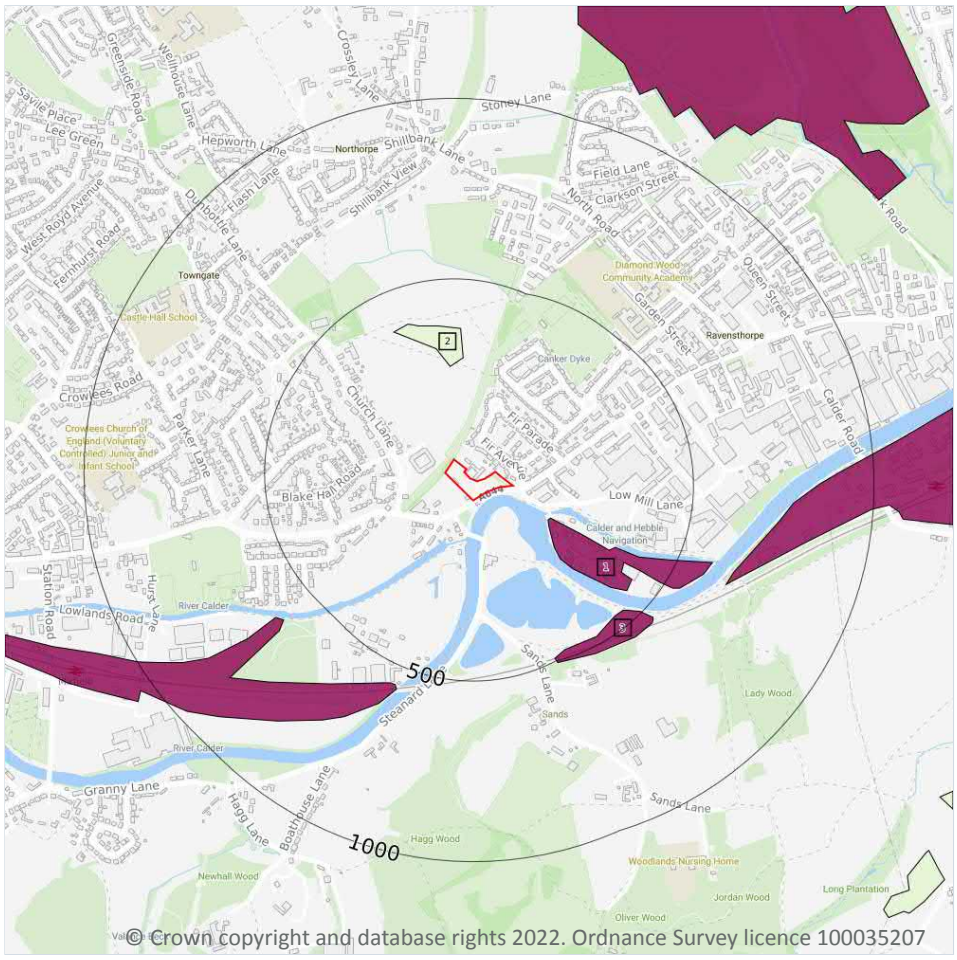
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 128**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW077_huddersfield_v4**

This data is sourced from the British Geological Survey.

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



15.2 Artificial and made ground (50k)

Records within 500m **3**

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 129**

ID	Location	LEX Code	Description	Rock description
1	136m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	258m N	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	458m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

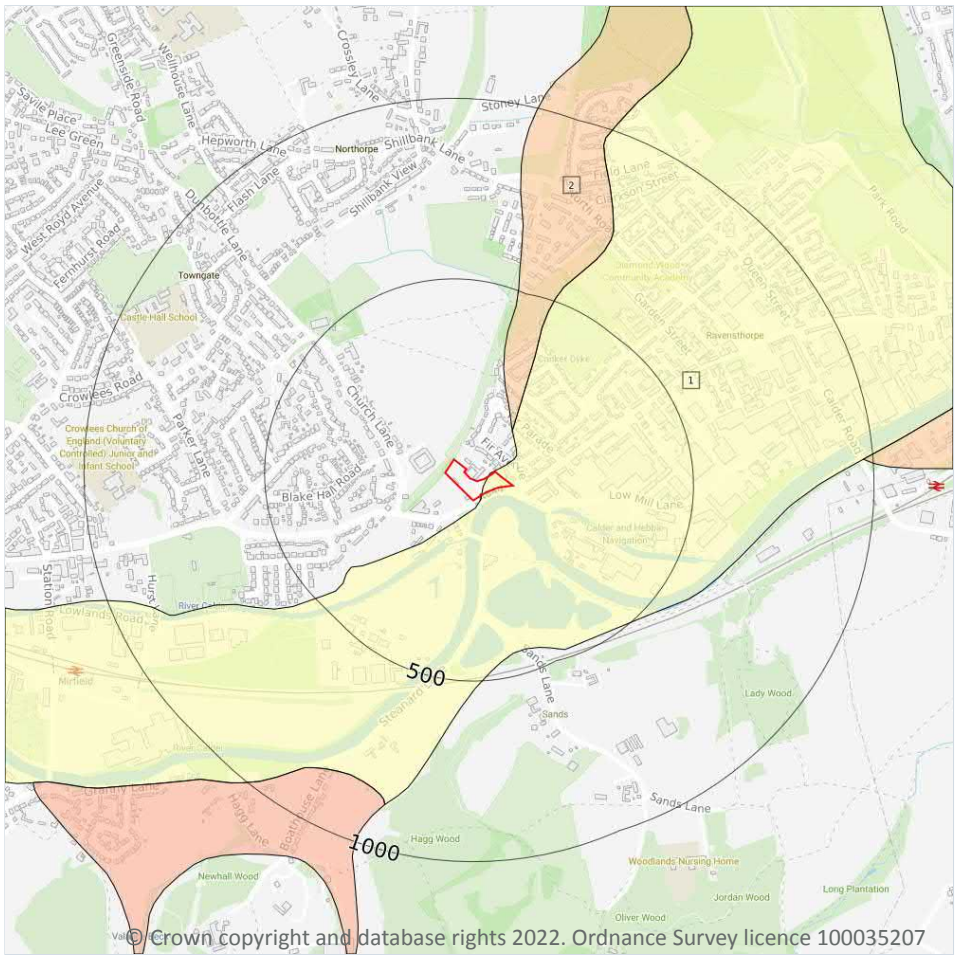
15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



15.4 Superficial geology (50k)

Records within 500m	2

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 131**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
2	123m NE	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL

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**	**High**	**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.

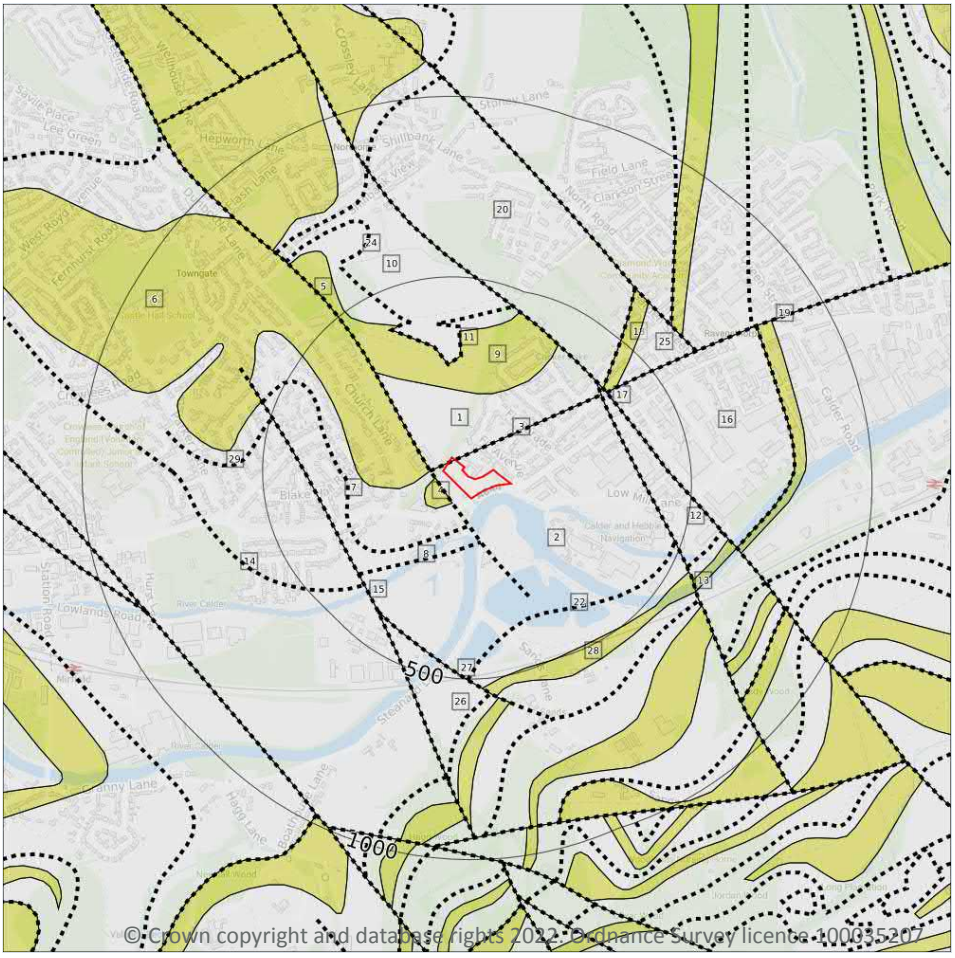
15.7 Landslip permeability (50k)

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 **14**

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 133**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**PLCM-MDSS**	**PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**
2	**On site**	**PLCM-MDSS**	**PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**
4	29m W	FHR-SDST	FALHOUSE ROCK - SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
6	36m W	FHR-SDST	FALHOUSE ROCK - SANDSTONE	WESTPHALIAN
9	186m N	FHR-SDST	FALHOUSE ROCK - SANDSTONE	WESTPHALIAN
10	258m N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	329m E	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
14	341m W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16	365m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
18	366m NE	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
20	367m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
25	395m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
26	405m SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
28	492m SE	FHR-SDST	FALHOUSE ROCK - SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**5**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Low**
29m W	Fracture	High	Moderate
36m W	Fracture	High	Moderate
37m W	Fracture	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**15**

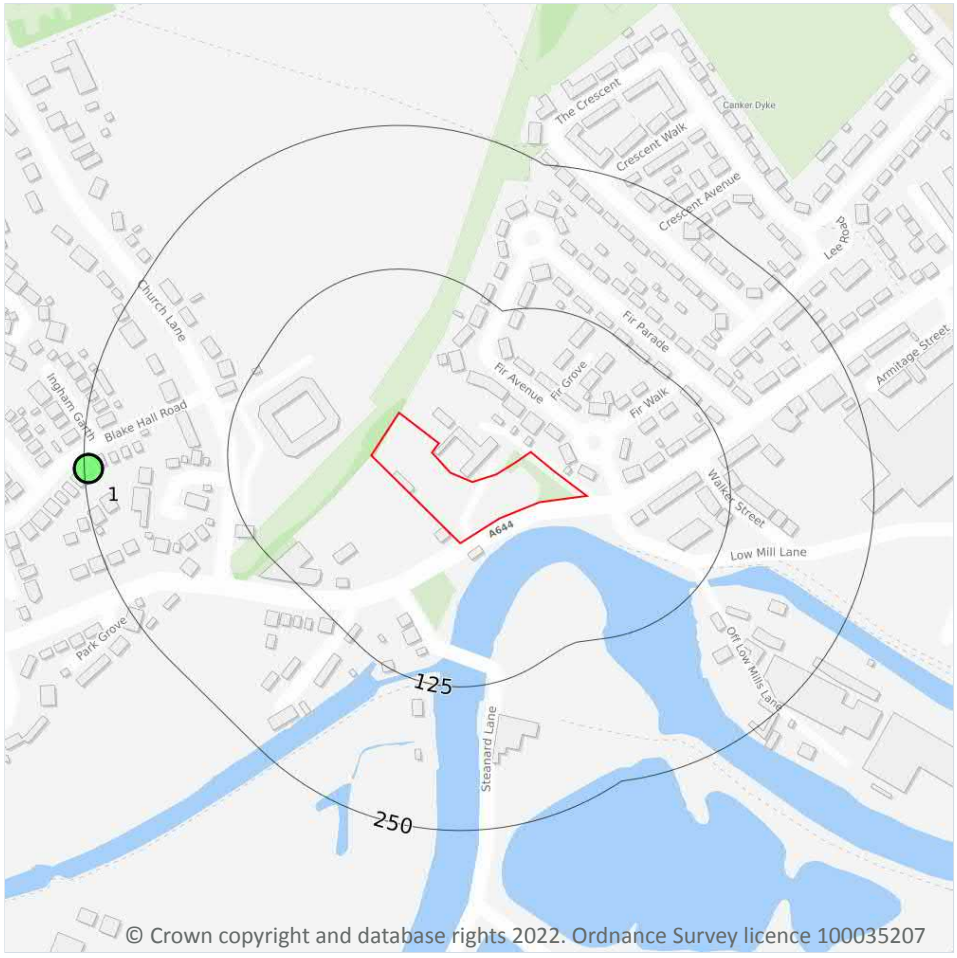
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 133**

ID	Location	Category	Description
3	**On site**	**FAULT**	**Fault, inferred**
5	29m W	FAULT	Fault, inferred
7	76m S	ROCK	Coal seam, inferred
8	124m S	ROCK	Coal seam, inferred
11	258m N	ROCK	Coal seam, inferred
13	329m E	FAULT	Fault, inferred
15	341m W	FAULT	Fault, inferred
17	365m NE	FAULT	Fault, inferred
19	366m NE	FAULT	Fault, inferred
21	367m NE	ROCK	Coal seam, inferred
22	368m S	ROCK	Coal seam, inferred
23	378m SW	ROCK	Coal seam, inferred
24	390m N	ROCK	Coal seam, inferred
27	405m SW	FAULT	Fault, inferred
29	495m W	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	1

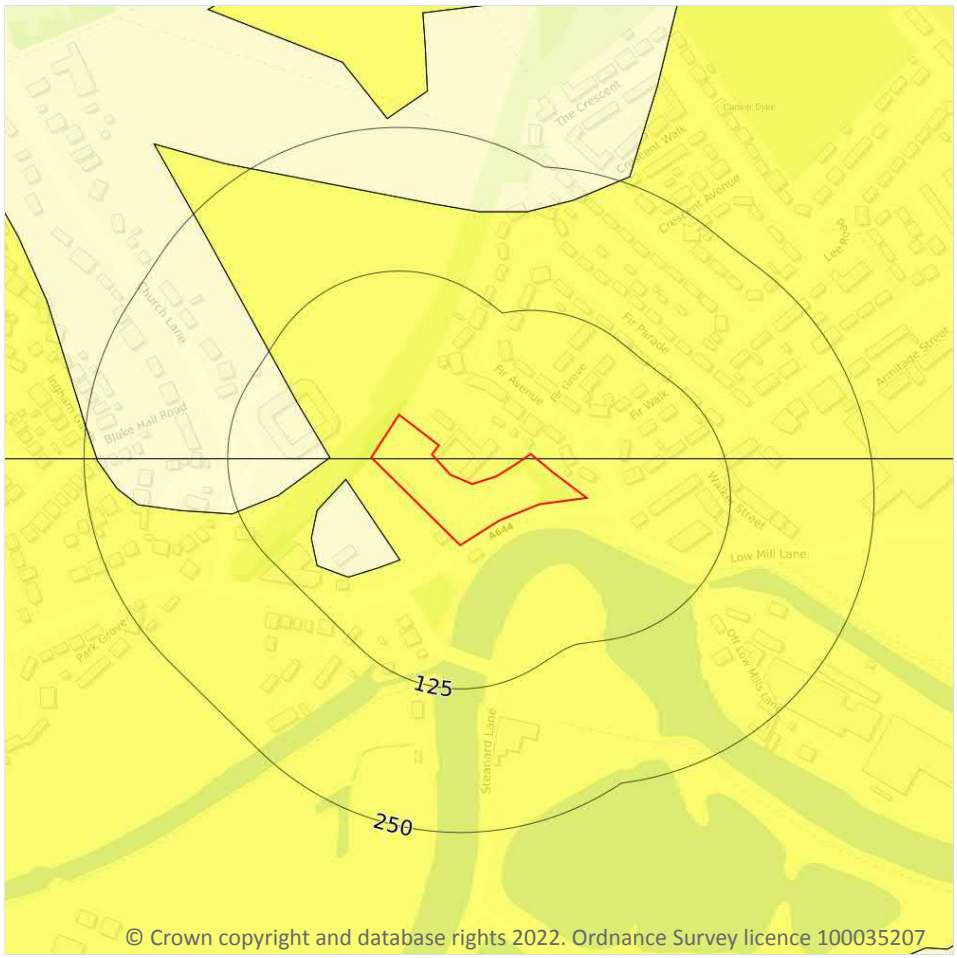
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several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

Features are displayed on the Boreholes map on **page 136**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	246m W	421250 419990	BLAKE HALL ESTATE MIRFIELD 17	13.41	N	18574574

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	4

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).

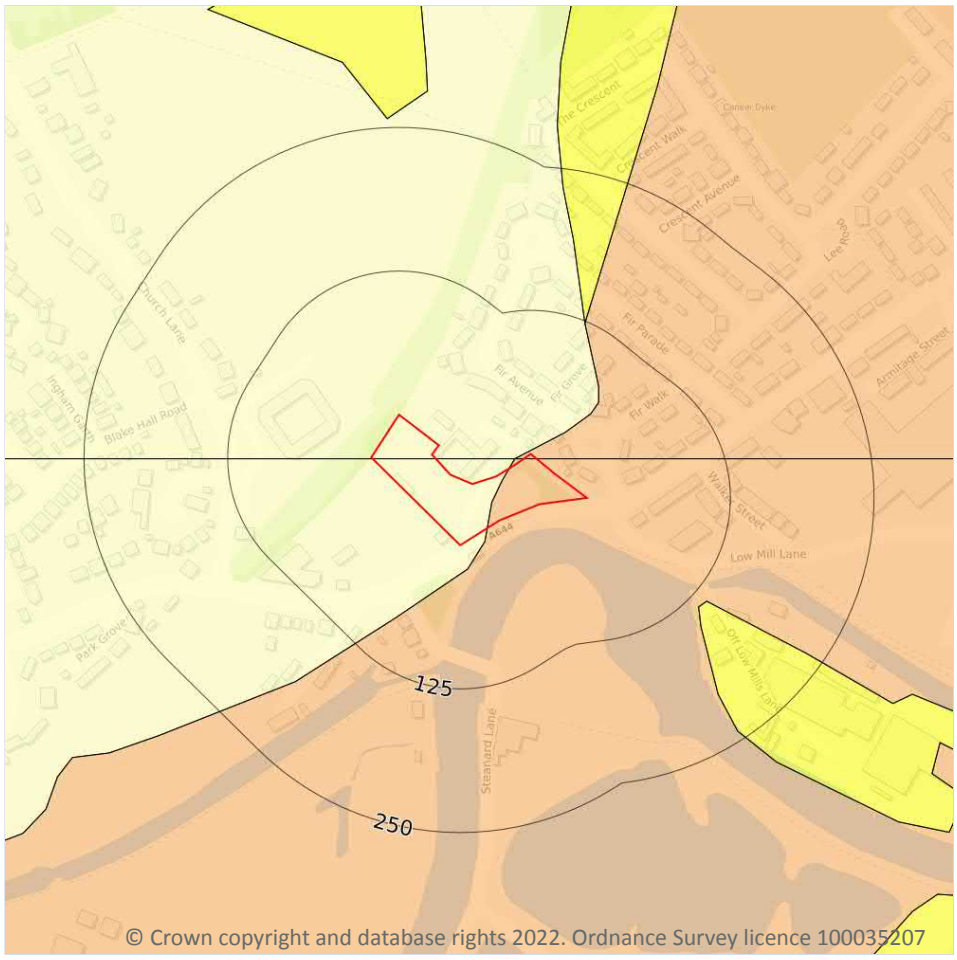
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 137**

Location	Hazard rating	Details
On site	**Very low**	**Ground conditions predominantly low plasticity.**
29m W	Negligible	Ground conditions predominantly non-plastic.
36m W	Negligible	Ground conditions predominantly non-plastic.

Location	Hazard rating	Details
38m W	Negligible	Ground conditions predominantly non-plastic.

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	2

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.

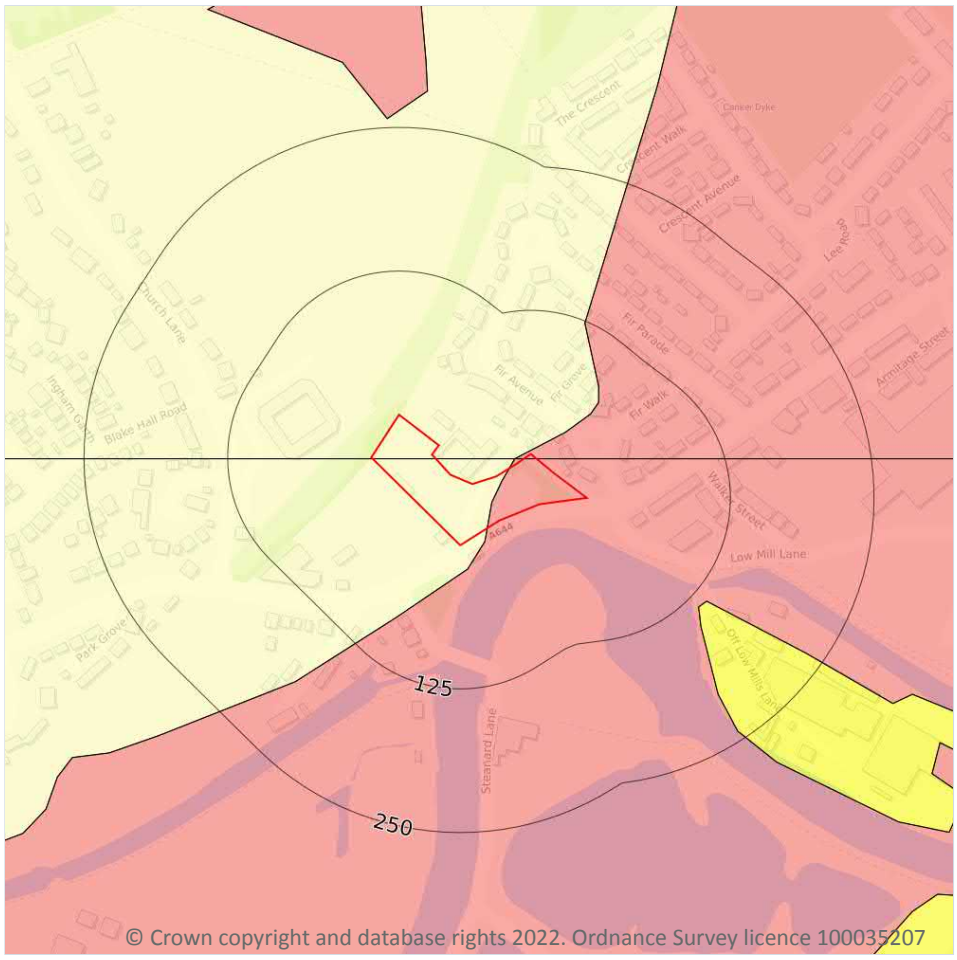
Features are displayed on the Natural ground subsidence - Running sands map on **page 139**

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	**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

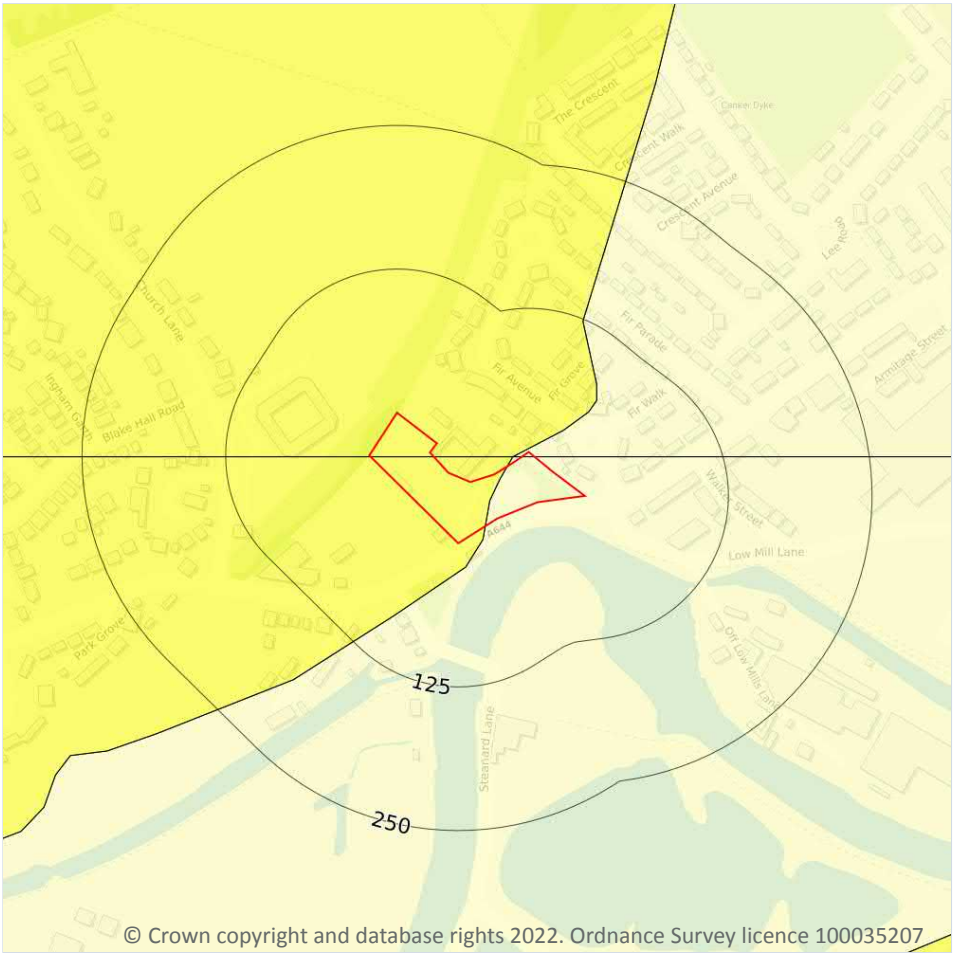
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 141**

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



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	2

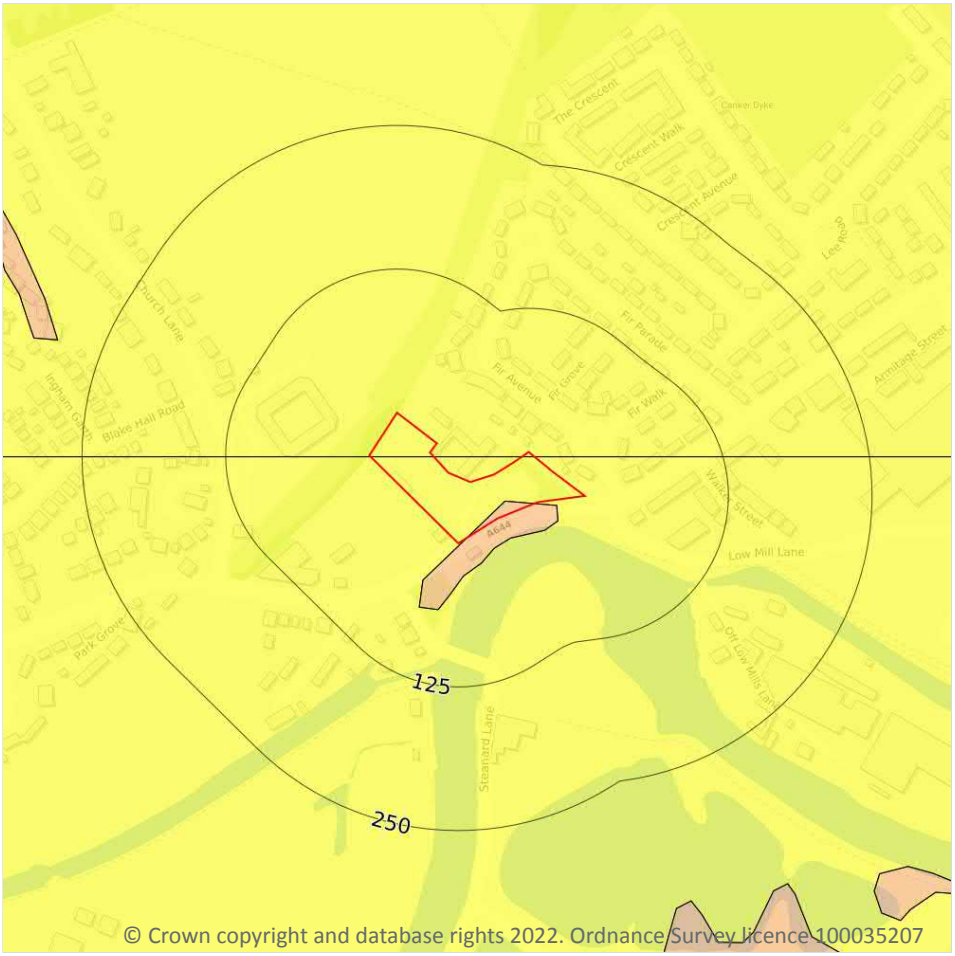
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 143**

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	2

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.

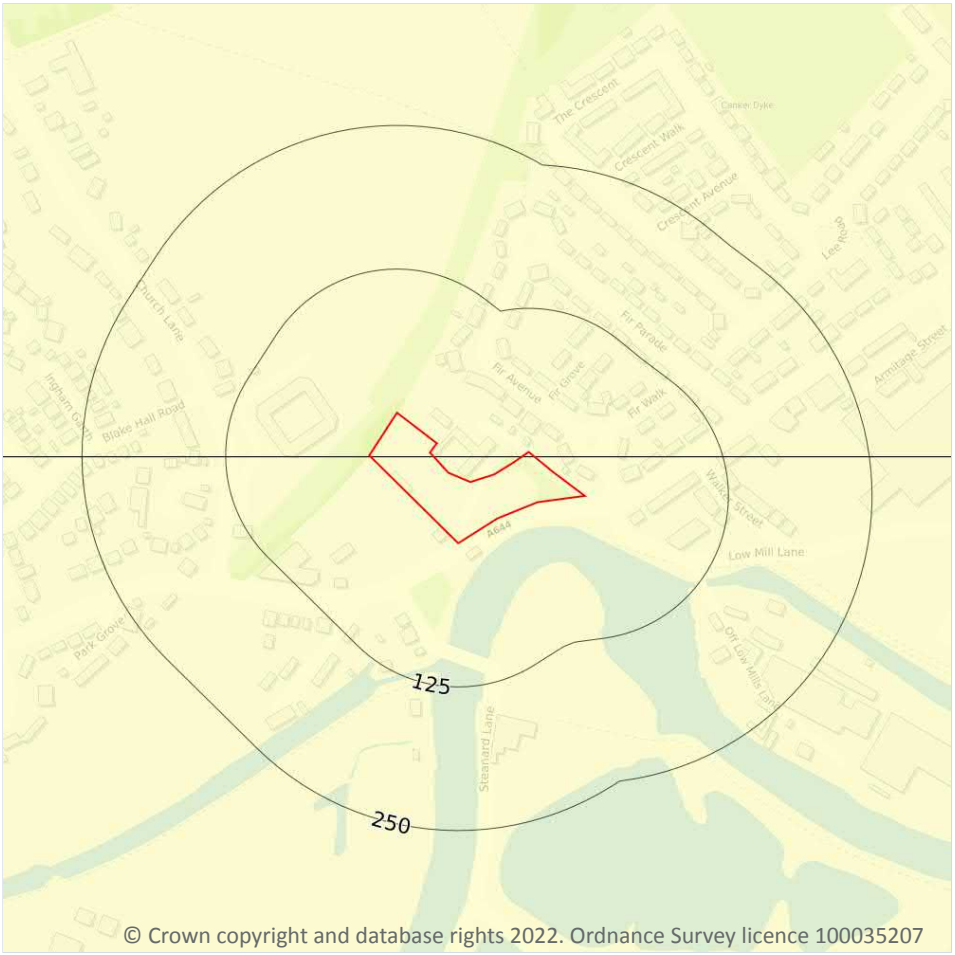
Features are displayed on the Natural ground subsidence - Landslides map on **page 144**

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.**

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**

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 146**

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	1

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 148**

ID	Location	Details	Description
3	257m SE	Name: Sands Lane Quarry Address: MIRFIELD, West Yorkshire Commodity: Sand & Gravel 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	27

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 148**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Cuttings**	**1981**	**1:10000**
A	**On site**	**Cuttings**	**1974**	**1:10000**
A	**On site**	**Cuttings**	**1967**	**1:10560**
B	**On site**	**Cuttings**	**1948**	**1:10560**
B	**On site**	**Cuttings**	**1905**	**1:10560**
B	**On site**	**Cuttings**	**1892**	**1:10560**
B	**On site**	**Cuttings**	**1931**	**1:10560**
1	3m NW	Cuttings	1955	1:10560
B	6m NW	Cuttings	1938	1:10560
C	17m W	Cuttings	1966	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
C	17m W	Cuttings	1951	1:10560
D	108m S	Canal	1993	1:10000
D	108m S	Canal	1982	1:10000
D	108m S	Canal	1966	1:10560
D	108m S	Canal	1951	1:10560
E	120m E	Canal	1982	1:10000
E	120m E	Canal	1966	1:10560
E	120m E	Canal	1951	1:10560
E	126m SE	Canal	1993	1:10000
F	182m SW	Cuttings	1905	1:10560
F	182m SW	Cuttings	1892	1:10560
G	205m NW	Unspecified Pit	1948	1:10560
G	205m NW	Unspecified Pit	1905	1:10560
G	205m NW	Unspecified Pit	1892	1:10560
G	205m NW	Unspecified Pit	1931	1:10560
G	243m NW	Unspecified Pit	1938	1:10560
G	243m NW	Unspecified Pit	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**18**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 148**

ID	Location	Land Use	Year of mapping	Mapping scale
H	326m N	Colliery	1948	1:10560
K	460m N	Colliery	1905	1:10560
K	460m N	Colliery	1892	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
K	464m N	Colliery	1931	1:10560
K	675m N	Unspecified Disused Shafts	1988	1:10000
K	675m N	Unspecified Disused Shafts	1981	1:10000
K	675m N	Unspecified Disused Shafts	1974	1:10000
K	682m N	Unspecified Disused Shafts	1988	1:10000
K	682m N	Unspecified Disused Shafts	1981	1:10000
K	682m N	Unspecified Disused Shafts	1974	1:10000
-	751m SE	Unspecified Old Shaft	1905	1:10560
-	826m SE	Unspecified Disused Shaft	1982	1:10000
-	826m SE	Unspecified Disused Shaft	1966	1:10560
-	826m SE	Unspecified Old Shaft	1951	1:10560
-	827m SE	Unspecified Disused Shaft	1993	1:10000
-	828m SE	Unspecified Old Shaft	1948	1:10560
-	828m SE	Unspecified Old Shaft	1905	1:10560
-	828m SE	Unspecified Old Shaft	1931	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m **2**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 148**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
2	138m E	Lowfields	Sand and gravel	Surface mineral working	Valid	13/6/55
4	286m S	Sands Lane Quarry	Sand and gravel	Surface mineral working	Valid	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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).

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.

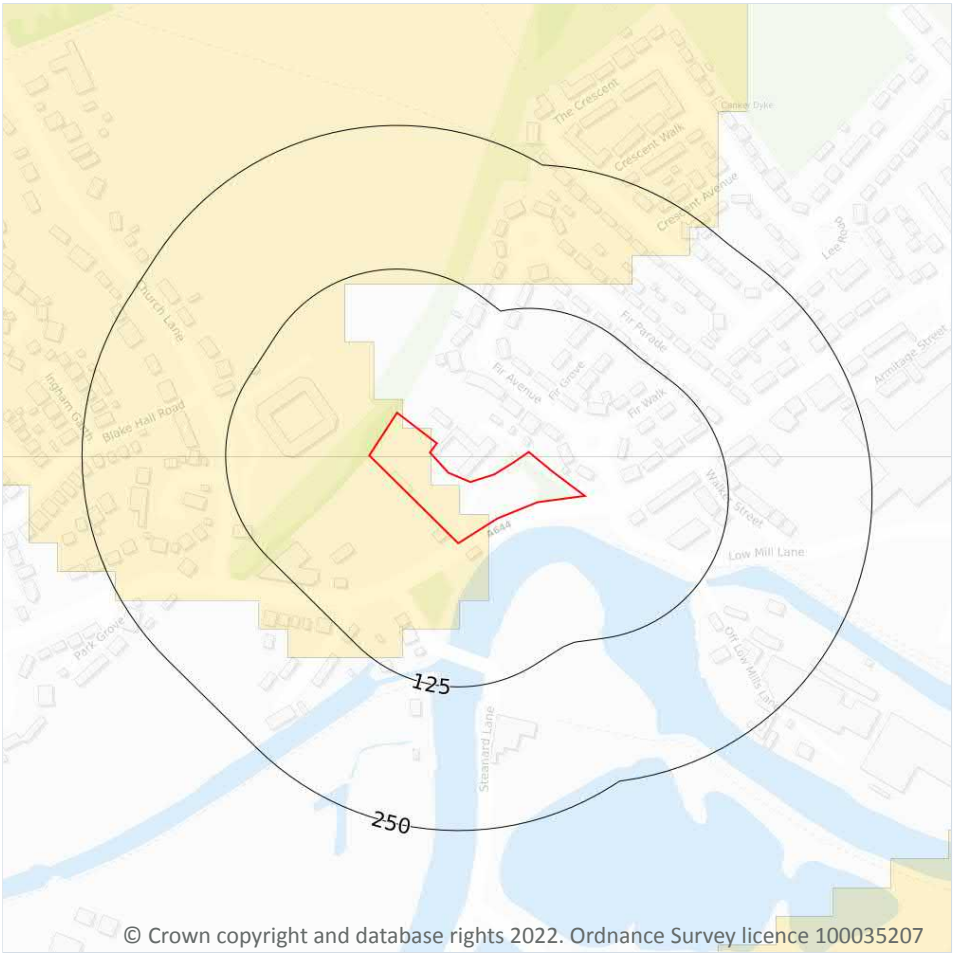
18.13 Clay mining

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 154**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 1% and 3%**	**None**
On site	**Less than 1%**	**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	16

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	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**120 - 180 mg/kg**	**30 - 45 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**120 - 180 mg/kg**	**30 - 45 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**120 - 180 mg/kg**	**30 - 45 mg/kg**
On site	**25 - 35 mg/kg**	**No data**	**100 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
6m NW	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
29m 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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
36m W	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
37m 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
37m 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
38m SW	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.

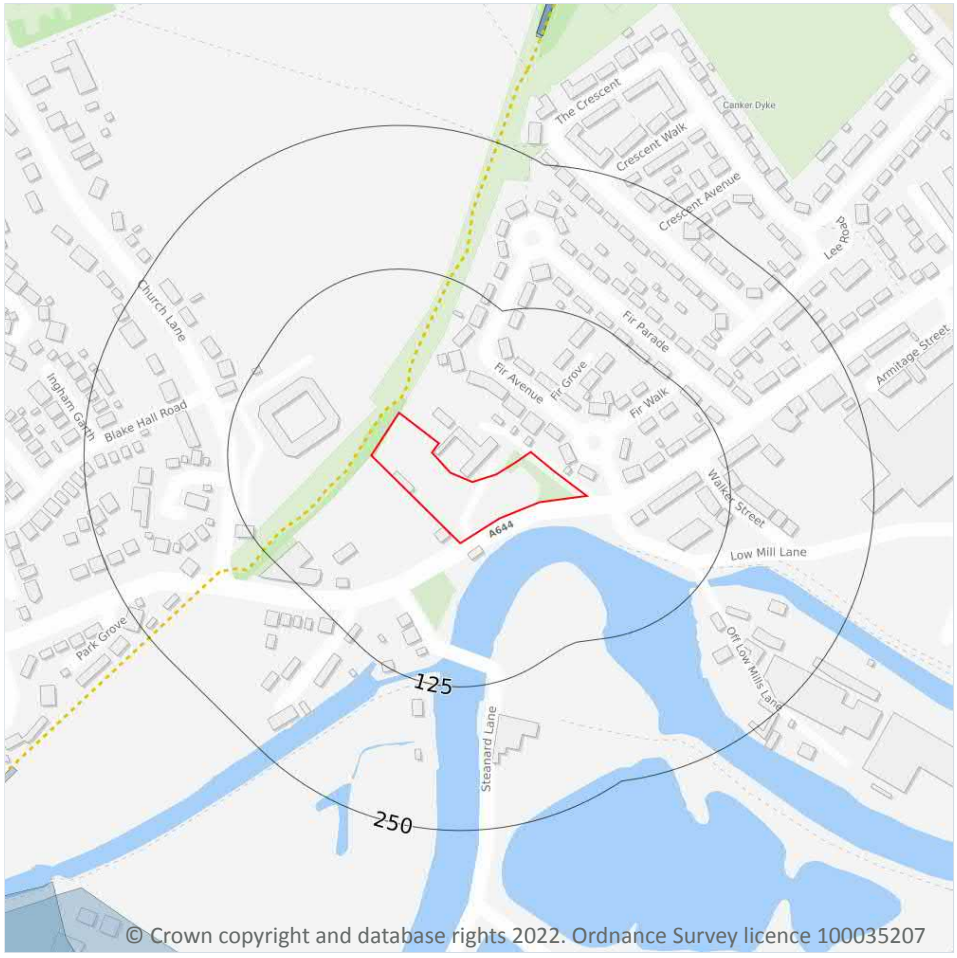
20.3 BGS Measured Urban Soil Chemistry

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	0

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.

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	2

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

Features are displayed on the Railway infrastructure and projects map on **page 158**

Location	Description
9m NW	Abandoned
166m W	Dismantled

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.

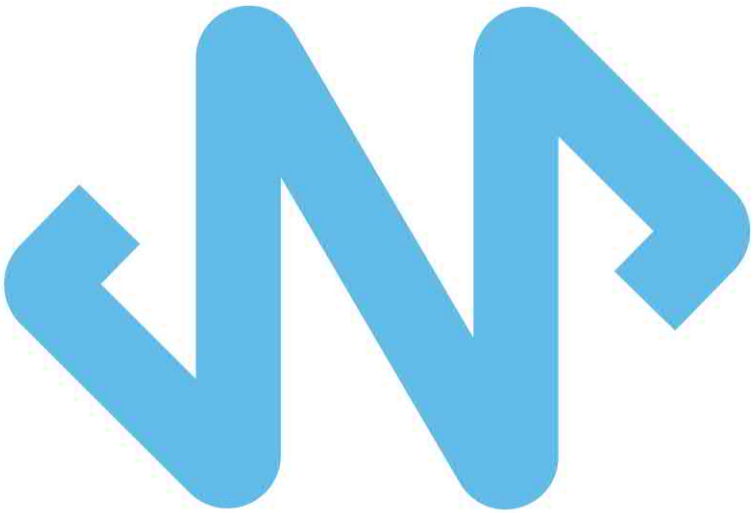
This data is sourced from HS2 ltd.

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/.



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