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Land Off Dowker Street, Milnsbridge, Huddersfield  
Geo-Environmental Assessment and Walkover Survey

Land and Development Consultants Limited  
July 2006

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Land and Development Consultants – *2 Bed Cottages - Units 1-8 - detailed proposals*, drawing no. 556W-11, dated September 2005

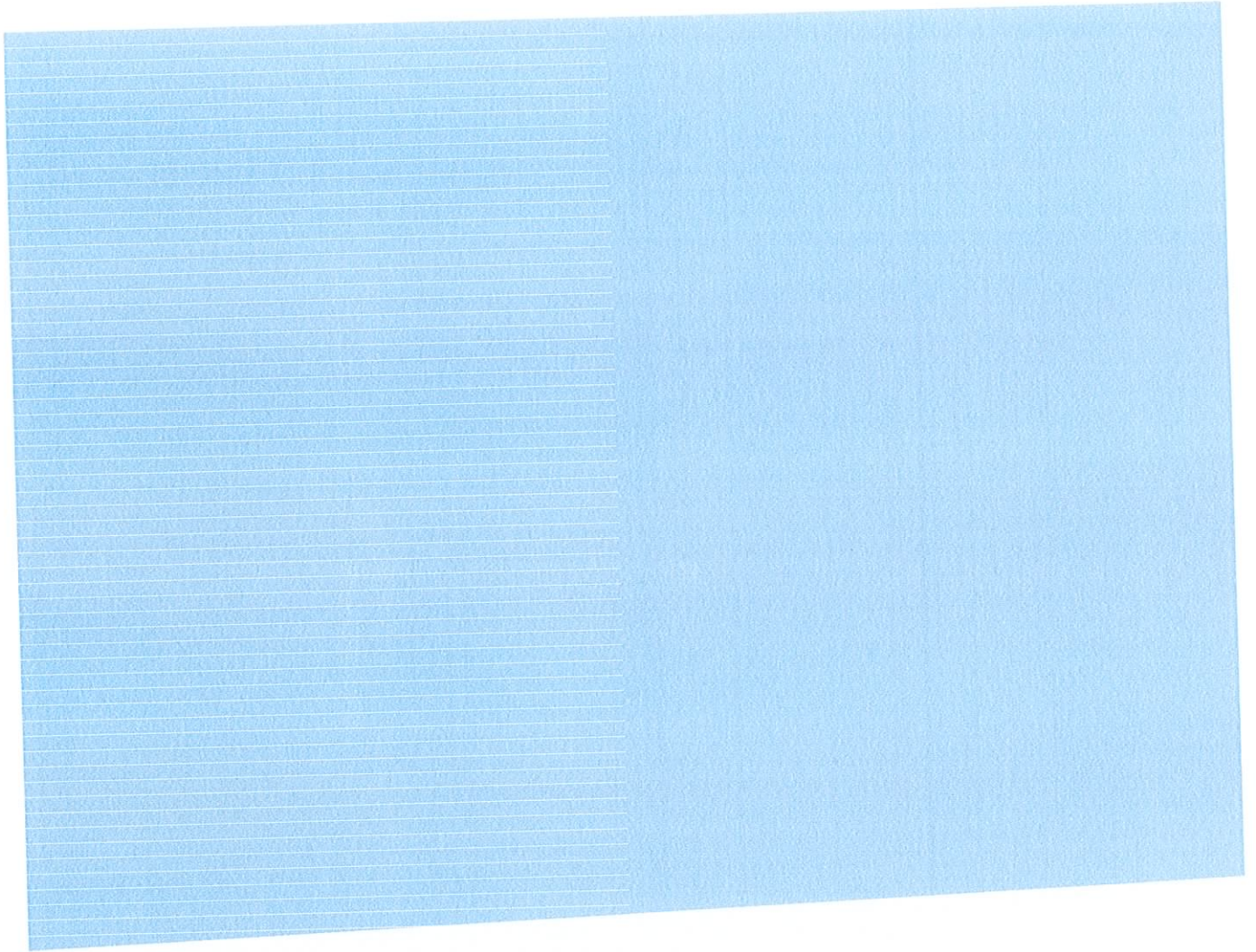
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# Executive Summary



# Executive Summary

Wordsworth Holdings plc is proposing to redevelop a site off Dowker Street, Milnsbridge, Huddersfield as residential housing and apartments. The site is occupied by a valve manufacturing works and has been a works since the late 1800's.

The geology beneath the site comprises alluvium drift deposits overlying Huddersfield White Rock in the south-west half of the site and Midgley Grit in the north-east half of the site, both of which belong to the Millstone Grit Group. Both the White Rock and Midgley Grit are classified as Minor Aquifers by the Environment Agency.

The site is located near the Longwood Brook and the River Colne, but is situated just outside of the zone of flooding from both these water courses and is therefore not considered to be at risk.

It is likely that there are chemicals of concern in soils beneath the site from the industrial nature of the site and surrounding land use. Asbestos containing materials were also identified at the site.

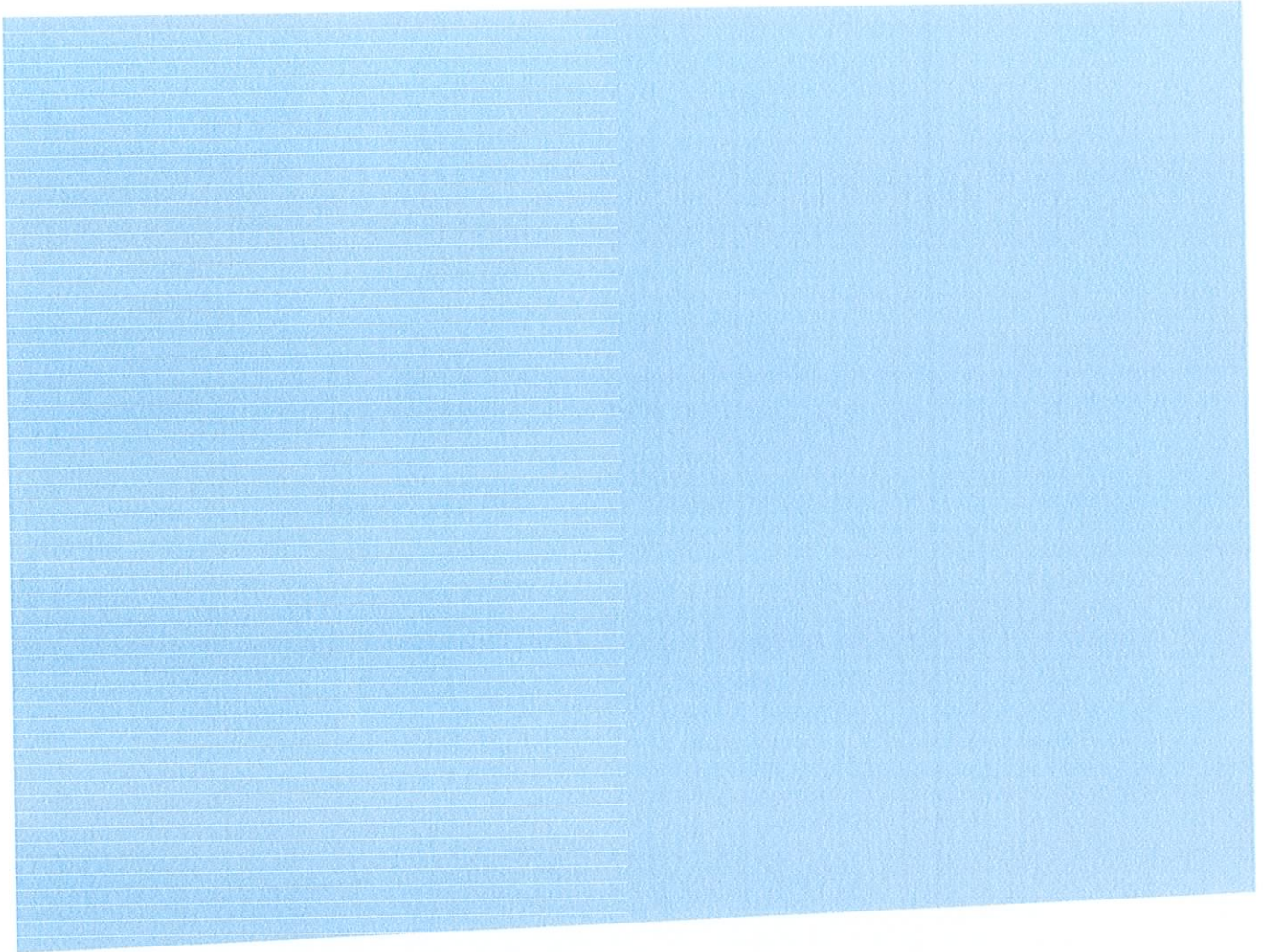
Although the preliminary assessment indicates that any contamination on site currently poses a low risk to the identified receptors, it is recommended that the chemical composition of the soils and groundwater should be established. This will allow the determination of the presence or otherwise of elevated contaminant concentrations and will establish the potential environmental liabilities associated with the site.

It is recommended that a ground investigation is carried out in order to; ascertain the ground conditions beneath the site, identify suitable founding stratum for the proposed 2 and 3 storey buildings, and obtain environmental samples of soils and groundwater for chemical testing.

It is also recommended that an asbestos survey is carried out at the site and all identified asbestos containing materials are removed and disposed of by a suitably qualified contractor prior to demolition.

Construction and ground workers should be made aware of the potentially contaminative nature of the soils on the site, and issued with appropriate personal protective equipment including gloves, overalls and goggles.

# Introduction



# 1 Introduction

## 1.1 Background

Wordsworth Holdings plc is proposing to redevelop a site located off Dowker Street, Milnsbridge, Huddersfield as residential properties including apartments, houses, an access road, garden and landscaped areas.

Land Development Consultants Limited (LDC) has appointed Faber Maunsell Limited (FML) to carry out a geo-environmental desk study and walkover survey of the development on behalf of Wordsworth Holdings plc. The desk study is to be submitted as part of the planning application for the development.

## 1.2 Purpose of the Assessment

The purpose of the assessment is as follows:

- To identify potential sources of soil and groundwater or gas contamination at the site
- To identify current and future potential receptors to contamination at the site and located off-site, and the pathways by which they could be affected by contamination sources
- To identify potential ground engineering risks
- To provide recommendations for further investigation and remedial works, where necessary.

## 1.3 Scope of the Assessment

The scope of the Assessment includes the following:

- Obtain details of the proposed development including site plan in digital form
- Obtain and examine available historical Ordnance Survey maps of the area in order to identify former land use within the study site and its environs
- Obtain and review information relating to the following:
  - Groundwater and surface water abstractions
  - Surface water locations and quality
  - Pollution incidents
  - Licensed landfill or waste management sites in the study area
  - Potentially polluting activities carried out within 1km of the site
  - Prevailing ground conditions in the study area
  - Radon affected areas
  - Sensitive land uses in the area
  - Mining report for the area
  - Petroleum records search for the area
- Obtain and review the geological map and groundwater vulnerability maps to determine the ground conditions and quality and vulnerability of groundwater at the site
- Obtain and review a report on current and historical petroleum storage at the site
- Undertake a site walkover survey to assess the following:
  - General condition of the site
  - Visual and / or olfactory evidence of contamination
  - Potentially contaminating activities or situations on or adjacent to the site
- Prepare a report based on the findings of the desk study and walkover survey

## 1.4 Status of the Report

This report is a desk study report, and not a design report. It has been prepared using readily available information in accordance with the project stage requirements, budget and timescales. The opinions expressed in this report are based on the information obtained from the desk assessment and the site reconnaissance. At this stage intrusive investigations have yet to be undertaken to establish actual ground and groundwater conditions at the site, and provide data for assessment of the environmental status of the site.

The information, views and conclusions drawn concerning the site are based, in part, on information supplied to FML by other parties. FML has proceeded in good faith on the assumption that this information is accurate. FML accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to FML from others.

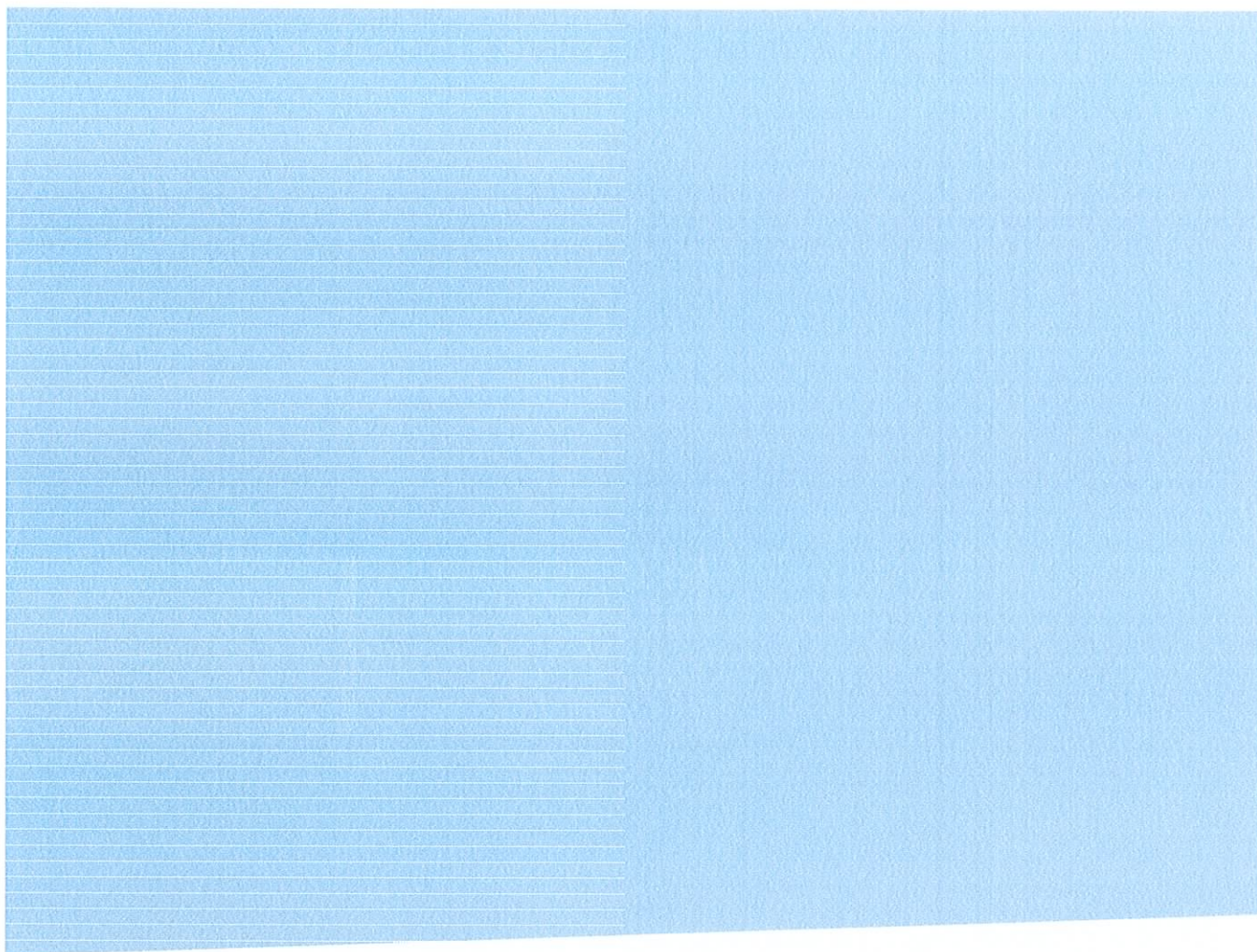
The environmental reconnaissance survey consisted of a general external inspection of the site aimed at identifying any obvious signs of potential sources of ground contamination. A detailed inspection of the buildings was outside the project brief.

Any risks identified in this desk study are perceived risks, based on the information reviewed; actual risks can only be assessed following a physical investigation on site.

It should also be noted that the effects of ground and water borne contamination on the environment are constantly under review, and authoritative guidance values are potentially subject to change. The conclusions presented herein are based on the guidance available at the time this report was prepared, and no liability can be accepted for the retrospective effects of any changes or amendments to the legislation or guidance.

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# The Site



## 2 The Site

### 2.1 Site Location

The site is located off Dowker Street approximately 3.5km to the west of Huddersfield town centre at National Grid Reference 411620 416070; see Figure 1.

### 2.2 Site Description and Surrounding Land Use

The site has an area of approximately 0.63 hectares (6300m<sup>2</sup>) and is currently occupied by a valve manufacturing works. The site has been identified as a works since the late 1800's on historical maps, although it is not known if it has always been a valve manufacturers or has had other uses. The site is bounded by Dowker Street to the east and Armitage Road the north. To the west and north-east of the site are residential properties. The south of the site is bounded by George Street with further residential properties beyond.

The River Colne is located approximately 30m to the south of the site. The surrounding land use is a combination of residential, commercial and light industrial properties.

### 2.3 Topography

The site is on a gentle slope falling to the south. The north of the site is at approximately 96.3mAOD and the south of the site 93.0mAOD.

### 2.4 Site Development History

Historical Ordnance Survey maps have been obtained and reviewed to establish the historical development of the site. The maps have been included as Appendix A and are summarised as follows:

#### 1854

The site and surrounding area mainly comprises fields with a footpath and some residential properties.

#### 1893

The site is occupied by 'Britannia Works' and some residential properties. There is a building located in the north-west corner of the Britannia works. The Longwood Brook runs in a southerly direction in a culvert 35m to the west of the site. The brook enters the culvert 110m north-west of the site where it meets the Longwood and Milnsbridge railway line. The railway line runs roughly east-west approximately 90m north of the site and runs over the Longwood Viaduct. Longwood and Milnsbridge Station is located 150m north-east of the site.

The River Colne is located approximately 30m south of the site and flows in an easterly direction. The Huddersfield Canal runs east-west 200m south of the site. To the east of the site, on the other side of Dowker Street is the Milnsbridge Pleasure grounds including a fish pond and a spring. A weir for the River Colne is located approximately 70m south-east of the site.

The following industrial properties and other land uses are located within 1km of the site:

| Land Use/ Industrial Property       | Distance from site | Direction from site |
|-------------------------------------|--------------------|---------------------|
| Commercial Mill                     | 25m                | North-west          |
| Bottom Hall Woollen Mills           | 40m                | South-west          |
| Colne Vale Gas and Drysaltery Works | 90m                | North-west          |
| Chapel and burial ground,           | 100m               | South-east          |
| Longwood Gas Works                  | 120m               | North               |
| Bridge Croft Dye Works              | 130m               | South-east          |
| Quarmby Mills                       | 150m               | East/ south-east    |
| George Street Woollen Mills         | 170m               | East/ south-east    |
| Bridge Croft Woollen Mill           | 170m               | South-east          |

| Land Use/ Industrial Property     | Distance from site | Direction from site |
|-----------------------------------|--------------------|---------------------|
| Disused tannery                   | 200m               | South-east          |
| Cliff End Woollen Mills           | 210m               | North               |
| Pollard Street Mill               | 220m               | East/ south-east    |
| Milnsbridge Top Chemical Works    | 240m               | South-west          |
| Milnsbridge Iron Works            | 280m               | South-west          |
| Colne Vale Dye Works              | 300m               | South-west          |
| Elm Ing Woollen Mills             | 310m               | South-west          |
| Milnsbridge Middle Chemical Works | 340m               | South-west          |
| Woollen Mills                     | 370m               | North-west          |
| Stafford Mills                    | 440m               | East                |
| Spring Mill                       | 450m               | South-east          |
| Woodland Mills                    | 490m               | North-west          |
| Quarry                            | 580m               | South-east          |
| Brittania Mills                   | 600m               | South-west          |
| Malthouse                         | 620m               | South-east          |
| Quarry                            | 620m               | South               |
| Quarry                            | 640m               | North-east          |
| Malthouse                         | 700m               | South-east          |
| Sunny Bank Mill                   | 760m               | North-west          |
| Quarry                            | 780m               | North-west          |
| Quarry                            | 840m               | South               |
| Mill                              | 850m               | South-west          |
| Quarry                            | 870m               | North               |
| Britannia Mills                   | 920m               | East                |

Other industrial properties are likely to be located within 1km of the site, however the scale of the map does not identify all the works and industrial sites in the area.

#### 1907

The site is no longer labelled as a works and some additional small buildings have been constructed in the south of the site and in the north-east corner and adjacent land. Several other industrial properties are no longer shown, including the Colne Vale Gas and Drysaltery Works, Longwood Gas Works, the Milnsbridge Top Chemical Works, the Milnsbridge Middle Chemical Works. The Commercial Mill remains and is now labelled as a woollen mill.

#### 1918

Further buildings have been constructed on the site. A skating rink and bowling green have been constructed 40m to the east of the site. The Milnsbridge Pleasure Grounds are no longer shown and the fish pond is no longer present and new buildings have been constructed in this area. A smithy is shown 100m west of the site and a new picture theatre has also been constructed 120m west of the site.

The Quarmbly Mills and Pollard Street Mill are no longer present and the George Street Mills have expanded to encompass the two sites. A tar distillery is shown adjacent to the south-west boundary of the George Street Mills. The site formerly occupied by the Milnsbridge Top Chemical Works is now occupied by the Spring Gate Dye Works.

#### 1948

The site and surrounding land remains relatively unchanged with the following exceptions; the skating rink is now shown as a club house; a depot has been constructed approximately 140m west of the site and another works has been constructed 140m north-west of the site.

*1956*

The site and surrounding land remains unchanged.

*1961*

A telephone exchange has been constructed in the south-east corner of the site. A garage is shown 110m west of the site. The site is labelled as a works. The surrounding area remains relatively unchanged.

*1966*

The site and surrounding land remains unchanged.

*1975*

The site remains unchanged. The works 140m north-west of the site is no longer shown.

*1983*

The works 90m east of the site has gone and a scrap yard is now present in its place.

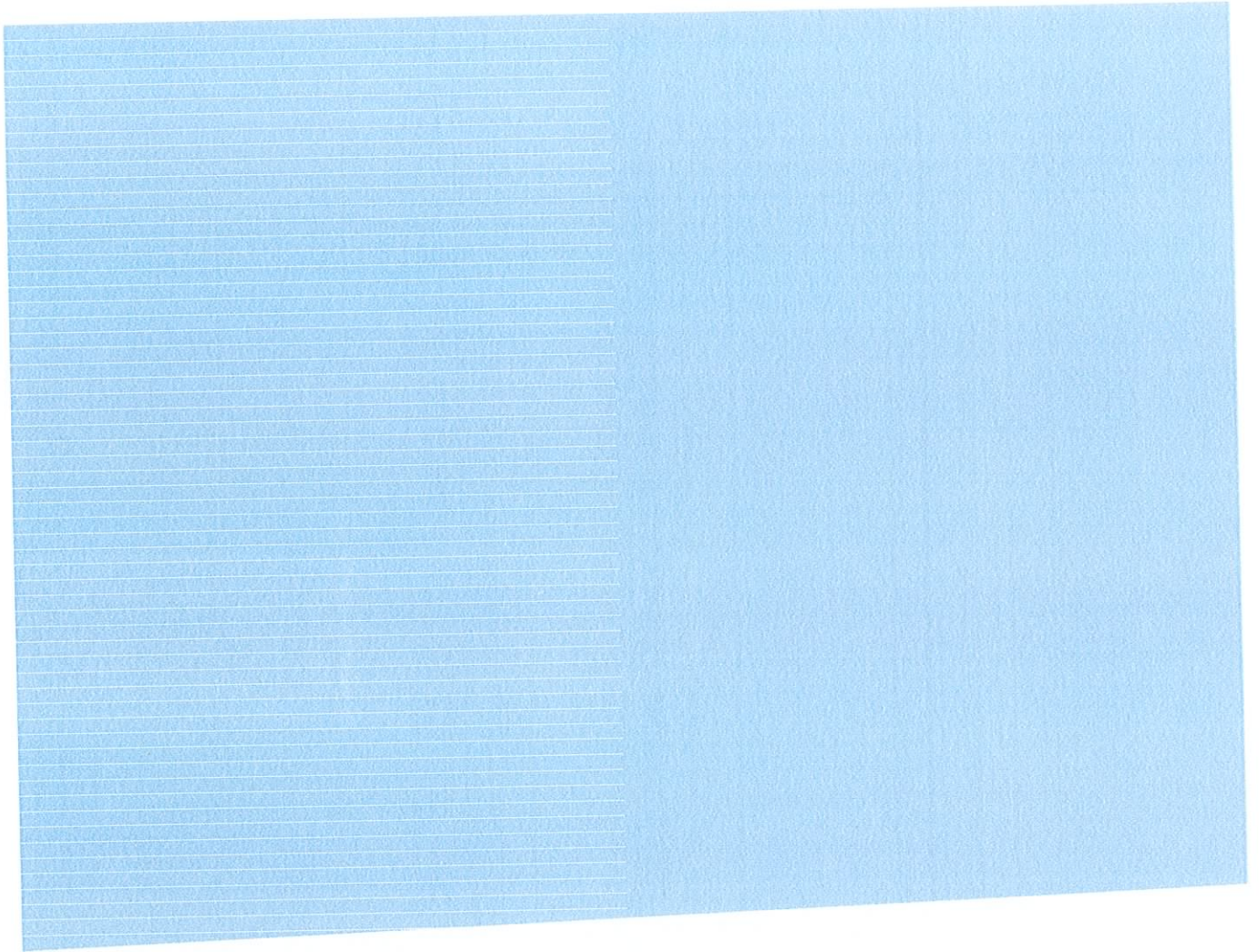
*1987*

The site and surrounding land remains unchanged.

*2000*

A police station is located approximately 50m east of the site. Bottom Hall Mills, located 200m south-west of the site, is no longer present. A car park and building has been constructed in its place.

# Geology and Hydrology



# 3 Geology and Hydrology

## 3.1

### Geology

The geological map (1) and memoir (2) of the area have been examined and indicate that the site is underlain by alluvium drift deposits. Huddersfield White Rock is present in the south-western half of the site and Midgley Grit is present in the north-eastern half of the site.

The alluvium drift deposits comprise interbedded silt, clay and sand with gravel and peat lenses.

The Huddersfield White Rock is a sandstone and the Midgley Grit is a gritstone. Both units belong to the Millstone Grit Group which comprises very fine to very coarse grained, locally pebbly sandstone interbedded with mudstones and siltstones. Subordinate marine bands, seatearths and thin coals are also present.

The Longwood Fault is located 30m north-east of the site, which runs north-west, south-east.

## 3.2

### Mining

Coal Measures are located within 1km of the site; therefore a coal mining report has been obtained and is included as Appendix B. The report can be summarised as follows:

- The site is not within the zone of likely physical influence from past, present or future underground mining.
- There are no known mine entries within 20m of the boundary of the property.
- The site is not within the zone of likely physical influence from past, present or future opencast mining.

### Recorded Mineral Sites

There are eight recorded mineral extraction sites identified within 1km of the site all for opencast quarrying of sandstone as rough rock. However, they have all ceased operation. The closest quarry was located 607m south-east of the site.

## 3.3

### Hydrogeology

The Groundwater Vulnerability map indicates that the Millstone Grit Group that underlies the site is classified as a Minor Aquifer (3), which is defined by the Environment Agency as:

*'fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers.'*

Soils in the vicinity of the site are considered to have a high leaching potential (U); soil information for urban areas is based on fewer observations than elsewhere. A worse case vulnerability classification (H) is assumed until proven otherwise. Soils with this classification are described by the Environment Agency as:

*'Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.'*

The site is not located within a Source Protection Zone. Groundwater flow in the area is likely to be in a southerly direction towards the River Colne.

## 3.4

### Hydrology

The site is situated approximately 30m north of the River Colne which flows in an easterly direction. However, the site is not located within the zone of flooding as defined on the Environment Agency's Flood Map, see Figure 2. The site is assessed as having a 0.1% (1 in 1000) or less chance of flooding each year from rivers or the sea. The River Colne flows in an easterly direction.

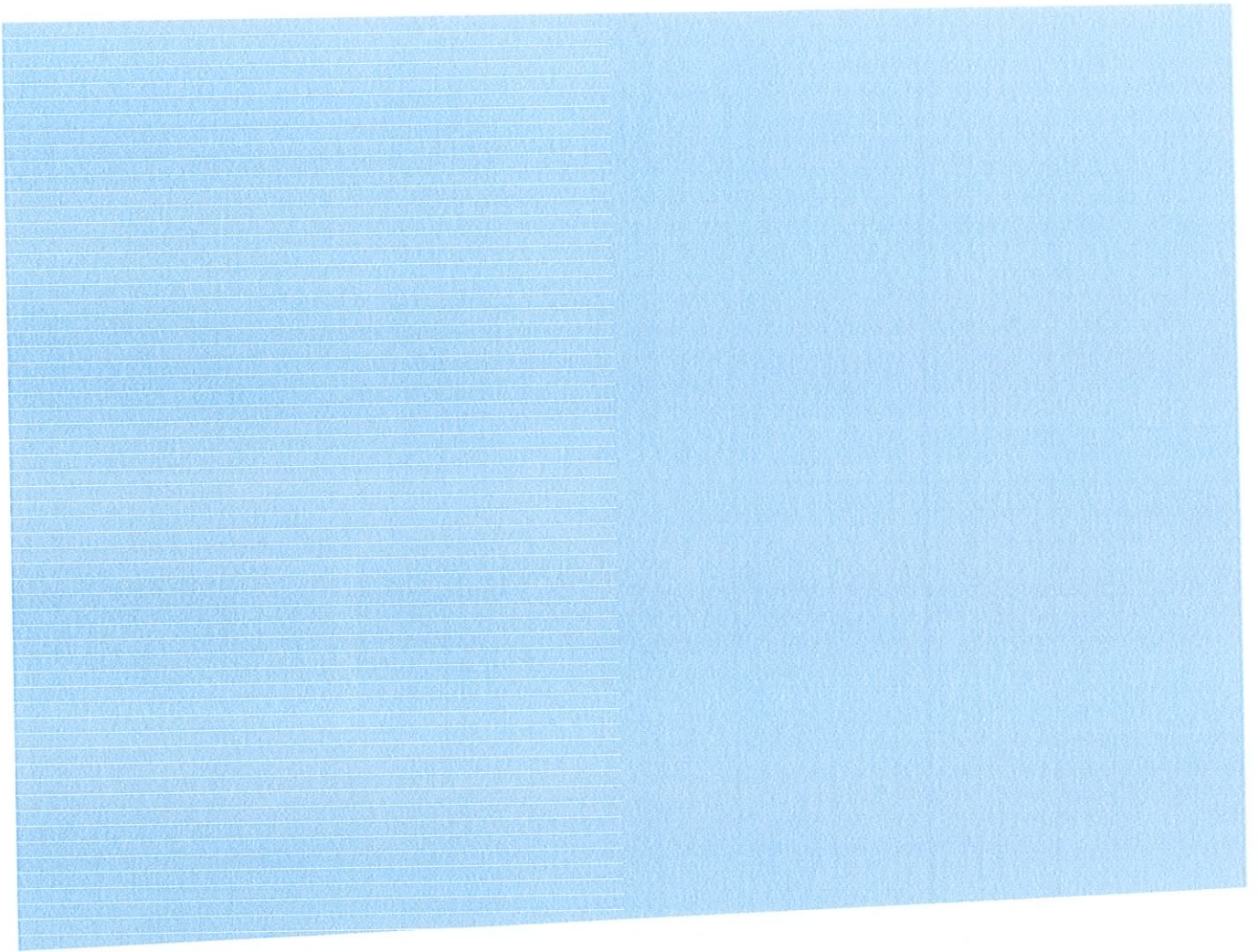
Chemical and biological sampling of the River Colne is undertaken by the Environment Agency at several sampling points, the closest of which is 95m to the south of the site (downstream). The water quality has been assessed as having a biological and chemical GQA (General Quality Assessment) of D (Fair) at this sampling point between 2000 and 2003. Another sampling point located 117m south of the site has recorded a GQA of B (good).

The Longwood Beck (or Longwood Brook) runs in a southerly direction in a culvert approximately 30m to the west of the site. The brook enters the culvert 110m north-west of the site where it meets the Longwood and Milnsbridge railway line. The brook surfaces again approximately 50m north-west of the site for a short stretch and then enters a culvert at approximately 35m north-west of the site. It is assumed that the culvert ultimately drains into the River Colne.

The Longwood Beck is also sampled by the Environment Agency at several locations, the closest of which is located 48m north-west of the site (upstream). The GQA has been assessed as Grade B (good) consistently since 1996. Another sampling point located 66m south-west of the site also recorded a GQA of Grade B in 2000 (downstream).

The Huddersfield Narrow Canal is located 200m south of the site. The GQA of the canal was recorded as Grade B (good) in 2000.

# Environmental Setting



## 4 Environmental Setting

### 4.1 Environmental Setting

A number of information sources have been investigated to determine the general environmental setting of the site, including an environmental disclosure report (4). The summary of the report is presented as Appendix C.

### 4.2 Discharge Consents

There are ten current discharge consents located within 500m of the site. All of the discharge consents are held by Yorkshire Water Services Ltd and are for sewage discharges - storm overflow/ storm tank. Six of the discharge consents have the same consent number but are thought to be for different outlets in the area (ref S/Cb/51). The remaining four consents discharge into the Longwood Brook 48m north-west of site (ref Wra8766), the River Colne 62m south-west of site (ref Wra8780), and a Tributary of the River Colne 226m and 354m south of the site (ref Wra8765 and Wra8768 respectively)

### 4.3 Integrated Pollution Controls

There are no current Integrated Pollution Prevention and Control permits (IPPC) located within 1km of the site. However, there are seven former Integrated Pollution Control permits issued for a chemical dye works located between 375m and 503m south-west of the site which have now been revoked.

### 4.4 Pollution Incidents to Controlled Waters

There have been twenty three recorded pollution incidents to controlled waters located within 250m of the site. Approximately three of these pollution incidents have occurred in the last ten years, although several of these recorded incidents have no recorded dates. The incidents that have occurred in the last ten years are as follows:

- A spill of chemicals such as paints and dyes occurred on 17<sup>th</sup> July 1998 into the River Colne, approximately 70m south of the site (ref SL980623). The incident was assessed as a Category 3 – minor incident.
- A release of sewage – storm overflow into the River Colne occurred on 21<sup>st</sup> February 1998 approximately 150m south-west of the site (ref SL980103). The incident was assessed as a Category 3 – minor incident.
- A release of sewage – storm overflow into the River Colne occurred on 29<sup>th</sup> May 1998 approximately 155m south-west of the site (ref SL980502). The incident was assessed as a Category 3 – minor incident.

The site is not recorded as the source of any pollution incidents.

### 4.5 Water Abstractions

There are five surface and groundwater water abstractions recorded within 500m of the site:

| Source                      | Distance From Site | Purpose                           | License Number |
|-----------------------------|--------------------|-----------------------------------|----------------|
| River Colne                 | 61m SE             | Textiles and Leather: General Use | 2/27/11/036(S) |
| Groundwater                 | 158m E             | Textiles and Leather: General Use | 2/27/11/036(G) |
| Surface                     | 221m S             | General Industrial                | 2/27/11/141    |
| Tributary of Longwood Brook | 259m NW            | Textiles and Leather: General Use | 2/27/11/169    |
| Huddersfield Canal          | 472m E             | Textiles and Leather: General Use | 2/27/11/144    |

It should be noted that wells that abstract less than 20m<sup>3</sup> of water a day do not require a licence and therefore will not be identified by this search.

### 4.6 Sensitive Land Designations

The site is located in an area designated as a Nitrate Vulnerable Zone. Nitrate vulnerable zones are defined as areas where surface water and ground water exceed or are at risk of exceeding 50mg/l concentration of nitrate. Nitrate vulnerable zones are often associated with agricultural areas.

4.7

**Radon**

Less than 1% of homes in the area are above the action level for radon and no special protective measures are required (5).

4.8

**Waste Management and Disposal**

4.8.1

*Licensed Waste Management Facilities*

There are three licensed waste management facilities located within 500m of the site, comprising:

- A metal recycling site (mixed) is located approximately 90m south-east of the site (ref 61012).
- A second metal recycling site (vehicle dismantlers) is located approximately 110m north-west of the site (ref 61037)
- A material recycling treatment facility is located approximately 210m north-west of the site.

4.8.2

*Registered Waste Transfer Sites*

There is one waste transfer site located approximately 400 west of the site (ref 1547). The site has a maximum input of less than 10,000 tonnes per year and is authorised for household waste, general builders rubble, and uncontaminated materials. It is understood that the site is operational.

4.8.3

*Registered Waste Treatment or Disposal Sites*

There are three operational waste treatment or disposal sites located within 500m of the site, comprising:

- Scrapyard located approximately 100m east of the site (ref 937). The maximum input is less than 10,000 tonnes per year and the site is authorised for general scrap metal, cars, and wet batteries.
- Scrapyard located approximately 100m north-west of the site (ref 1157). The maximum input is less than 10,000 tonnes per year and is authorised for scrap cars, tyres, wet cell batteries and used oil.
- Drum recycling facility are recycled located approximately 230m north-west of the site (ref 1021). The maximum input is less than 10,000 tonnes per year and is authorised for cardboard boxes, and disused empty tanks and drums.

4.8.4

*Landfill Sites*

There are no active landfill sites located within 500m of the site. A former landfill site was located approximately 580m south-west and was licensed for canal dredgings and solid subsoil/topsoil. There are a further two former landfill sites located between 500m and 1km of the site.

4.9

**Contemporary Trade Directory Entries**

The site itself is entered in the contemporary trade register as a valve manufacturers. There are several other contemporary trade entries located within 500m of the site. Entries include:

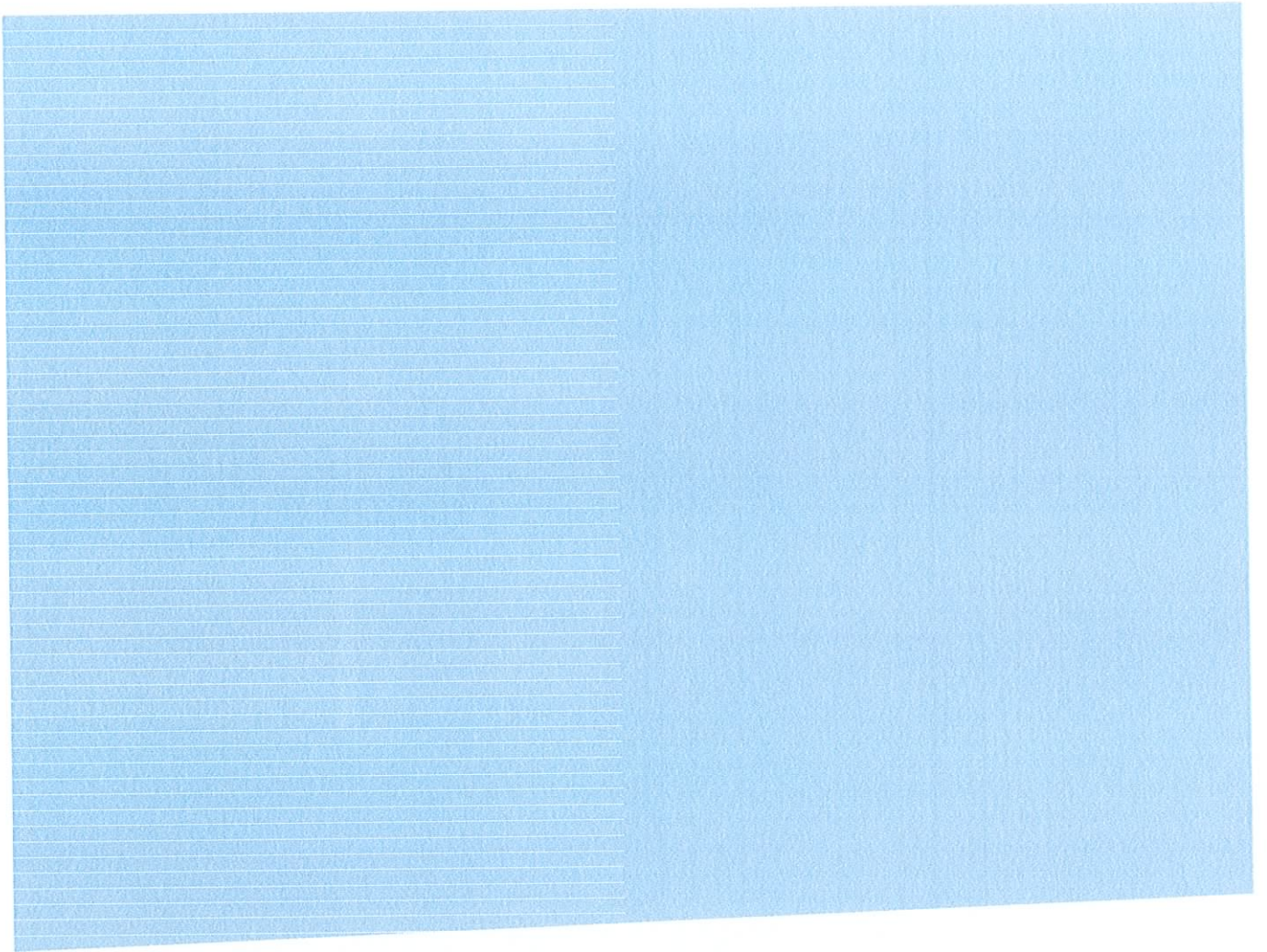
- Scrap metal merchants
- Dyers
- Car Dealers, MOT testing Centres and Garage services
- Engineers
- Metal workers
- Textile manufacturers
- Glass manufacturers
- Printers

4.10

**Petroleum Officer's Search**

A Petroleum Officers report has been obtained from West Yorkshire Fire and Recue and is presented as Appendix D. There are no records of any underground storage tanks for fuel historically or currently located at the site.

# Site Inspection



## 5 Site Inspection

A walkover survey of the site was undertaken on the 13<sup>th</sup> June 2006 to establish any potential sources of contamination and to identify areas where intrusive ground investigation may be necessary.

The site is currently occupied by an operational mechanical valve manufacturers and comprises a warehouse, machine shop, offices, access road for vehicles and an external storage area. The layout of the site is shown as Figure 3.

### 5.1 Machine Shop

The machine shop occupies the majority of the southern end of the site. It is a brick built warehouse-style building with high corrugated roof and a concrete floor of good quality. The building is mainly used for the manufacture of metal valves and is equipped with metal working machinery; see Figure 4. There are also storage areas for equipment and components; see Figure 5. Access to the machine shop is through the offices, or through roller shutter doors located off Dowker Street; and the access road near the centre of the site.

The building contains a compressed air pump and a heat treatment area; see Figure 6. No painting is carried out on the site and this work is sub-contracted out.

### 5.2 Offices

The offices are located in a building adjoining the machine shop in the south-eastern area of the site. The office is a three-storey brick building with stone block frontage on Dowker Street; see Figure 7. Pedestrian access to the offices is from Dowker Street.

### 5.3 Warehouse

The warehouse is of similar construction to the machine shop and occupies the majority of the northern half of the site. The warehouse also has good quality concrete floors. The warehouse is used for the storage of finished valves, components, and equipment; see Figure 8. It also incorporates an adjacent old house in the north-eastern corner and patent shop in the north. The old buildings are either unoccupied or used for additional storage space; see Figure 9. Access to the warehouse is from a roller shutter door from the access drive.

The warehouse roof comprises asbestos sheeting and there may be other asbestos-containing materials at the site due to the age and nature of the buildings.

### 5.4 Access Drive and Outdoor Storage Area

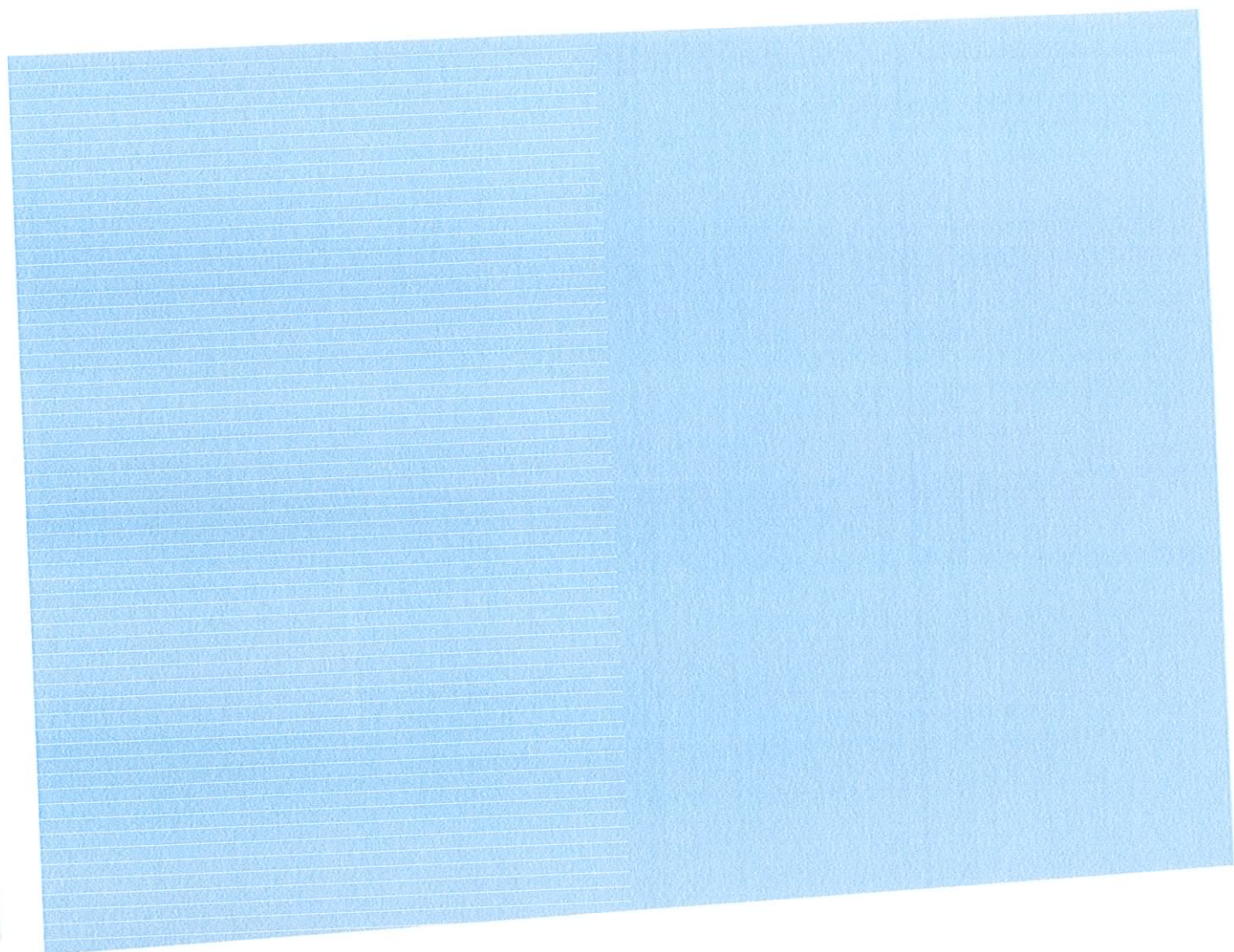
The main vehicular access to the site is through a security gate located off Dowker Street and the central access road to a rectangular shaped outdoor storage area in the west of the site. The central road also serves as a car parking area and there is a travelling crane for loading heavy goods vehicles; see Figure 10. The access drive comprises tarmac and concrete of good condition. There is an additional area for parking of approximately 4-5 cars in the south-east corner of the site, which is covered in very poor quality tarmac hardstanding which has degraded to gravel.

The storage area is occupied by skips for the disposal of general waste, cardboard and wood. There is also a container for swarf produced by the machine shop which is collected and either recycled or sent to an off-site disposal facility; see Figure 11. Several wooden pallets were also stored in this area.

### 5.5 Site Drainage

At the time of writing this report no drainage plans for the site were available. Drainage gullies were visible in the access drive in the central area of the site, and are thought to drain into the mains drainage along one or more of the neighbouring roads. A site representative stated that there is no oil interceptor located at the site. Rusty coloured surface staining was noted from water run off from the skip area, flowing south towards a low point, although no drainage gullies were observed at the location; see Figure 11.

# Preliminary Risk Assessment



# 6 Preliminary Risk Assessment

- 6.1 Approach Adopted for Risk Assessments**  
The approach adopted when assessing the significance of contaminant concentration levels on the site, is based on the identification of pollutant linkages. A pollutant linkage comprises a source or sources of contamination, a receptor or receptors that might be affected by the contaminant(s) and a pathway or pathways by which they may be linked. Where a potential pollutant linkage is identified, the risk to the identified receptor needs to be assessed.
- 6.2 Potential Pollution Linkages**
- Sources**  
A number of potential sources of chemicals of concern have been identified for the site and surrounding area.
- The site is currently occupied by a valve manufacturers involving metal working processes. The site produces swarf which is a by-product of metal working comprising oil lubricants and metal shavings. This could give rise to hydrocarbon contamination at the site. Asbestos roofing was observed and there may be other asbestos-containing materials at the site due to the age and nature of the buildings. There may also be other potentially contaminative chemicals used on site, such as solvents, cleaning compounds, and surface treatment reagents.
- Furthermore the site is located in an area of current and historical industry, which could have given rise to soil or water contamination.
- There is a possibility of made ground being present beneath the site which is generally associated with contamination. Based on historical development of the site any made ground is likely to predate 1918.
- Pathways**  
The following potential pathways for the migration of chemicals of concern have been identified:
- Surface run-off
  - Direct contact / inhalation / ingestion
  - Leaching
  - Groundwater migration
- 6.2.1 Surface run-off**  
Surface run-off can mobilise near surface contamination into; the drainage system, nearby surface water features, onto adjacent properties, or into the underlying soils. The site is positively drained to the mains drainage on the adjacent roads. The risk of surface water running onto adjacent properties is small, although may occur in heavy storms.
- 6.2.2 Leaching**  
The majority of the site is covered in concrete hardstanding and therefore it is unlikely that chemicals of concern have leached into the underlying soils. However, there are some areas where asphalt has degraded where leaching may have occurred. Historically the site may not have been covered in concrete and spills or leaks may have occurred that could have penetrated into the underlying soils.
- 6.2.3 Dermal contact / inhalation / ingestion**  
Due to the historical industrial site uses it is likely that there are chemicals of concern in the soils beneath the site. Construction workers may come into contact with contaminants in the course of their duties. Future site users may come into contact with contaminants in the soil in gardens or landscaped areas.
- 6.2.4 Groundwater migration**  
There is a risk that any chemicals of concern in the soils beneath the site may enter the groundwater which is classified as a minor aquifer, and migrate off site.

### Receptors

It is understood that the site will be developed as housing and apartments with access roads and landscaped areas. Architects design drawings for the proposed development are included in the drawings section of this report.

The following potential receptors that may be affected by contamination from the site have been identified:

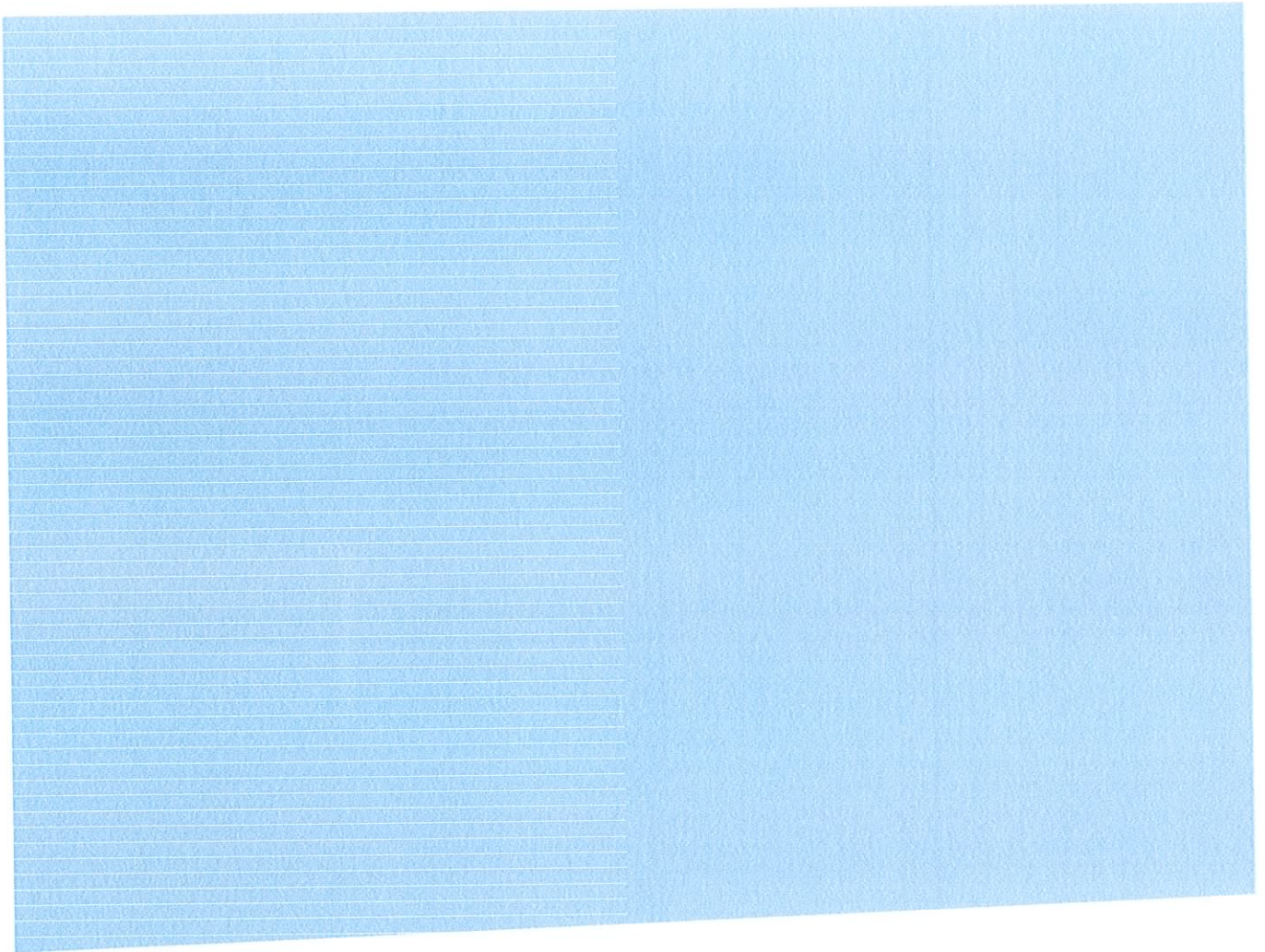
- Future site users
- Construction workers
- Adjacent properties
- Groundwater
- Surface watercourses
- Foundations and underground structures
- Underground services

- 6.2.5 *Future site users and construction workers*  
Future residents or visitors to the site may come into contact with contamination in garden or landscape areas not covered by hardstanding.  
Personnel employed during the construction works may come into contact with contamination in the course of their duties.
- 6.2.6 *Adjacent properties*  
A number of residential properties are located in the vicinity of the site.
- 6.2.7 *Groundwater*  
The underlying White Rock and Midgley Grits are classified as minor aquifers, and the release of contamination into these controlled waters is in contravention of the Groundwater Directive (6).
- 6.2.8 *Surface watercourses*  
The Longwood Beck and River Colne are located approximately 50m north-west and 30m south of the site respectively. Any contamination migrating to the rivers may cause detrimental effects to sensitive flora and fauna.
- 6.2.9 *Foundations and underground structures*  
Certain chemicals, such as sulphates, can attack underground concrete structures when present in elevated concentrations in the soil and groundwater, and damage integrity.
- 6.2.10 *Underground services*  
Underground services, such as plastic pipes, can come under attack by certain chemicals including poly-aromatic hydrocarbons (PAH) when present in elevated concentrations in the soil or groundwater.
- 6.3 **Results of Preliminary Risk Assessment**  
It is considered possible that there are low concentrations of chemicals of concern present at the site in the underlying soils and groundwater.  
The majority of the site is currently covered in hardstanding, however, the proposed development includes gardens and areas of landscaping. Future site users are considered to be at low to moderate risk of coming into direct contact with potentially contaminated soils beneath the site.  
Construction workers are considered to be at a higher risk of coming into contact with contamination but the risk can be mitigated by the use of appropriate PPE and good hygiene practices.  
As the majority of the existing site and the proposed development comprise hardstanding, any chemicals of concern on the site currently pose a low risk of leaching into the groundwater in the underlying minor aquifer and causing significant harm. There is also a low risk of chemicals of concern migrating to the nearby watercourses, the River Colne and the Longwood Brook.  
Adjacent properties are considered to be currently at a low risk from surface run-off from the site due to the presence of surface water drainage.

Underground services and structures, such as concrete foundations, are considered to be at low to moderate risk of attack by chemicals of concern in the underlying soils and groundwater.

Although the preliminary assessment indicates that the current risk to receptors is generally low, it is recommended that the chemical composition of the soils and groundwater should be established. This will allow the determination of the presence or otherwise of elevated contaminant concentrations, establish the potential environmental liabilities associated with the site and allow risks associated with redevelopment to be established.

# Conclusions and Recommendations



# 7 Conclusions and Recommendations

## 7.1

### Conclusions

The site has been a works since the late 1800's and is currently a valve manufacturers. It is proposed to develop the site as residential houses and apartments with an access road, car parking areas, gardens and landscaped areas.

Due to the industrial nature of the site there is a possibility of chemicals of concern being present in the soils underlying the site. The site is currently covered in concrete or tarmac hardstanding of generally good condition and therefore the chance of chemicals of concern entering the underlying soils from current processes has been minimised. However, the site is located in an area of current and historical industry, which may also have given rise to soil or water contamination beneath the site.

The warehouse roof comprises asbestos sheeting and due to the age and nature of the property it is likely that there are other asbestos-containing materials located at the site.

The site is underlain by alluvium drift deposits overlying Huddersfield White Rock in the south-west half of the site and Midgley Grit in the north-east half of the site. Both the Huddersfield White Rock and the Midgley Grit are classified as minor aquifers. The Longwood Beck and River Colne are located approximately 50m north-west and 30m south of the site respectively.

The preliminary risk assessment indicates that chemicals of concern at the site currently pose a low risk to the majority of identified receptors. The highest risks identified are to construction workers during development at the site, future site users, underground services and underground structures such as foundations.

## 7.2

### Recommendations

It is recommended that an intrusive ground investigation is carried out at the site in order to ascertain the ground conditions beneath the site, and identify suitable founding strata for the proposed development.

It is also recommended that environmental samples of the soils and groundwater underlying the site are obtained and tested to determine the presence, or otherwise, of chemicals of concern in concentrations that could pose a high risk to identified receptors.

The intrusive ground investigation should establish the following:

- Determine the geological strata underlying the site
- Identify the presence of any made ground
- Ascertain the physical and chemical properties of the different geological strata
- Identify a suitable founding stratum
- Recommend appropriate foundation solutions for the proposed development
- Assess the risk posed to potential receptors from contamination at the site
- Identify the potential environmental liabilities associated with contamination beneath the site.

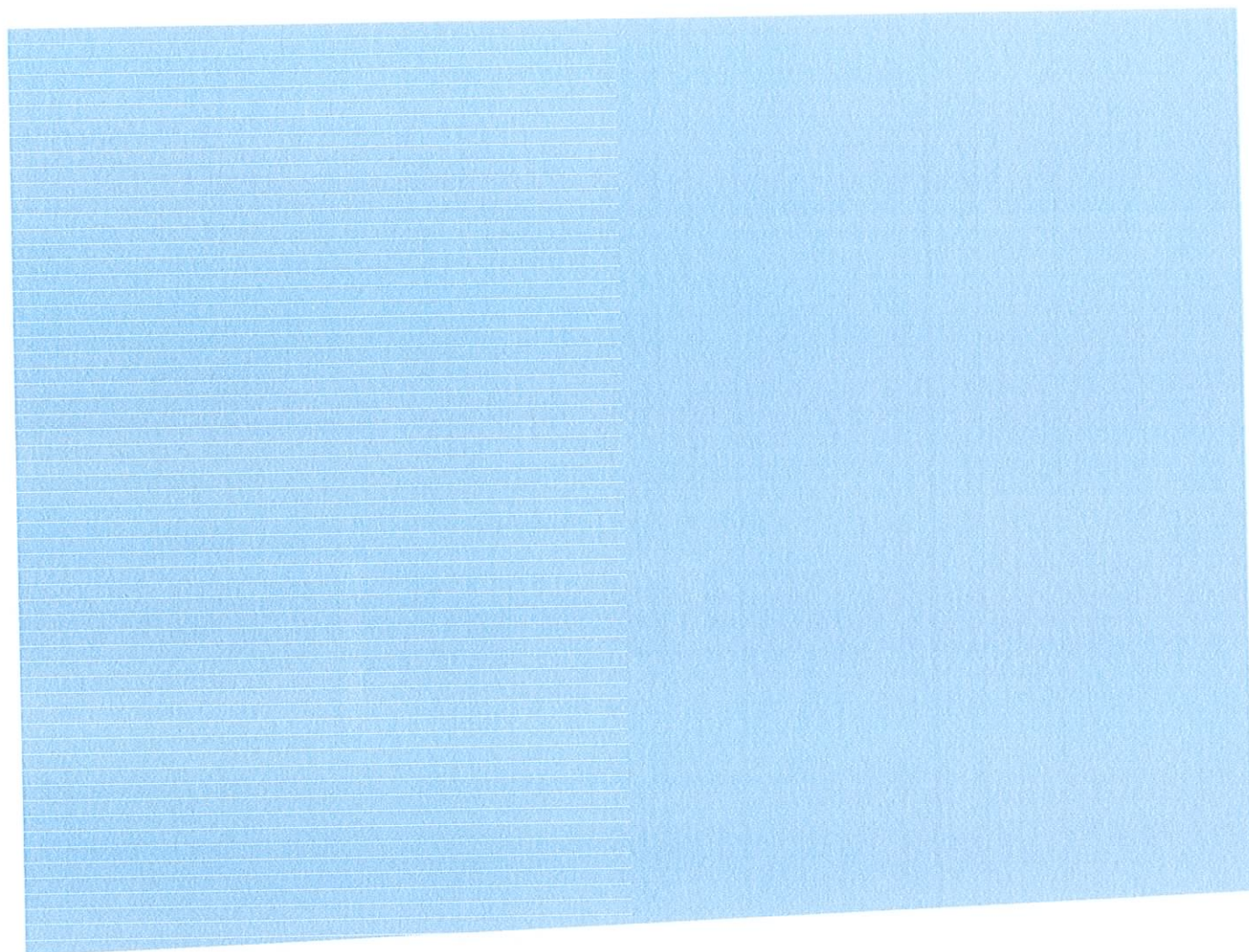
Construction and ground workers should be made aware of the potentially contaminative nature of the soils on the site, and issued with appropriate personal protective equipment including gloves, overalls and goggles.

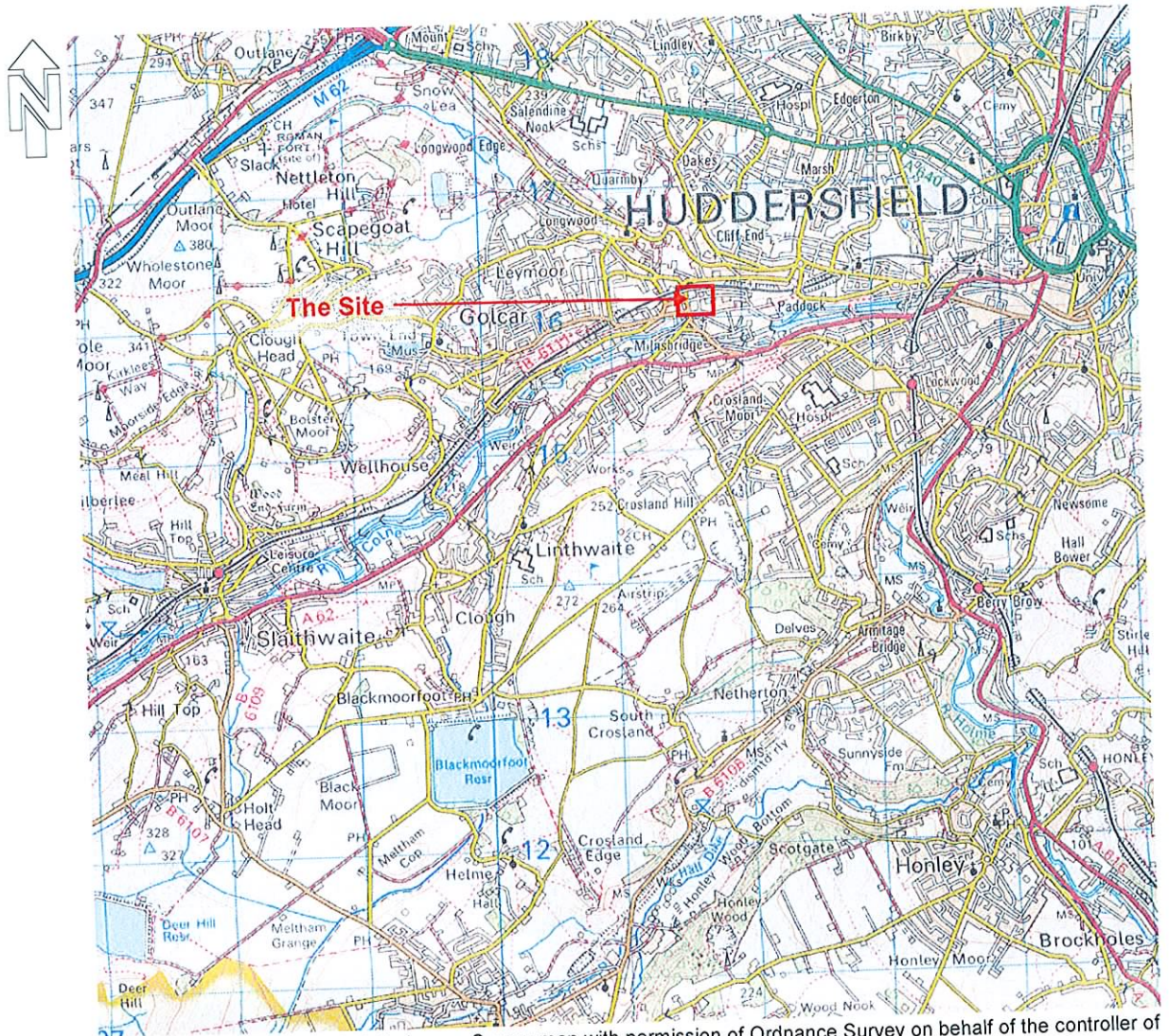
It is recommended that an asbestos survey is carried out prior to the demolition of the site, as asbestos containing materials were identified. Asbestos could pose a significant risk to human health if not removed by a suitably qualified contractor prior to demolition.

# References

- (1) **British Geological Survey**, England and Wales Sheet 77, Huddersfield, 1:50,000 series, Solid and Drift Edition, 2003.
- (2) **British Geological Survey**, British Regional Geology: The Pennines and Adjacent Areas, 1954.
- (3) **National Rivers Authority**, Groundwater Vulnerability of South Pennines, Sheet 11, 1:100,000 Map Series, 1999.
- (4) **Envirocheck**, Report on Milnsbridge, Market Street, Huddersfield, Reference 16826351-1-1, January 2006.
- (5) **Building Research Establishment** – BRE Report 211 – Radon: Guidance on Protective Measures for New Dwellings, 1999.
- (6) EC Groundwater Directive (Protection of Groundwater Against Pollution Caused by Certain Dangerous Substances, 80/68/EEC, 1998

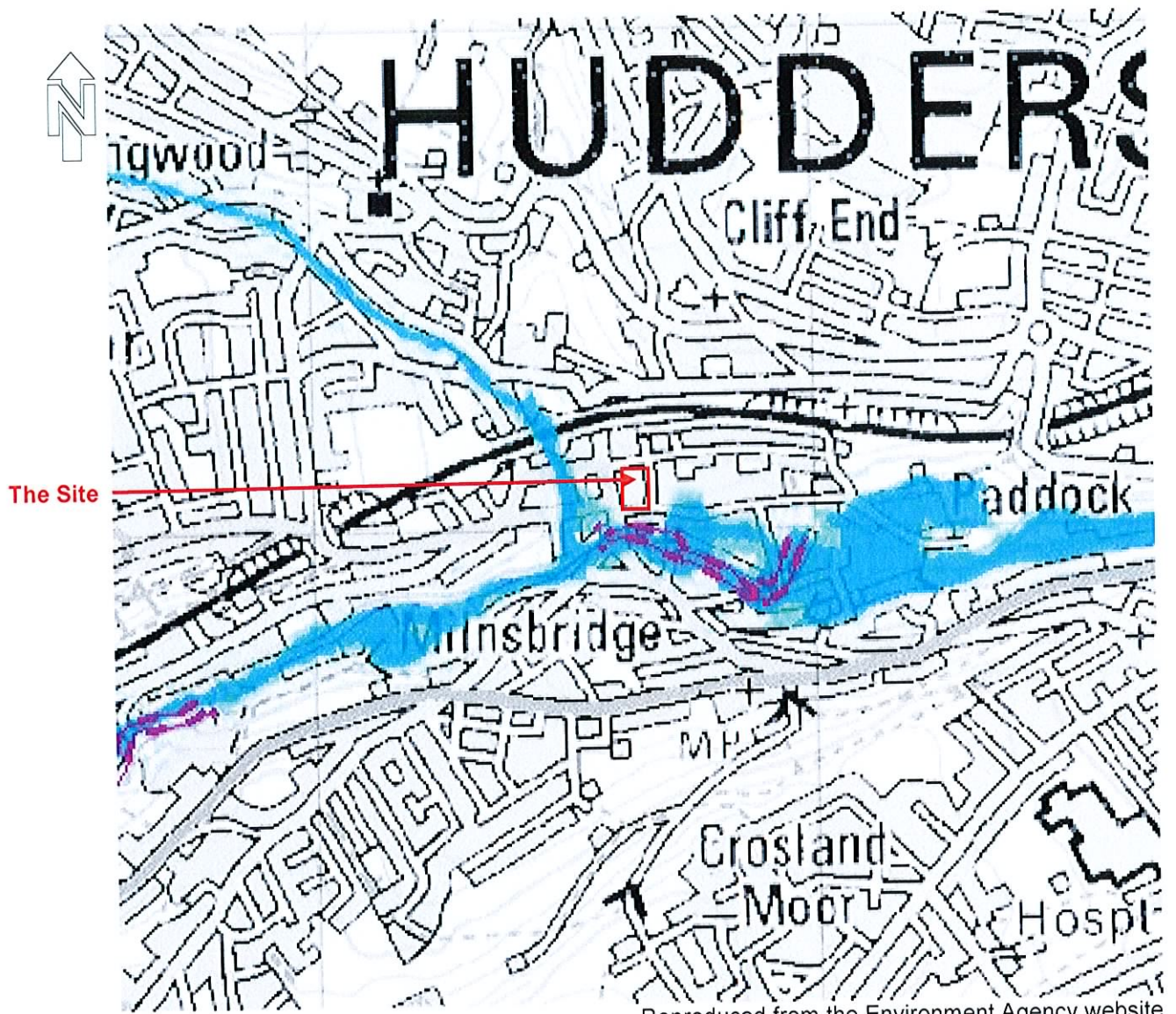
# Figures





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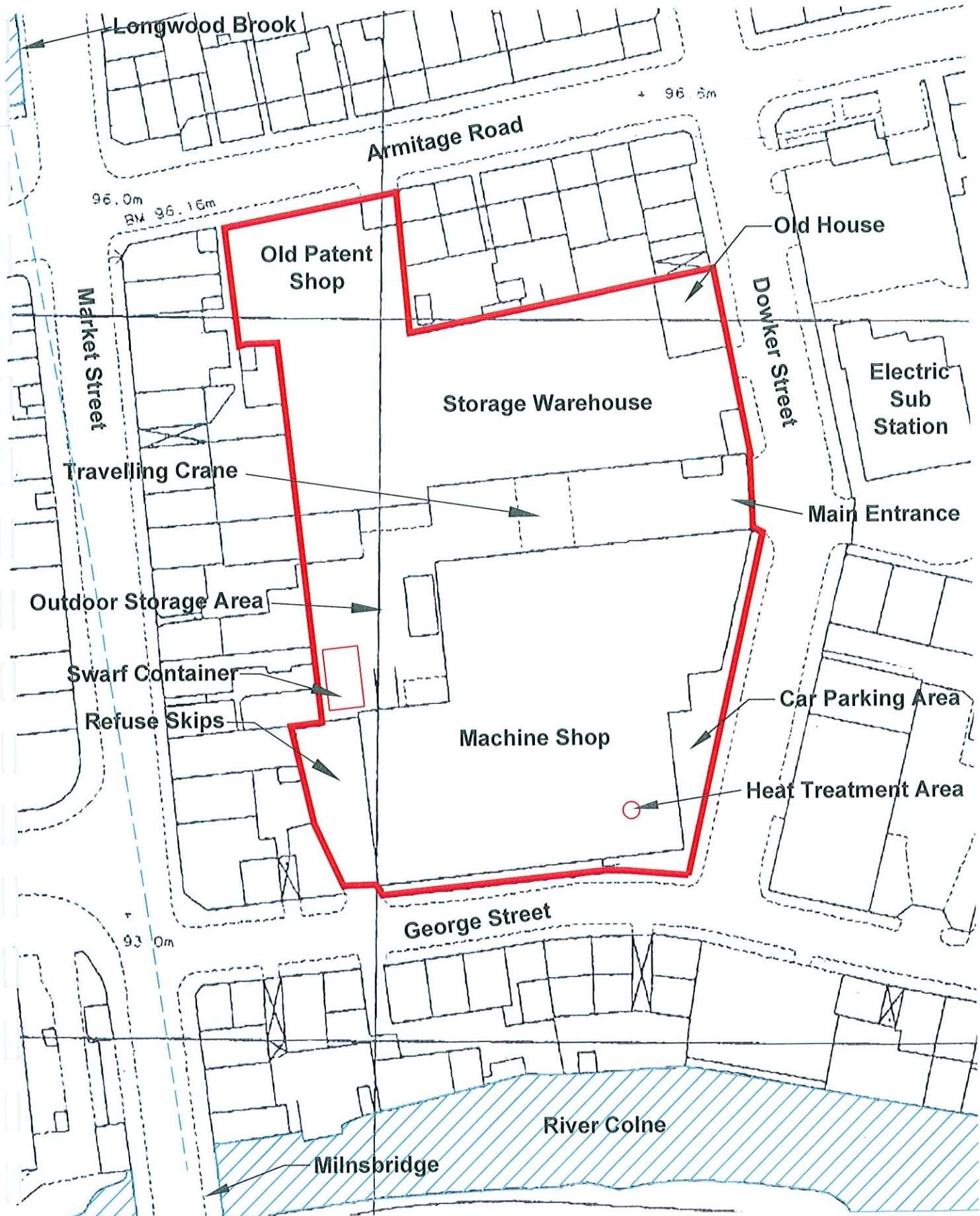
**Figure 1**  
**Site Location Plan**



Reproduced from the Environment Agency website

- Extent of extreme flood
- Flooding from rivers and seas without defenses
- Flood defenses

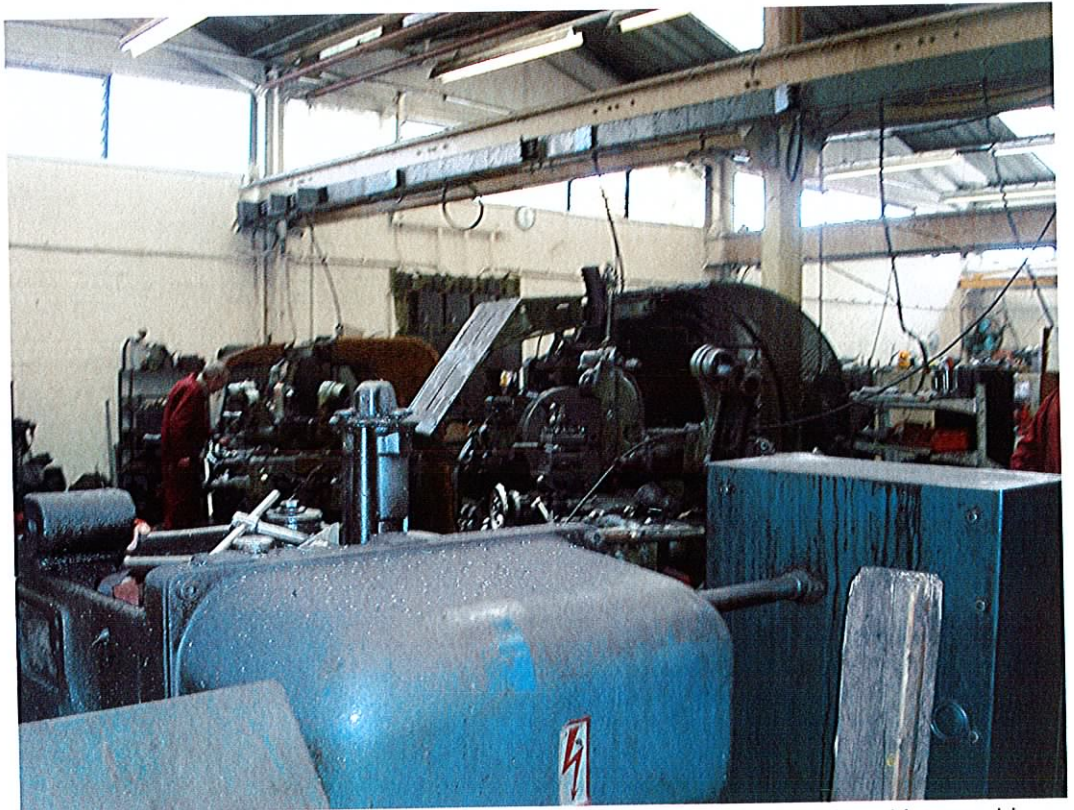
**Figure 2**  
**Flood Map**



**Figure 3**  
**Site Layout Plan**  
 Not To Scale

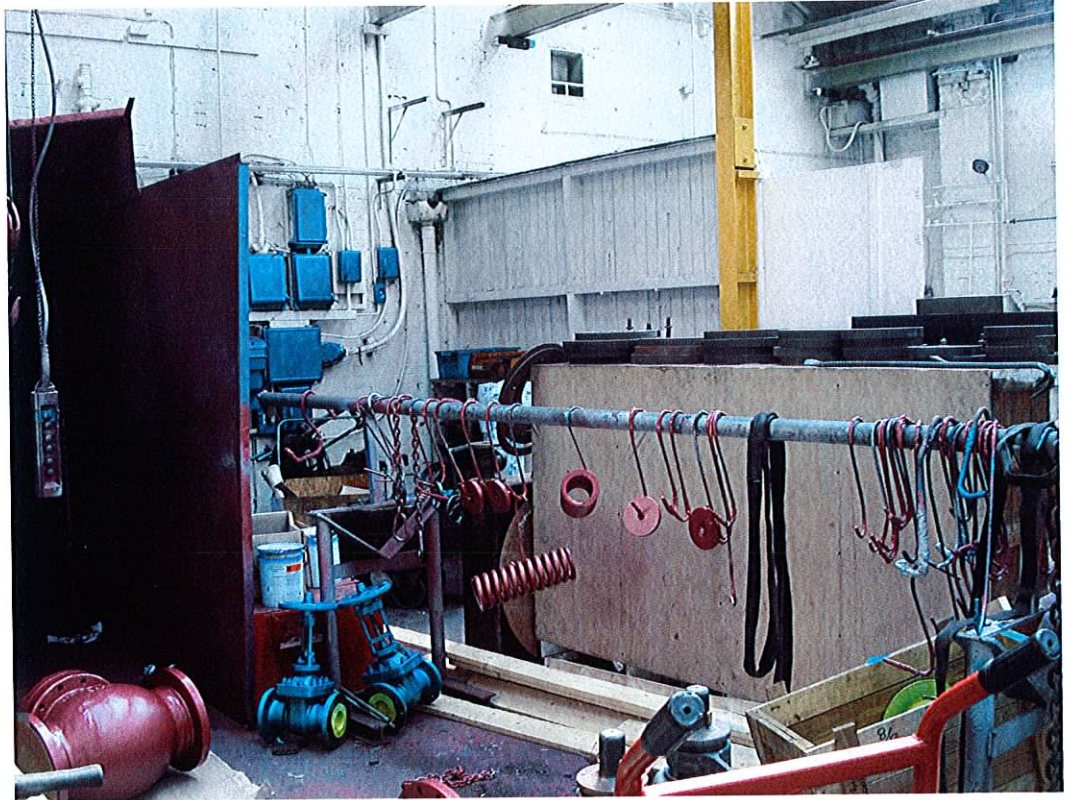


Workbenches and equipment

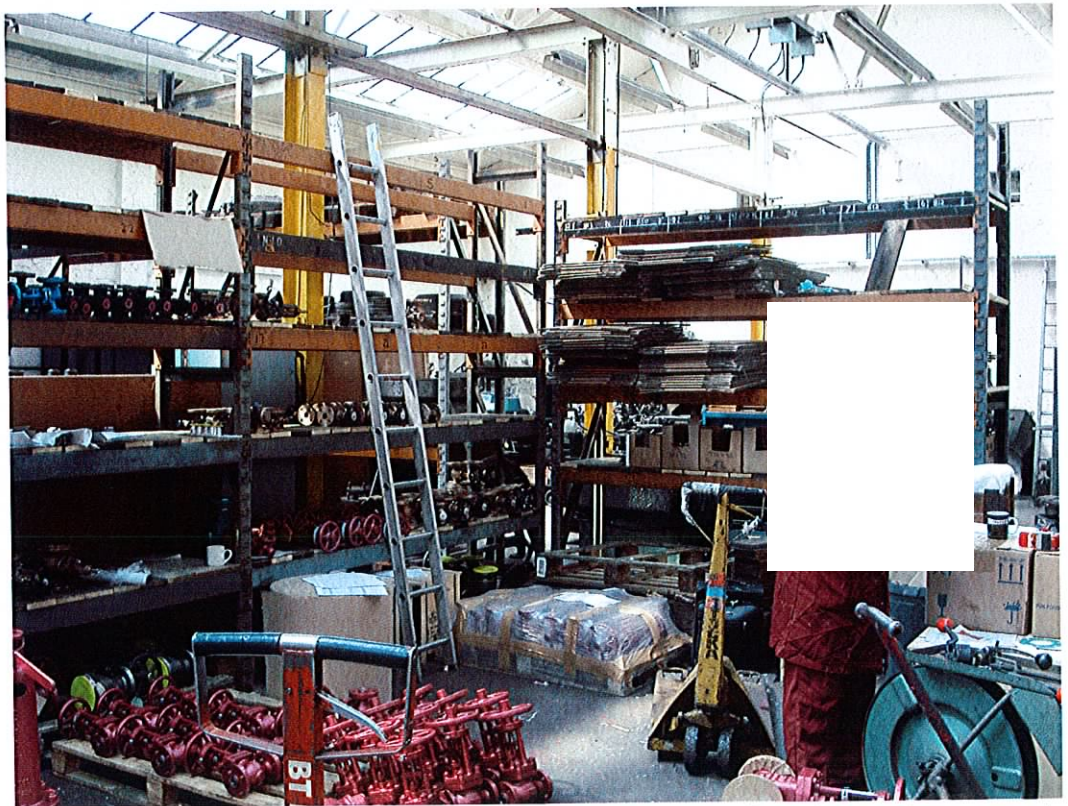


Metal working machinery

**Figure 4**  
**Machine Shop**



Storage area

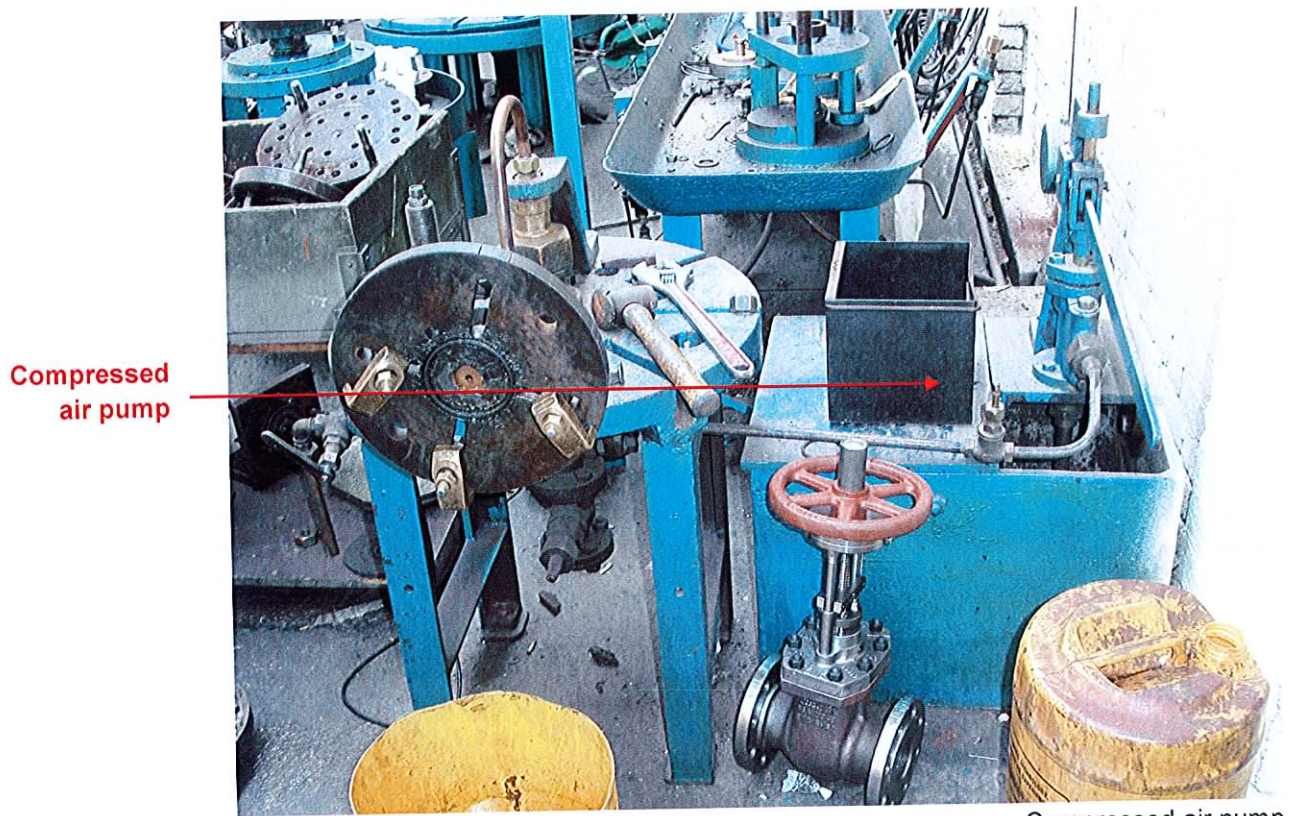


Storage shelves for valves and components

**Figure 5**  
**Machine Shop - Storage**



Heat treatment platform



Compressed air pump

**Figure 6**  
**Heat Treatment Area and Compressed Air Pump**



Offices Facing on to Dowker Street



Offices and roller door facing onto Dowker Street

**Figure 7**  
**Offices Facing onto Dowker Street**



Storage warehouse



Storage area for equipment and valves

**Figure 8**  
**Storage Warehouse**



Old house used for storage



Old patent shop used for storage

**Figure 9**  
**Old House and Patent Shop**

Travelling Crane



Car parking off access road

Asbestos roof

Degrading asphalt



Main gate and access drive

**Figure 10**  
**Access Drive and Car Parking Area**

Swarf  
container

Rust coloured  
staining



Outdoor storage area, refuse bins and swarf container

Drainage gully






Outdoor storage area

**Figure 11**  
**Outdoor Storage Area**

## POTENTIAL SOURCES

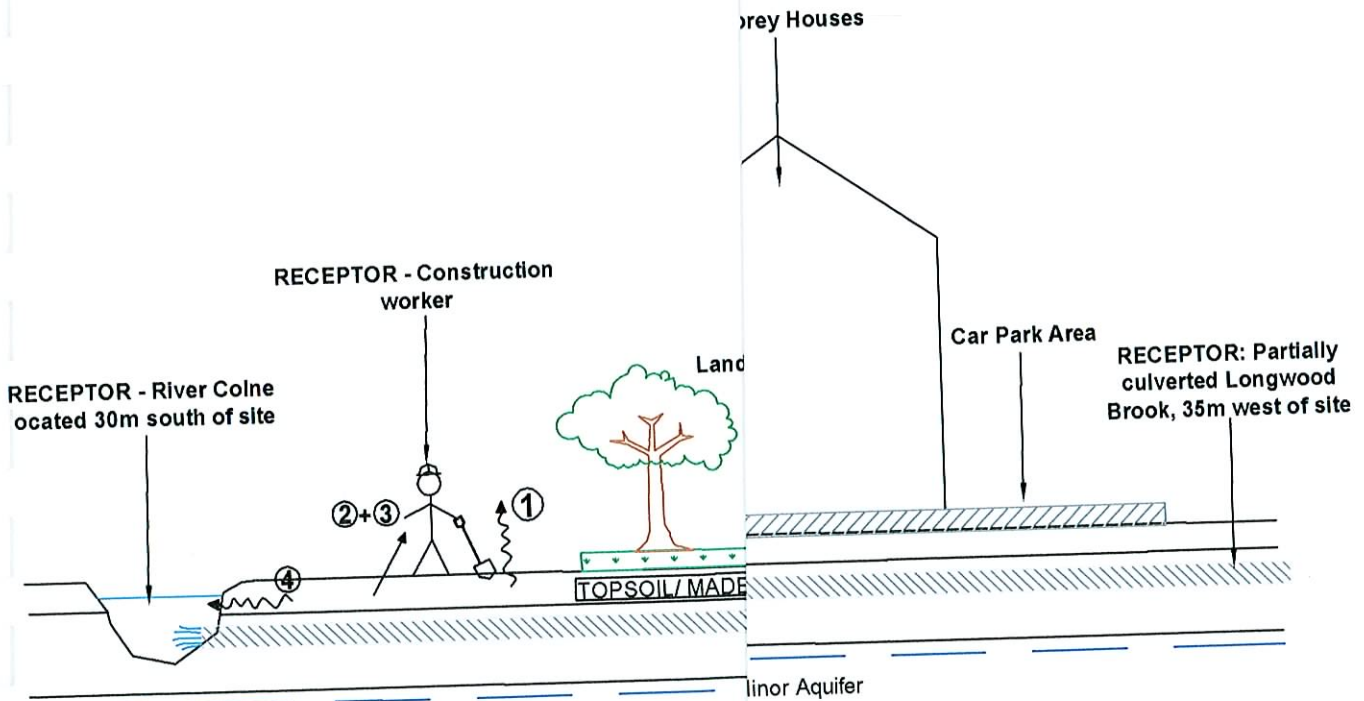
- Swarf Container
- Refuse bins
- Lubricants and other chemicals used on site during manufacturing process (current site use)
- Neighbouring industrial site use

## KEY

-  Concrete or tarmac hardstanding
-  Grass, garden or landscaped areas
-  Approximate Groundwater Level

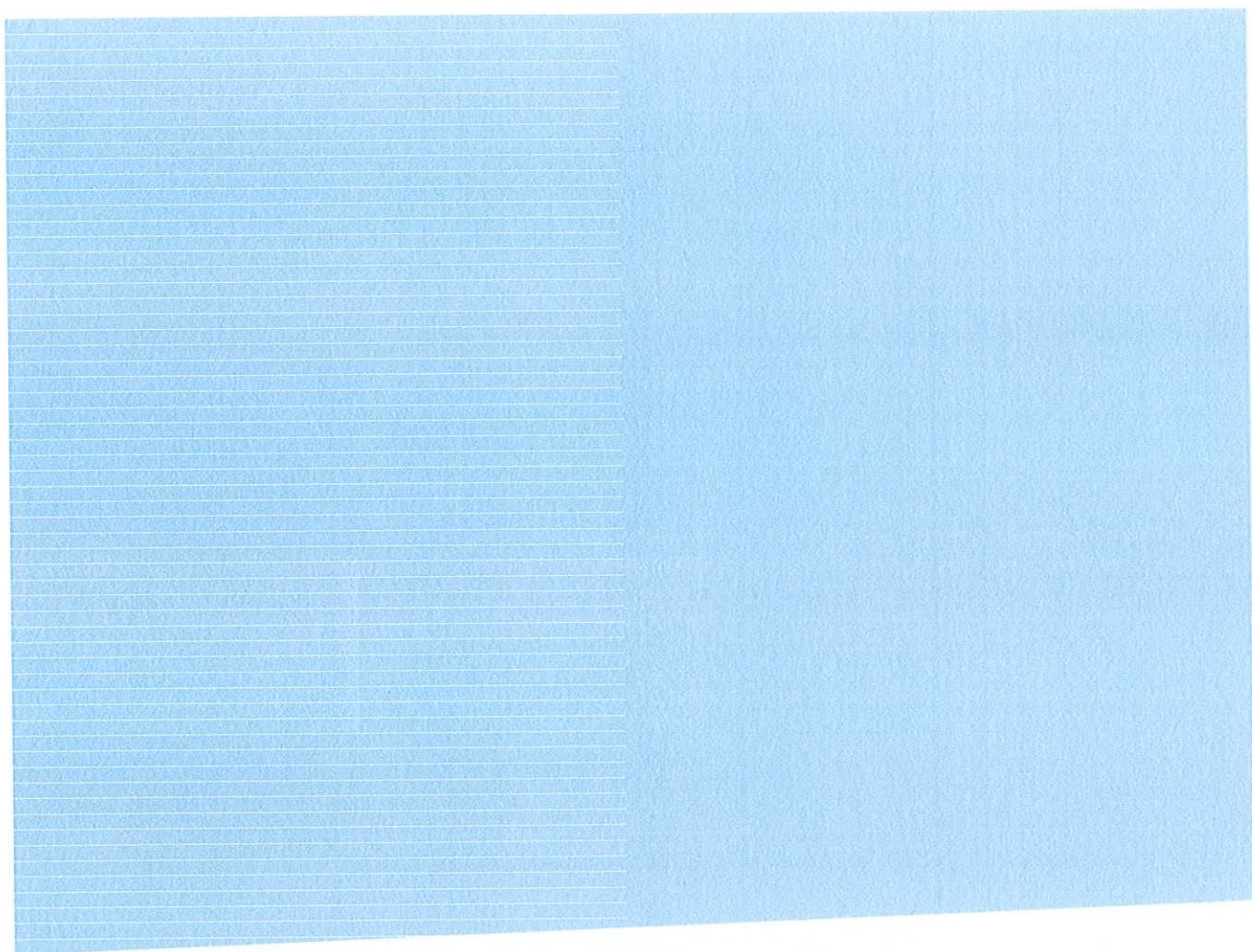
## PATHWAYS

- ① Inhalation of volatilised contaminants and dust
- ② Ingestion of contaminated soil
- ③ Dermal contact with contaminated soil
- ④ Leaching



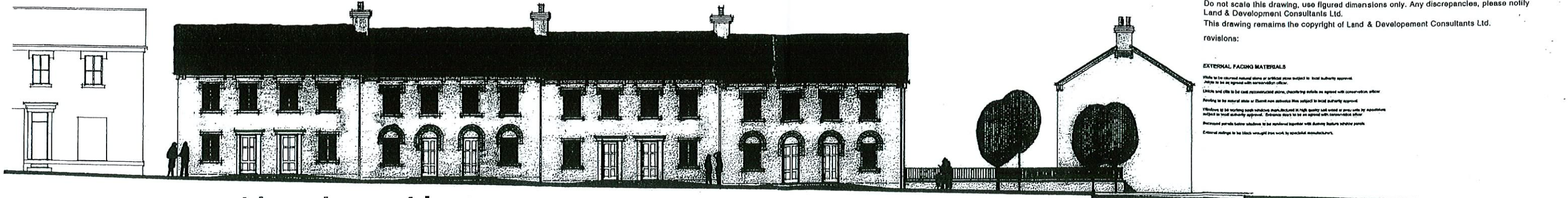
**Figure 12**  
**Conceptual Site Model**  
 Not To Scale

# Drawings

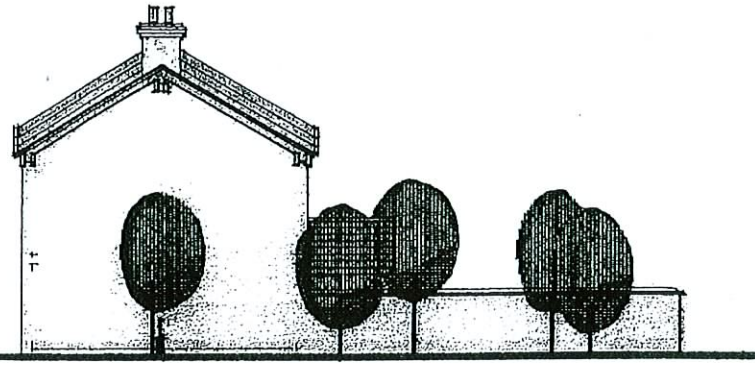


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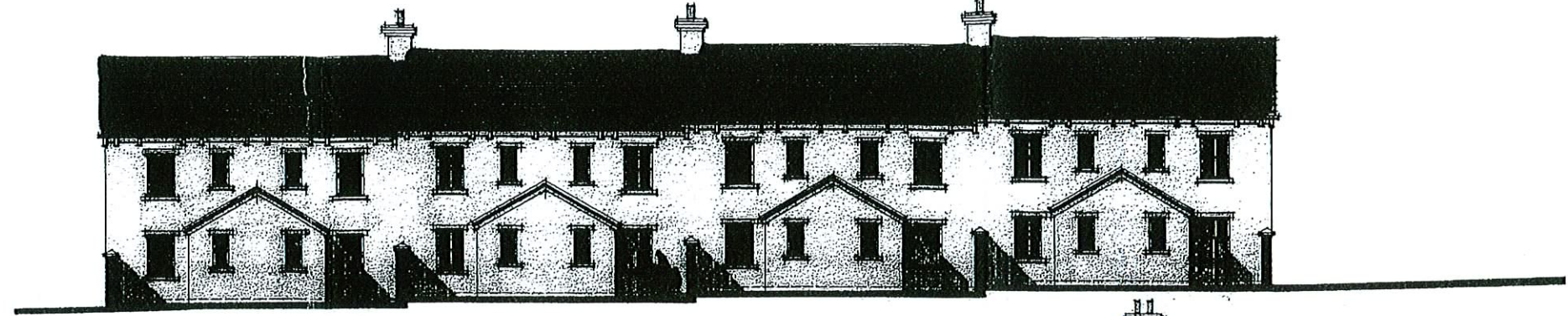
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 While to be external natural stone or artificial stone subject to local authority approval. Joints to be as agreed with conservation officer.  
 Linings and tiles to be cast reconstituted stone, quarrying details as agreed with conservation officer.  
 Roofing to be natural slate or Eternit non asbestos this subject to local authority approval.  
 Windows to be working sash windows manufactured to high quality and used or new, units by appointment subject to local authority approval. Entrance doors to be as agreed with conservation officer.  
 Recycled panels below windows to be finished together with existing feature window panels.  
 External railings to be black wrought iron work by specialist manufacturer.



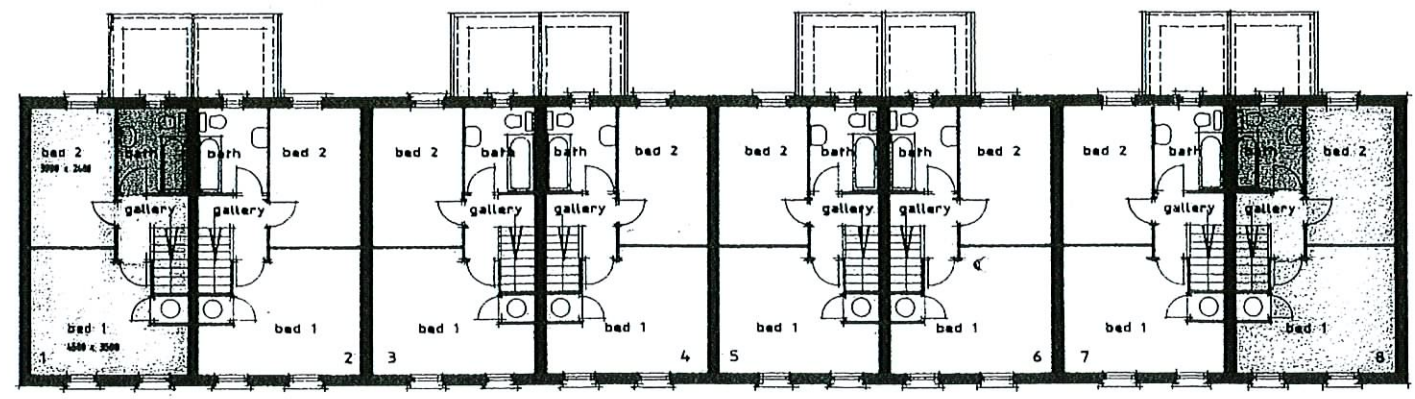
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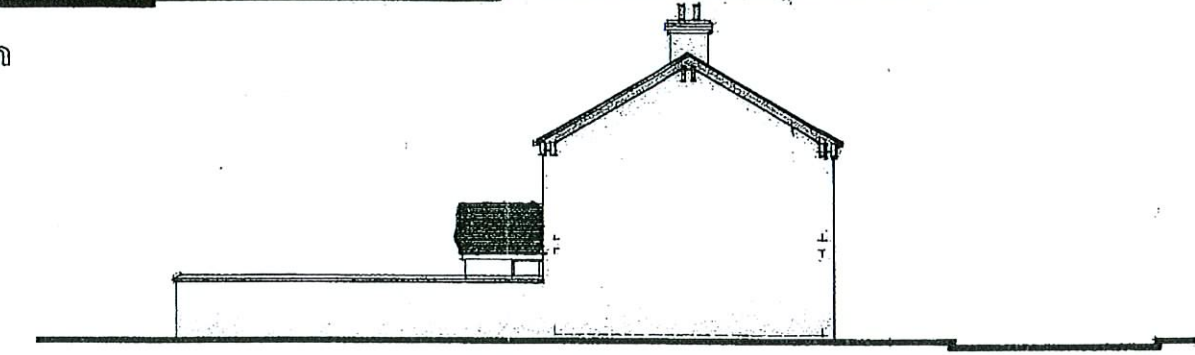
east elevation facing dowker street



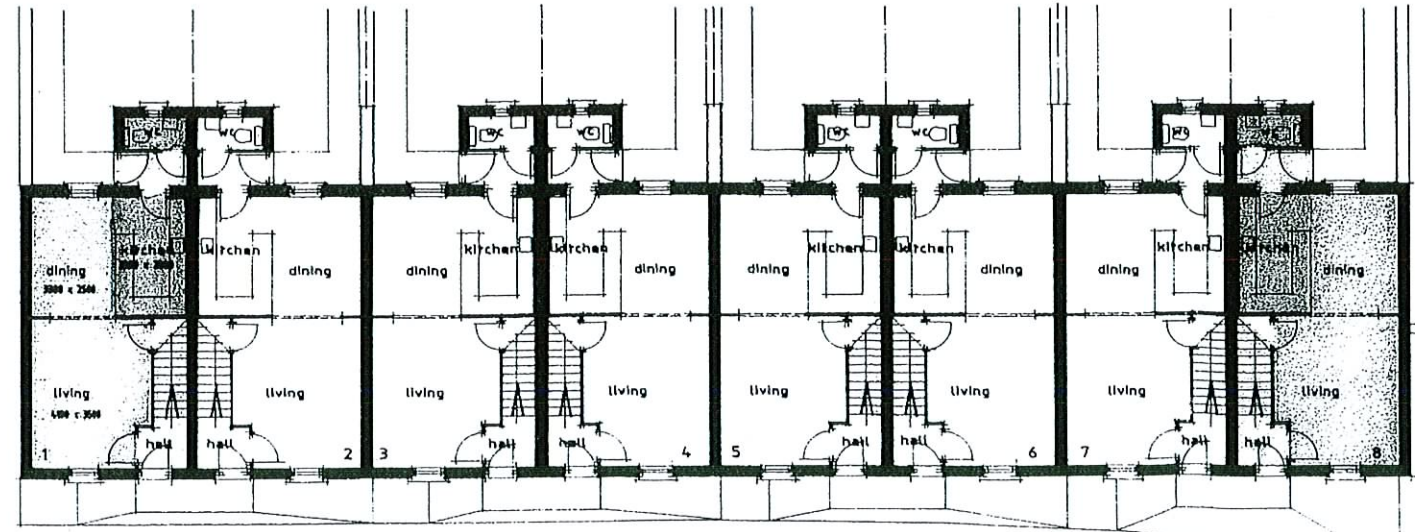
north elevation



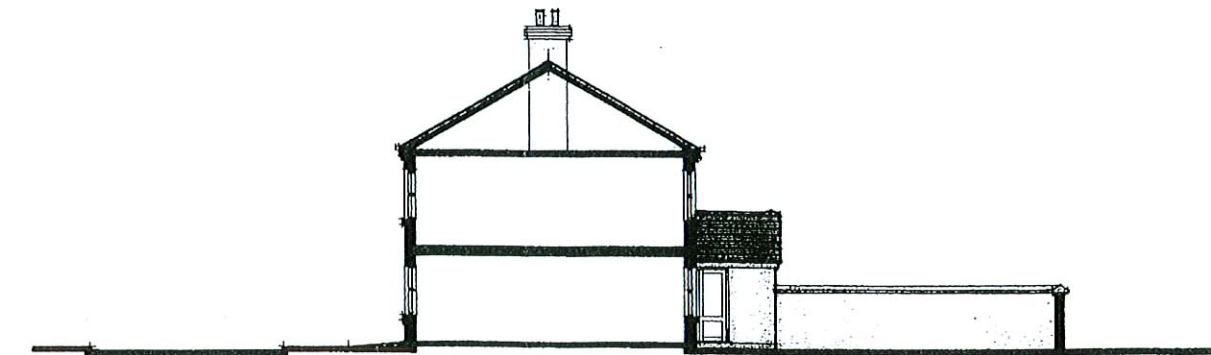
first floor plan



west elevation



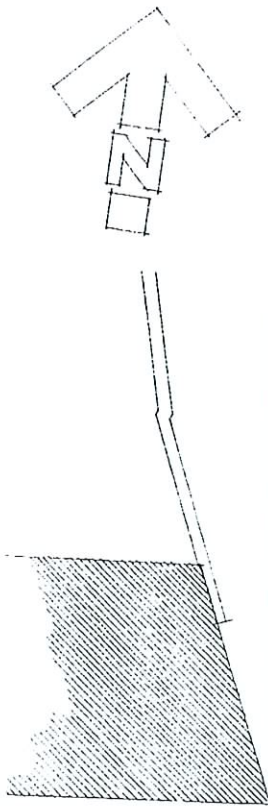
ground floor plan



section

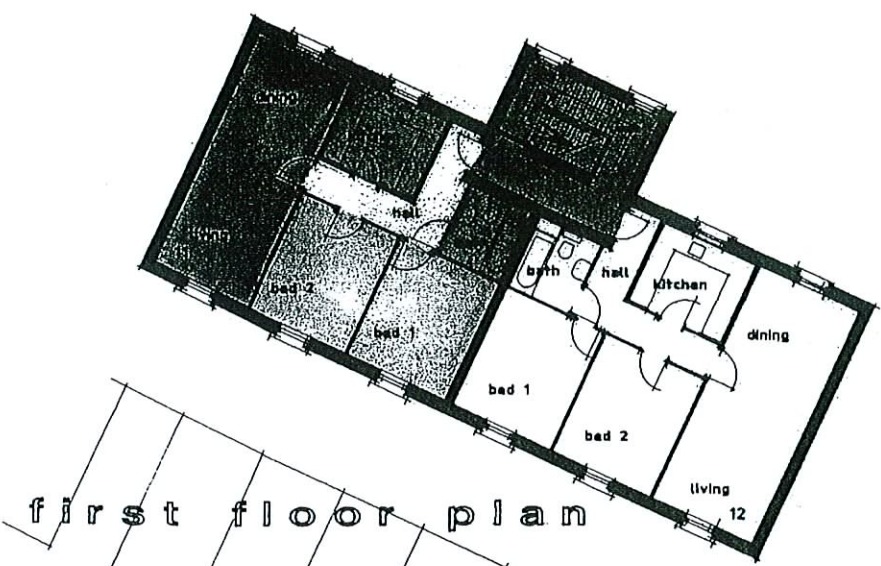
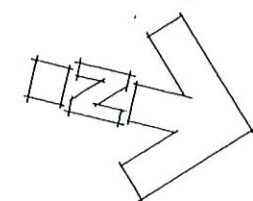
**MILNSBRIDGE**  
 PROPOSED RESIDENTIAL DEVELOPMENT  
 DOWKER STREET - MILNSBRIDGE - HUDDERSFIELD  
 WORDSWORTH HOLDINGS PLC

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|--|----|------------------------------------|------|---------|---|---------|---------|
| 2 BED COTTAGES - UNITS 1 TO 8 - DETAILED PROPOSALS |    |                                    |      | drawing |   |         |         |
| RAW  | dm | SB                                 | chkd | SEPT 05 | date  | 556W-11 | drg. no |
|  |    | LAND & DEVELOPMENT CONSULTANTS LTD |      |         | 1 Marine Studios, Burton Lane End, Burton Waters, Lincoln LN1 2WN |         |         |
|  |    | Telephone: 01522 545977            |      |         | Fax: 01522 545950   |         |         |

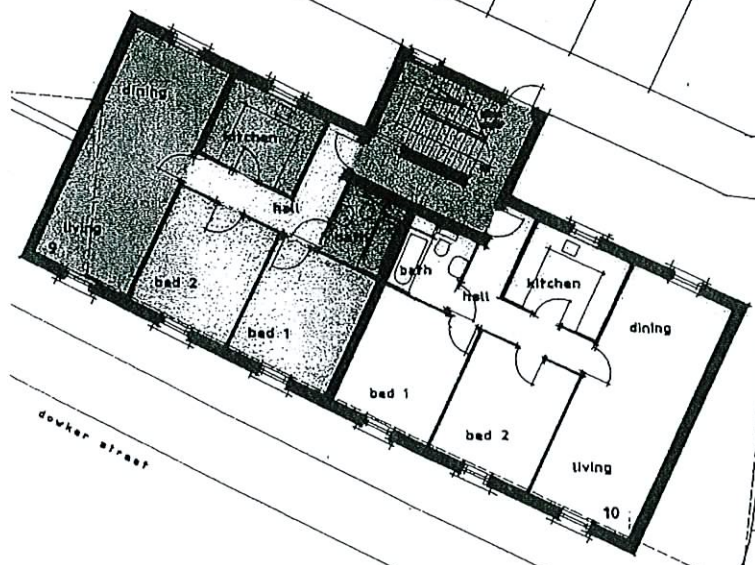
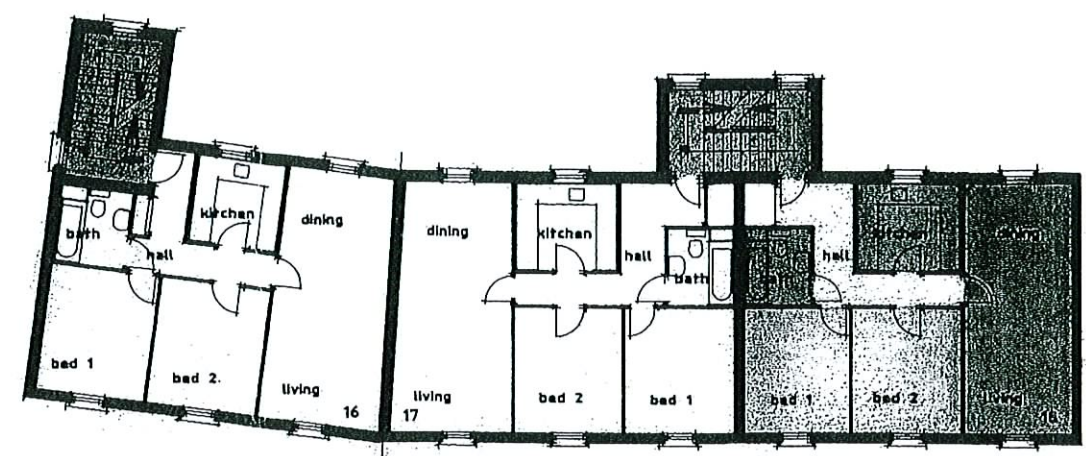


george street

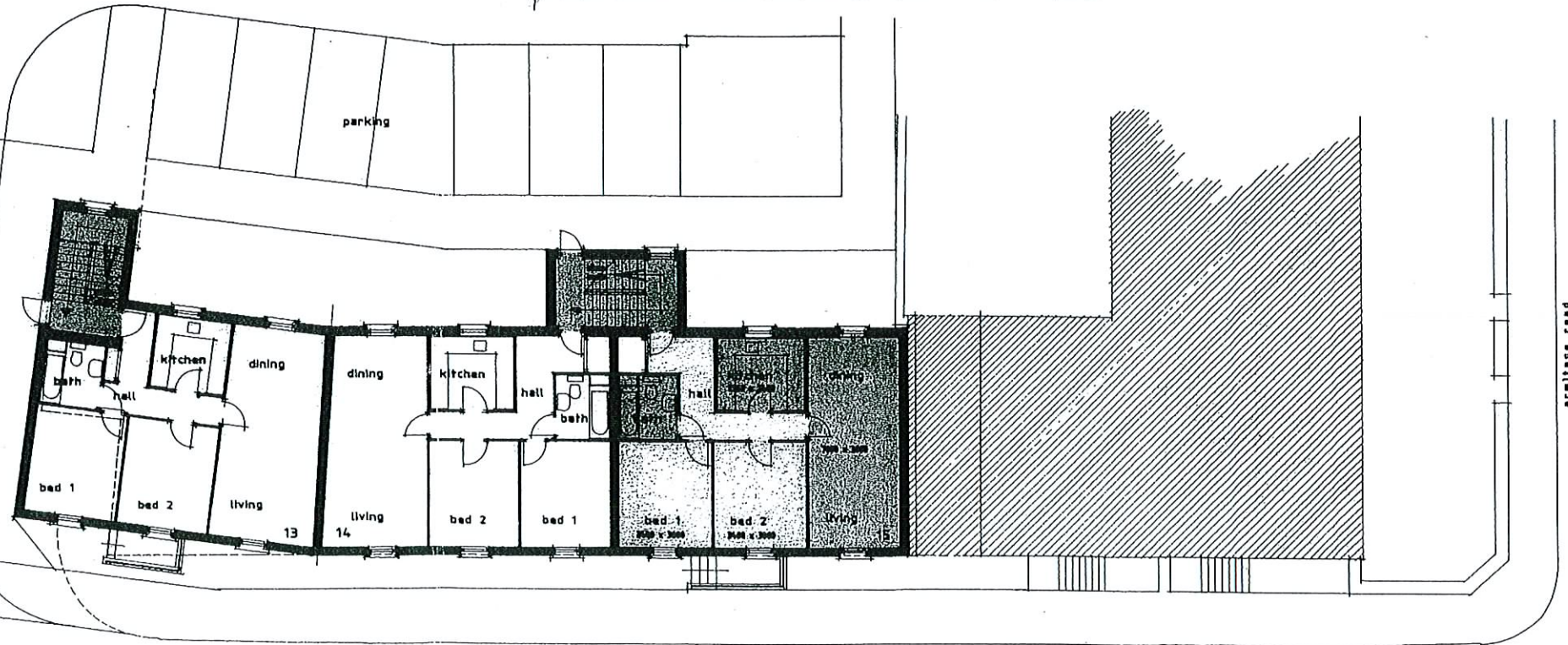
dowker street



first floor plan



ground floor plan



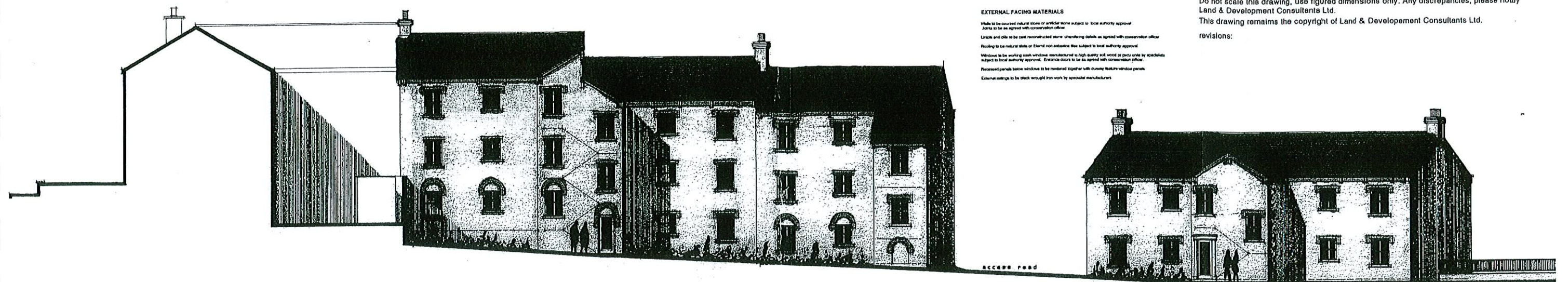
# MILNSBRIDGE

PROPOSED RESIDENTIAL DEVELOPMENT  
 DOWKER STREET - MILNSBRIDGE - HUDDERSFIELD  
**WORDSWORTH HOLDINGS PLC**

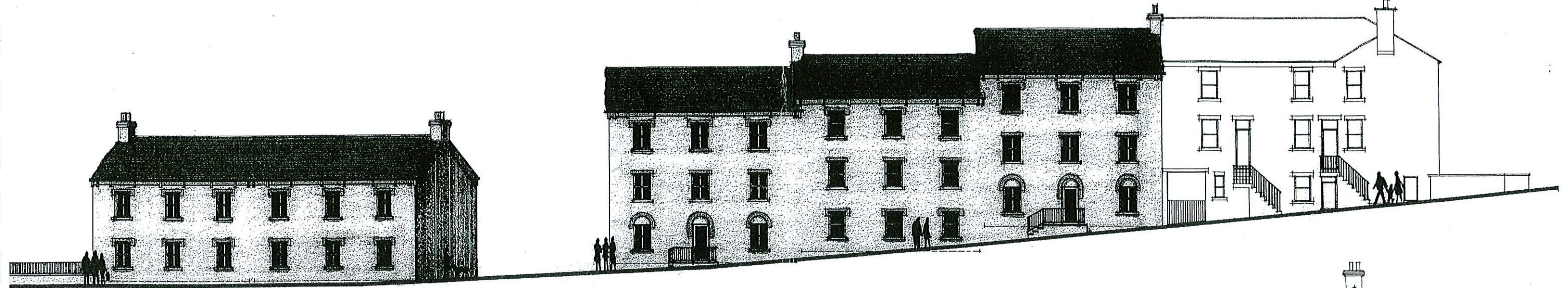
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|  |    |  |     | 556W-12 | drp. no |
|  |    | <b>LAND &amp; DEVELOPMENT CONSULTANTS LTD</b>  |     |         |         |
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 revisions:

**EXTERNAL FACING MATERIALS**  
 Walls to be coursed natural stone or artificial stone subject to local authority approval.  
 Joints to be as agreed with conservation officer.  
 Chimneys and gables to be cast reconstructed stone. Chanking details as agreed with conservation officer.  
 Roofing to be natural slate or Eternit non asbestos fibre subject to local authority approval.  
 Windows to be working sash windows manufactured to high quality soft wood or poly urea by specialist subject to local authority approval. Entrance doors to be as agreed with conservation officer.  
 Recessed panels below windows to be restored together with dummy fluted window panels.  
 External fittings to be black wrought iron work by specialist manufacturers.

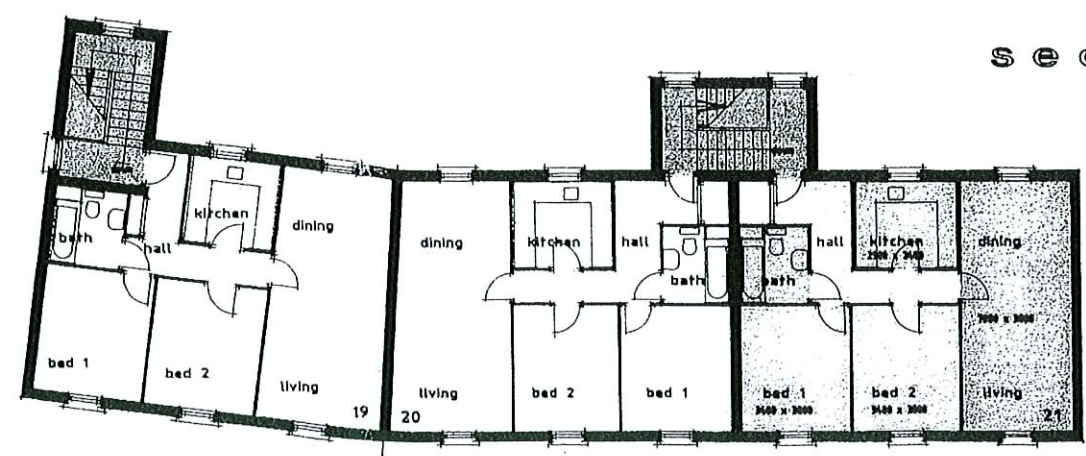
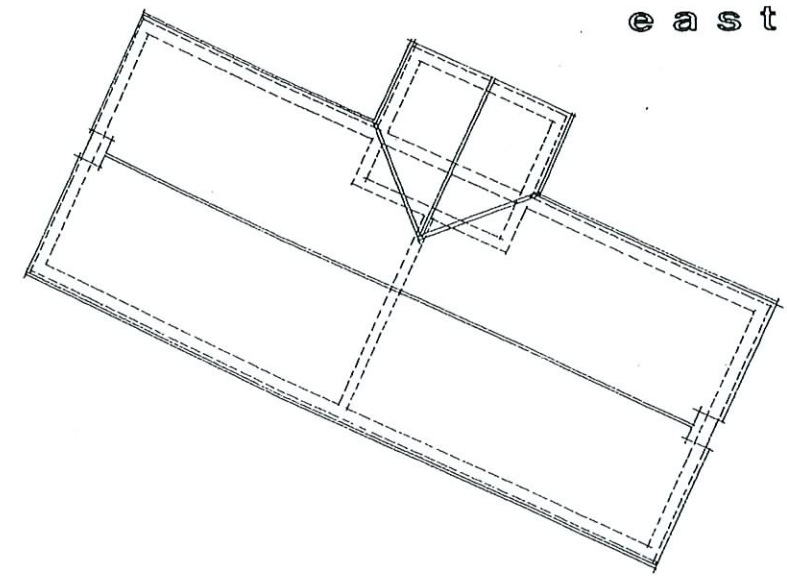


west elevation facing vehicular courtyard



east elevation facing dowker street

section



second floor plan

# MILNSBRIDGE

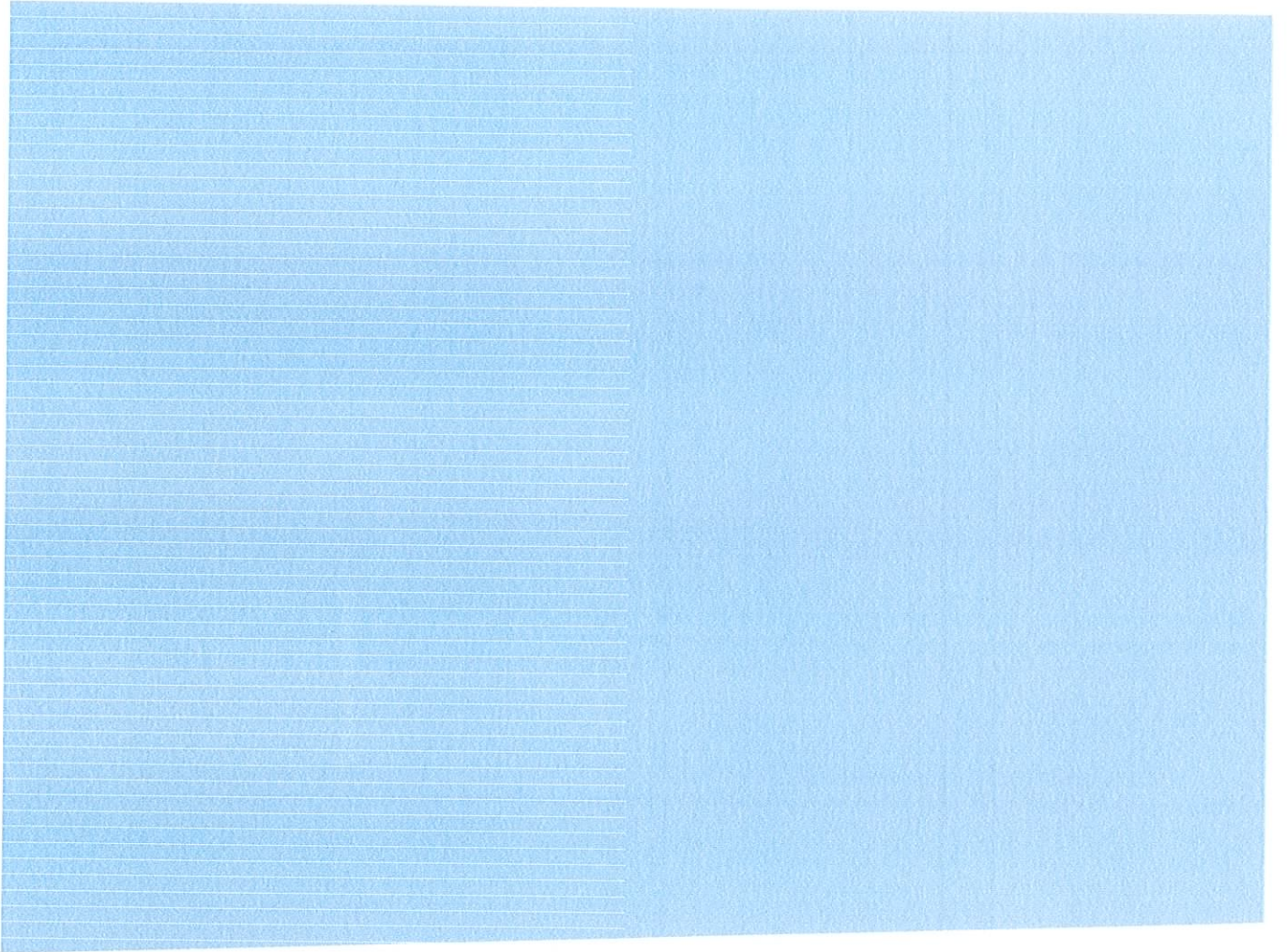
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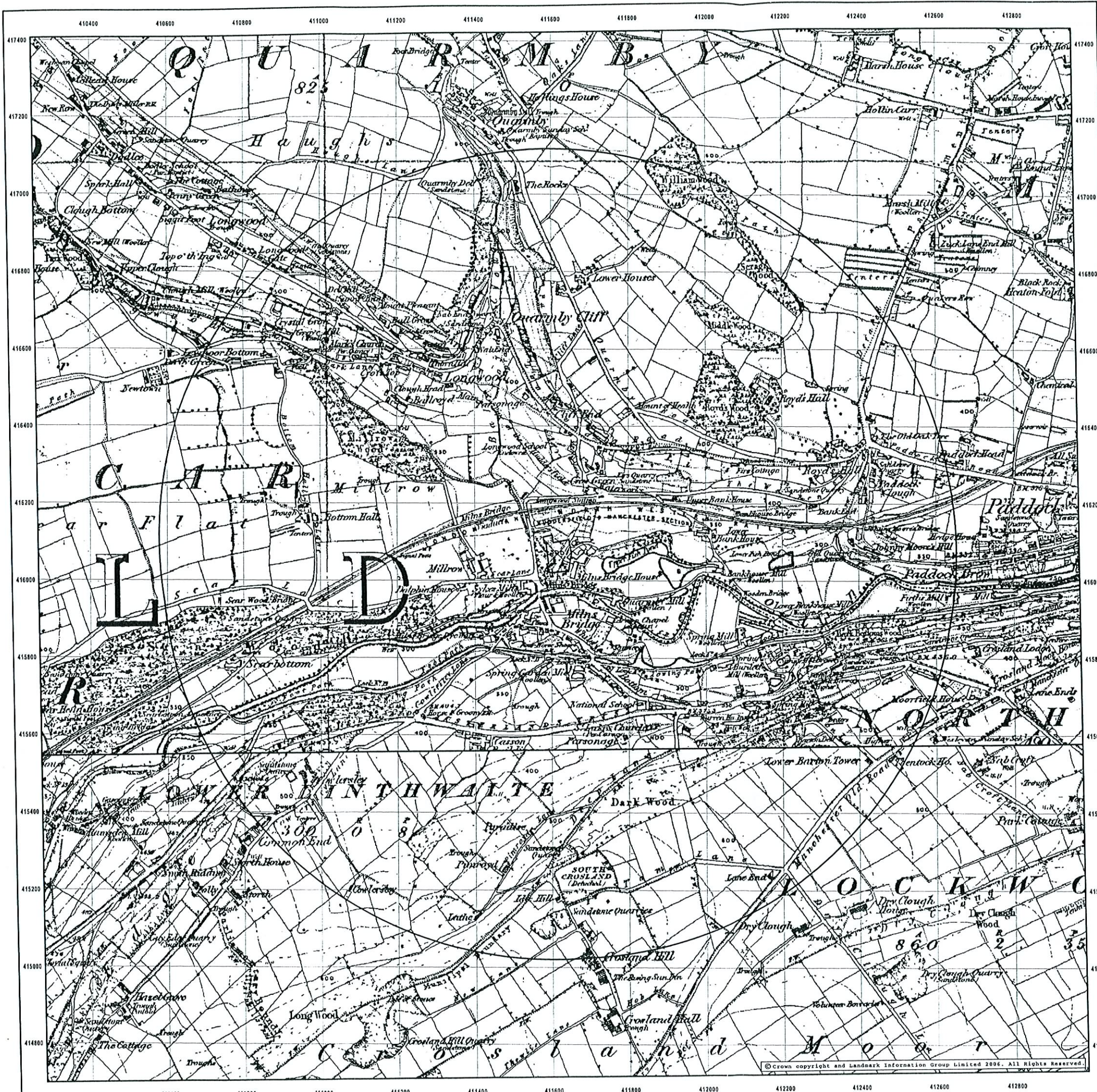
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 RAW dm SB chkd SEPT 05 date 556W-13 dfg.no



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# Appendix A





**CLIENT DETAILS**      Envirocheck Order No. **EC16826351\_1\_1**  
(10-Jan-2006 10:33)  
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 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midlands CV1 2FZ

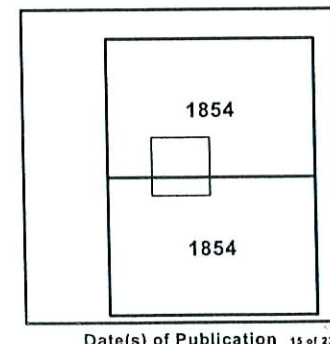
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 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|               |                  |                             |                      |
|---------------|------------------|-----------------------------|----------------------|
| Quarry        | Shingle          | Railway over Road           | Road over Railway    |
| Gravel Pit    | Sand Pit         | Level Crossing              | Railway over River   |
| Other Pits    |                  | Road over Stream            | Road over Stream     |
| Rough Pasture | Furze            | Road over River or Canal    | Sunken Road          |
| Marsh         | Reeds            | Raised Road                 | Instrumental Contour |
| Osiers        | Sketched Contour | Arrow denotes flow of Water |                      |

**Ordnance Survey County Series**      1  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.  
 In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**YORKSHIRE**  
 Published 1854  
 Source map scale - 1:10,560





**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(27-Jan-2008 10:27)  
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 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midland CV1 2FZ

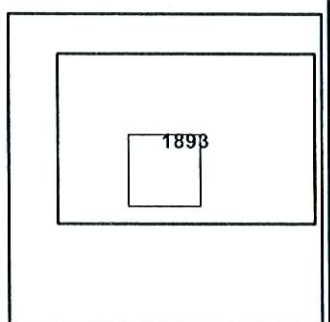
**SITE DETAILS**      Grid Reference    411620    416070  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|                                 |                          |                             |       |
|---------------------------------|--------------------------|-----------------------------|-------|
|                                 |                          |                             |       |
| Quarry                          | Sand Pit                 | Marsh                       | Reeds |
|                                 |                          |                             |       |
| Gravel Pit                      | Clay Pit                 | Rough Pasture               | Furze |
|                                 |                          |                             |       |
| Refuse Heap                     | Shingle                  | Osiers                      | Ford  |
|                                 |                          |                             |       |
| Railway crossing River or Canal | Railway crossing Road    | Level Crossing              |       |
|                                 |                          |                             |       |
| Embankment                      | Cutting                  | Road crossing Railway       |       |
|                                 |                          |                             |       |
| Road over single Stream         | Road over River or Canal | Arrow denotes flow of Water |       |

**Ordnance Survey County Series**      1  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given on the right is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

**YORKSHIRE**  
 Published 1893  
 Source map scale - 1:2,500



Date(s) of Publication    1 of 23



**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(20-Jan-2005 16:33)

Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS**      Grid Reference    411620    416070

Milsbridge  
 Market Street

Huddersfield  
 HD3 4HT

**Historical Map Legend**

|                             |                      |                          |                          |
|-----------------------------|----------------------|--------------------------|--------------------------|
| Quarry                      | Shingle              | Railway over Road        | Road over Railway        |
| Gravel Pit                  | Sand Pit             | Level Crossing           | Railway over River       |
| Other Pits                  |                      | Road over Stream         | Road over Stream         |
| Rough Pasture               | Furze                | Road over River or Canal | Road over River or Canal |
| Marsh                       | Reeds                | Sunken Road              | Sunken Road              |
| Osiers                      | Instrumental Contour | Raised Road              | Raised Road              |
| Arrow denotes flow of Water | Sketched Contour     |                          |                          |

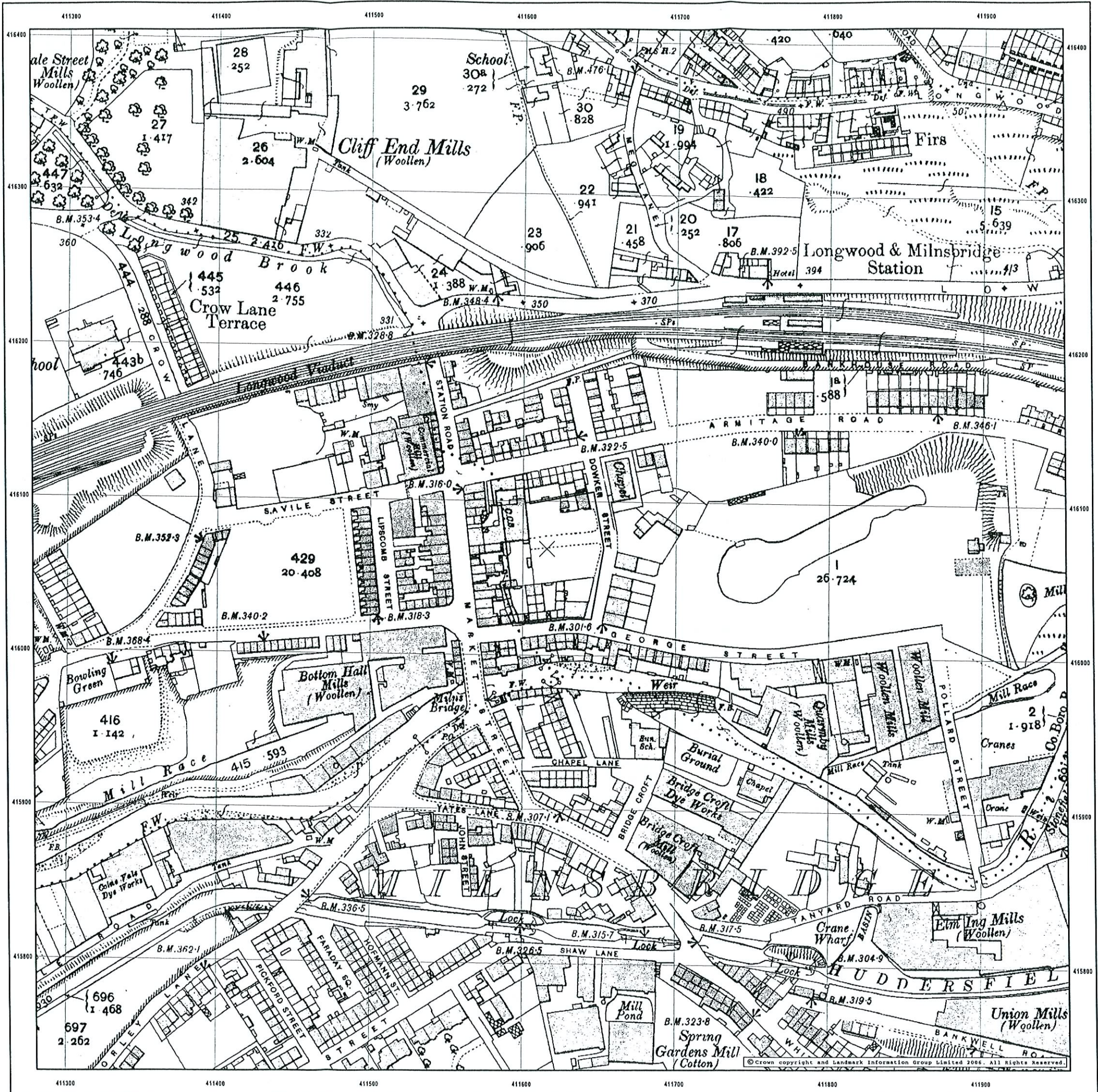
**Ordnance Survey County Series**      2

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**YORKSHIRE**  
 Published 1894  
 Source map scale - 1:10,560

Date(s) of Publication    16 of 23



**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(10-Jan-2008 10:28)  
 Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midland CV1 2FZ

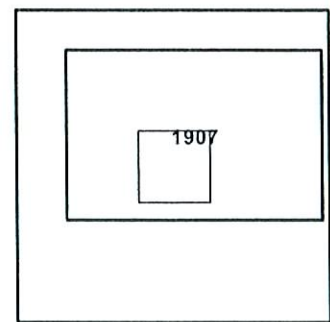
**SITE DETAILS**      Grid Reference    411620    416070  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|                                    |                             |                                |       |
|------------------------------------|-----------------------------|--------------------------------|-------|
|                                    |                             |                                |       |
| Quarry                             | Sand Pit                    | Marsh                          | Reeds |
|                                    |                             |                                |       |
| Gravel Pit                         | Clay Pit                    | Rough Pasture                  | Furze |
|                                    |                             |                                |       |
| Refuse Heap                        | Shingle                     | Osiers                         | Ford  |
|                                    |                             |                                |       |
| Railway crossing<br>River or Canal | Railway crossing<br>Road    | Level Crossing                 |       |
|                                    |                             |                                |       |
| Embankment                         | Cutting                     | Road crossing<br>Railway       |       |
|                                    |                             |                                |       |
| Road over<br>single Stream         | Road over<br>River or Canal | Arrow denotes<br>flow of Water |       |

**Ordnance Survey County Series**      2  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given on the right is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

**YORKSHIRE**  
 Published 1907  
 Source map scale - 1:2,500



Date(s) of Publication    2 of 23











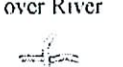


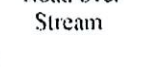
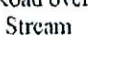
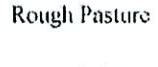

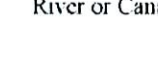

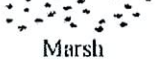
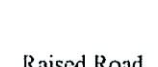
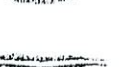


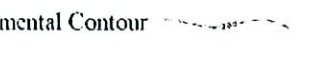
**CLIENT DETAILS** Envirocheck Order No. EC16826351\_1\_1

Customer Ref: Ms V Griffin, 47943ICVK  
Faber Maunsell  
3 Copthall House Station Square  
Coventry  
West Midlands CV1 2FZ

**SITE DETAILS** Grid Reference 411620 416070

Milnsbridge  
Market Street  
  
Huddersfield  
HD3 4HT

**Historical Map Legend**

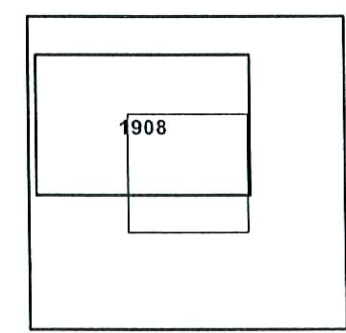
|   |   |   |   |
|---|---|---|---|
|    |    |    |    |
| Quarry  | Shingle   | Railway over Road   | Road over Railway   |
|    |    |    |    |
| Gravel Pit  | Sand Pit  | Level Crossing  | Railway over River  |
|    |   |    |    |
| Other Pits  |   | Road over Stream  | Road over Stream  |
|    |    |    |    |
| Rough Pasture   | Furze   | Road over River or Canal  | Road over River or Canal  |
|  |  |  |  |
| Marsh   | Reeds   | Sunken Road   | Sunken Road   |
|  |   |  |  |
| Osiers  |   | Raised Road   | Raised Road   |
|  |  |  |   |
| Arrow denotes flow of Water   | Instrumental Contour  | Sketched Contour  |   |

**Ordnance Survey County Series** 3

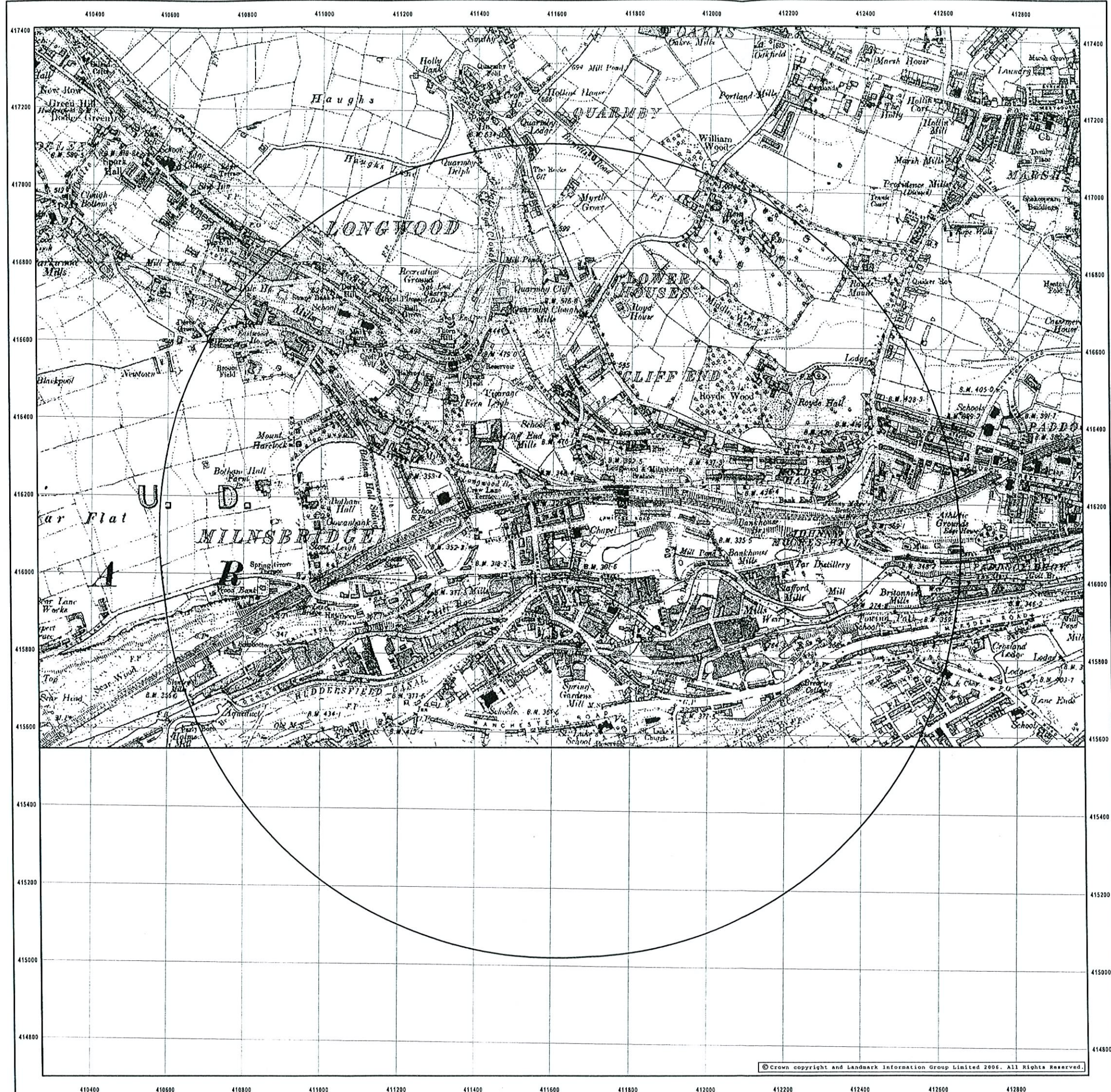
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

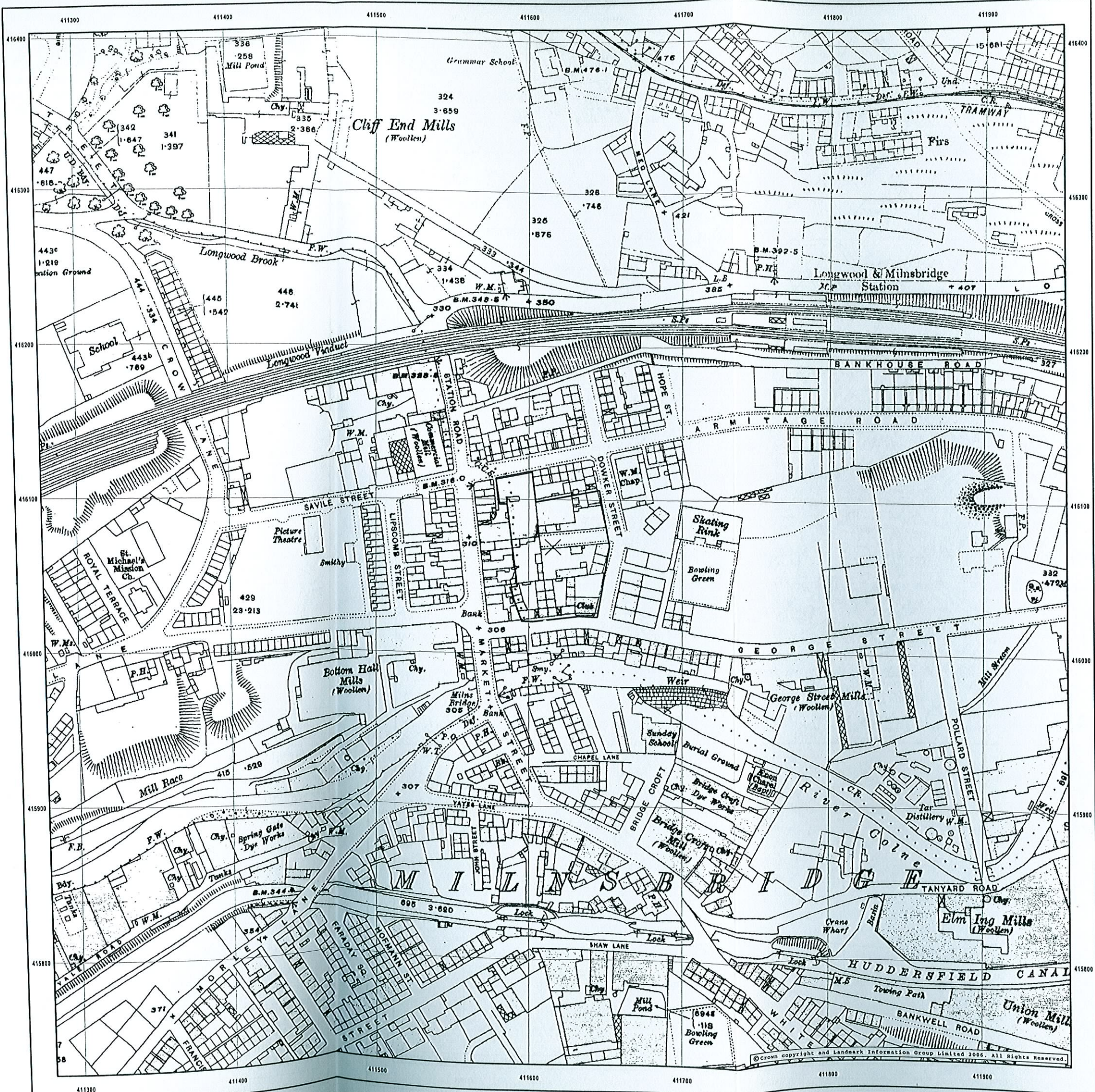
In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**YORKSHIRE**  
Published 1908  
Source map scale - 1:10,560



Date(s) of Publication 17 of 23





**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(20-Jan-2008 10:30)

Customer Ref: Ms V Griffin, 47943ICVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS**      Grid Reference    411620    416070

Milnsbridge  
 Market Street

Huddersfield  
 HD3 4HT

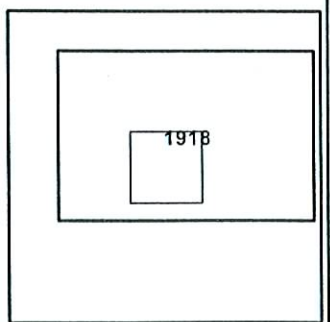
**Historical Map Legend**

|                                    |                             |                                |       |
|------------------------------------|-----------------------------|--------------------------------|-------|
|                                    |                             |                                |       |
| Quarry                             | Sand Pit                    | Marsh                          | Reeds |
|                                    |                             |                                |       |
| Gravel Pit                         | Clay Pit                    | Rough Pasture                  | Furze |
|                                    |                             |                                |       |
| Refuse Heap                        | Shingle                     | Osiers                         | Ford  |
|                                    |                             |                                |       |
| Railway crossing<br>River or Canal | Railway crossing<br>Road    | Level Crossing                 |       |
|                                    |                             |                                |       |
| Embankment                         | Cutting                     | Road crossing<br>Railway       |       |
|                                    |                             |                                |       |
| Road over<br>single Stream         | Road over<br>River or Canal | Arrow denotes<br>flow of Water |       |

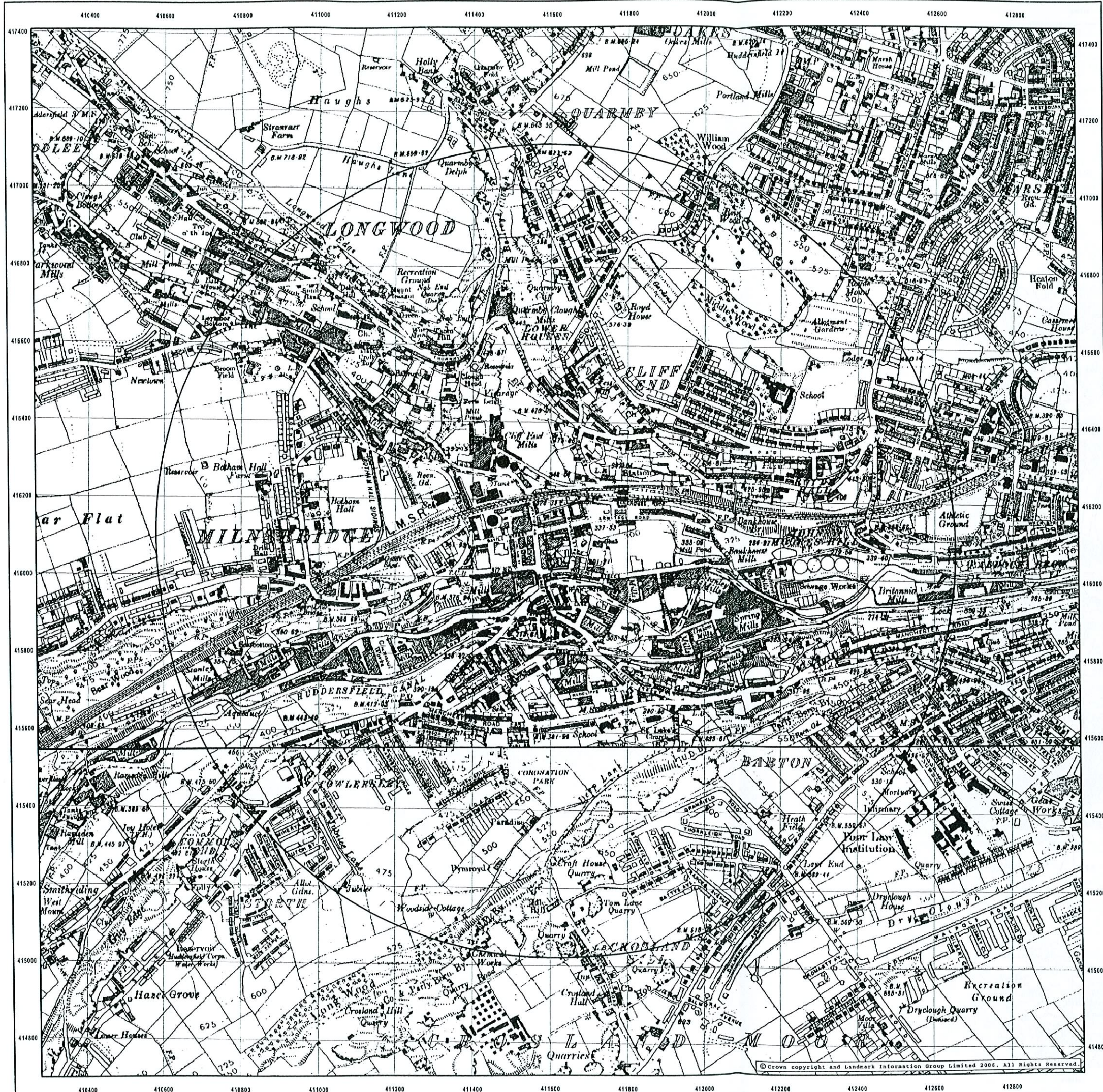
**Ordnance Survey County Series**      3

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given on the right is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

**YORKSHIRE**  
 Published 1918  
 Source map scale - 1:2,500



Date(s) of Publication    3 of 23



**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(18-Jun-2004 10:34)

Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS**      Grid Reference    411620    416070

Milnbridge  
 Market Street

Huddersfield  
 HD3 4HT

**Historical Map Legend**

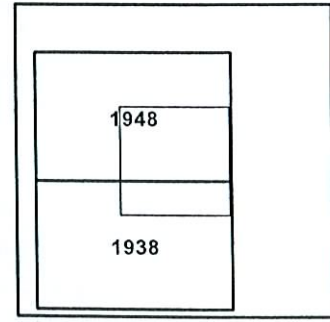
|               |                      |                             |                    |
|---------------|----------------------|-----------------------------|--------------------|
| Quarry        | Shingle              | Railway over Road           | Road over Railway  |
| Gravel Pit    | Sand Pit             | Level Crossing              | Railway over River |
| Other Pits    |                      | Road over Stream            | Road over Stream   |
| Rough Pasture | Furze                | Road over River or Canal    | Sketched Contour   |
| Marsh         | Reeds                | Sunken Road                 | Raised Road        |
| Osiers        | Instrumental Contour | Arrow denotes flow of Water |                    |

**Ordnance Survey County Series**      4

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**YORKSHIRE**  
 Published 1938 to 1948  
 Source map scale - 1:10,560



Date(s) of Publication 18 of 23

**CLIENT DETAILS** Envirocheck Order No. EC16826351\_1\_1  
(16-Jan-2006 10:25)  
 Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midlands CV1 2FZ

**SITE DETAILS** Grid Reference 411620 416070  
 Milsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|  |                                |  |                                 |  |                 |
|--|--------------------------------|--|---------------------------------|--|-----------------|
|  | Chalk Pit, Clay Pit, or Quarry |  | Non-coniferous Trees            |  | Bracken         |
|  | Gravel Pit                     |  | Coniferous Trees                |  | Heath           |
|  | Sand Pit                       |  | Scrub                           |  | Rough Grassland |
|  | Disused Pit or Quarry          |  | Lake, Loch or Pond              |  | Reeds           |
|  | Refuse or Slag Heap            |  | Pylon                           |  | Saltings        |
|  |                                |  | Electricity Pole                |  | Marsh           |
|  |                                |  | Transmission Line               |  |                 |
|  |                                |  | Direction of Flow of Water      |  |                 |
|  |                                |  | Shingle                         |  |                 |
|  |                                |  | Sand                            |  |                 |
|  | Cutting                        |  | Embankment                      |  |                 |
|  | Standard Gauge                 |  | Multiple Track                  |  |                 |
|  | Standard Gauge Single Track    |  | Siding, Tramway or Mineral Line |  |                 |
|  | Narrow Gauge                   |  |                                 |  |                 |

**Ordnance Survey Plan** 1  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unflattened - with all military camps and other strategic sites removed. These maps were initially overlaid with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**ORDNANCE SURVEY PLAN**  
 Published 1956  
 Source map scale - 1:10,560

|      |
|------|
| 1956 |
| 1956 |

Date(s) of Publication 19 of 23





**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1  
(20-Jan-2008 10:33)  
 Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midlands CV1 2FZ

**SITE DETAILS**      Grid Reference    411620    416070  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|  |                                      |                                |                                    |
|--|--------------------------------------|--------------------------------|------------------------------------|
|  |                                      |                                |                                    |
| Inactive Quarry, Chalk Pit or Clay Pit | Active Quarry, Chalk Pit or Clay Pit | Culvert                        |                                    |
|  |                                      |                                |                                    |
| Slope                                  | Slope                                |                                |                                    |
|  |                                      |                                |                                    |
| Pylon                                  | Electricity Transmission Line        | Direction of Water flow        | Coppice, Osier                     |
|  |                                      |                                |                                    |
| Marsh                                  | Saltings                             | Orchard Tree                   | Reeds                              |
|  |                                      |                                |                                    |
| Rough Grassland                        | Scrub                                | Hoath                          | Bracken                            |
|  |                                      |                                |                                    |
| Coniferous Tree (Surveyed)             | Coniferous Tree (Not Surveyed)       | Non-coniferous Tree (Surveyed) | Non-coniferous Tree (Not Surveyed) |

**Ordnance Survey Plan**      1  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given on the right is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

**ORDNANCE SURVEY PLAN**  
 Published 1961  
 Source map scale - 1:1,250

|      |      |
|------|------|
| 1961 | 1961 |
| 1961 | 1961 |

Date(s) of Publication    5 of 23



**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1\_1  
(28-Jun-1998 16:34)  
 Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midlands CV1 2FZ

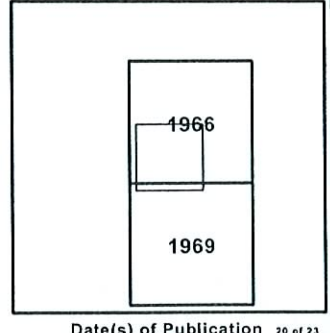
**SITE DETAILS**      Grid Reference    411620    416070  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|  |                                |  |                               |  |                                 |
|--|--------------------------------|--|-------------------------------|--|---------------------------------|
|  | Chalk Pit, Clay Pit, or Quarry |  | Non-coniferous Trees          |  | Bracken                         |
|  | Gravel Pit                     |  | Coniferous Trees              |  | Heath                           |
|  | Sand Pit                       |  | Scrub                         |  | Rough Grassland                 |
|  | Disused Pit or Quarry          |  | Lake, Loch or Pond            |  | Reeds                           |
|  | Refuse or Slag Heap            |  | Pylon                         |  | Saltings                        |
|  |                                |  | Pole                          |  | Marsh                           |
|  |                                |  | Electricity Transmission Line |  |                                 |
|  |                                |  | Direction of Flow of Water    |  |                                 |
|  |                                |  | Shingle                       |  |                                 |
|  |                                |  | Sand                          |  |                                 |
|  | Cutting                        |  | Embankment                    |  | Standard Gauge Multiple Track   |
|  | Road Under                     |  | Road Over                     |  | Standard Gauge Single Track     |
|  | Level Crossing                 |  | Foot Bridge                   |  | Siding, Tramway or Mineral Line |
|  | Narrow Gauge                   |  |                               |  |                                 |

**Ordnance Survey Plan** 2  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.  
 In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**ORDNANCE SURVEY PLAN**  
 Published 1966 to 1969  
 Source map scale - 1:10,560





**CLIENT DETAILS**      Envirocheck Order No. EC16826351\_1  
(18-Jun-2006 16:33)  
 Customer Ref: Ms V Griffin, 47943ICVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS**      Grid Reference    411620    416070  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|  |                                      |                                |                                    |
|--|--------------------------------------|--------------------------------|------------------------------------|
|  |                                      |                                |                                    |
| Inactive Quarry, Chalk Pit or Clay Pit | Active Quarry, Chalk Pit or Clay Pit | Culvert                        |                                    |
|  |                                      |                                |                                    |
| Slope                                  | Slope                                |                                |                                    |
|  |                                      |                                |                                    |
| Pylon                                  | Electricity Transmission Line        | Direction of Water flow        | Coppice, Osier                     |
|  |                                      |                                |                                    |
| Marsh                                  | Saltings                             | Orchard Tree                   | Reeds                              |
|  |                                      |                                |                                    |
| Rough Grassland                        | Scrub                                | Henth                          | Bracken                            |
|  |                                      |                                |                                    |
| Coniferous Tree (Surveyed)             | Coniferous Tree (Not Surveyed)       | Non-coniferous Tree (Surveyed) | Non-coniferous Tree (Not Surveyed) |

**Supply of Unpublished Survey Information**      1  
 SUST maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

**ORDNANCE SURVEY PLAN**  
 Published 1975  
 Source map scale - 1:1,250

|      |      |
|------|------|
| 1975 | 1975 |
| 1975 | 1975 |

Date(s) of Publication    18 of 23



**CLIENT DETAILS**      Envirocheck Order No. **EC16826351\_1\_1**  
(10-Jan-2006 10:33)

Customer Ref: Ms V Griffin, 47943ICVK  
 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS**      Grid Reference    **411620    416070**

Milnsbridge  
 Market Street

Huddersfield  
 HD3 4HT

**Historical Map Legend**

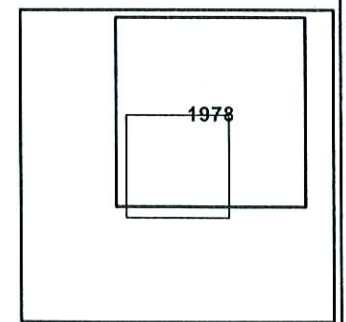
|  |                                 |  |                               |  |                 |
|--|---------------------------------|--|-------------------------------|--|-----------------|
|  | Chalk Pit, Clay Pit, or Quarry  |  | Non-coniferous Trees          |  | Bracken         |
|  | Gravel Pit                      |  | Coniferous Trees              |  | Heath           |
|  | Sand Pit                        |  | Scrub                         |  | Rough Grassland |
|  | Disused Pit or Quarry           |  | Lake, Loch or Pond            |  | Reeds           |
|  | Refuse or Slag Heap             |  | Pylon                         |  | Saltings        |
|  |                                 |  | Pole                          |  | Marsh           |
|  |                                 |  | Electricity Transmission Line |  |                 |
|  | Direction of Flow of Water      |  | Shingle                       |  |                 |
|  | Sand                            |  | Cutting                       |  | Embankment      |
|  | Road Under                      |  | Road Over                     |  | Level Crossing  |
|  | Foot Bridge                     |  | Standard Gauge                |  | Multiple Track  |
|  | Siding, Tramway or Mineral Line |  | Single Track                  |  | Narrow Gauge    |

**Ordnance Survey Plan**      1

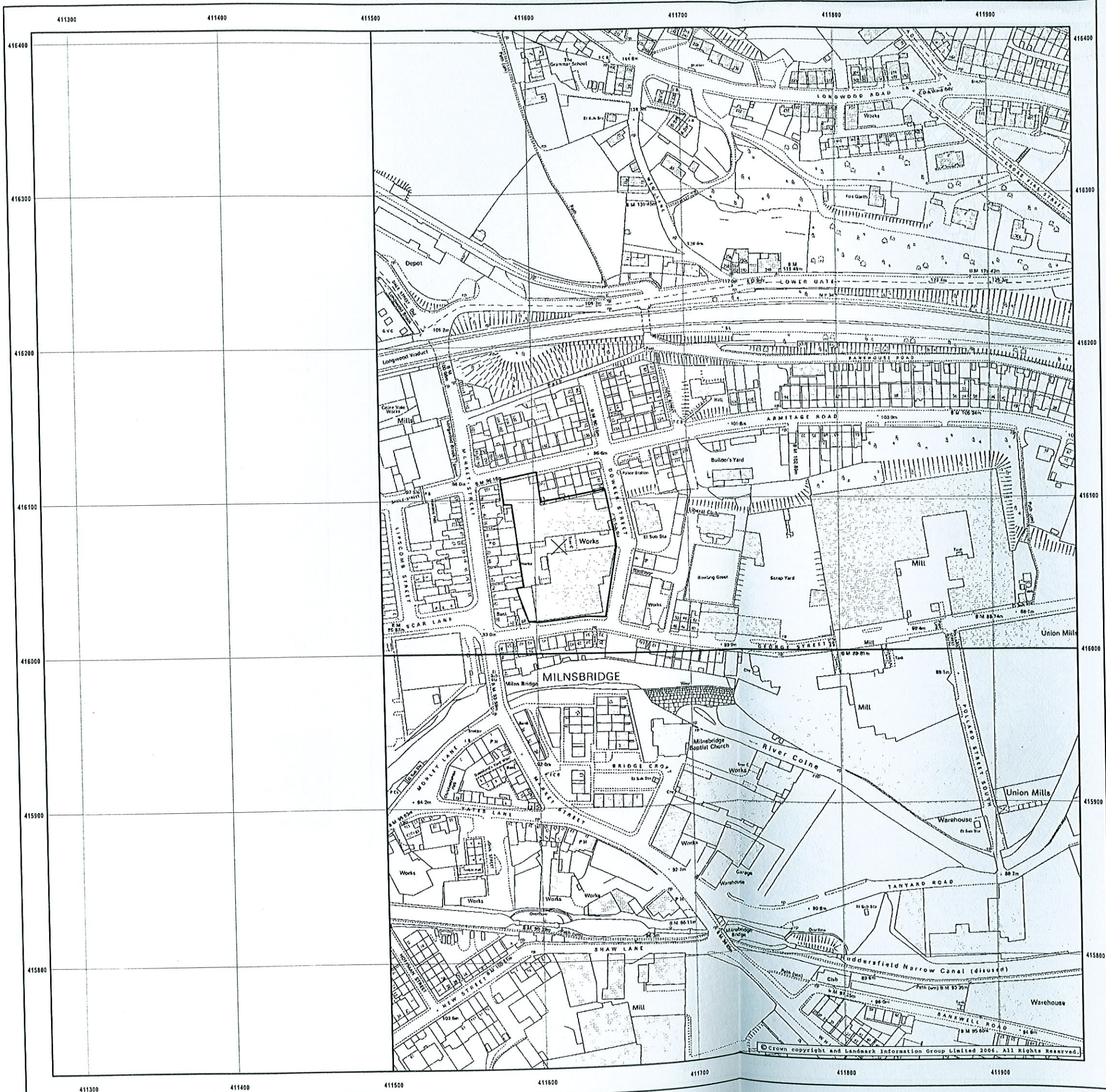
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**ORDNANCE SURVEY PLAN**  
 Published 1978  
 Source map scale - 1:10,000



Date(s) of Publication    21 of 23



**CLIENT DETAILS**      Envirocheck Order No. **EC16826351\_1\_1**  
(20-Jun-2006 10:23)  
 Customer Ref: Ms V Griffin, 47943ICVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midland CV1 2FZ

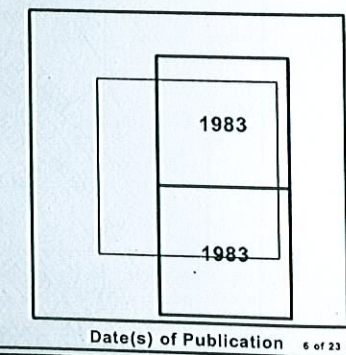
**SITE DETAILS**      Grid Reference    **411620**    **416070**  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

|  |                                      |                                |                                    |
|--|--------------------------------------|--------------------------------|------------------------------------|
|  |                                      |                                |                                    |
| Inactive Quarry, Chalk Pit or Clay Pit | Active Quarry, Chalk Pit or Clay Pit | Culvert                        |                                    |
|  |                                      |                                |                                    |
| Slope                                  | Slope                                |                                |                                    |
|  |                                      |                                |                                    |
| Pylon                                  | Electricity Transmission Line        | Direction of Water flow        | Coppice, Osier                     |
|  |                                      |                                |                                    |
| Marsh                                  | Saltings                             | Orchard Tree                   | Reeds                              |
|  |                                      |                                |                                    |
| Rough Grassland                        | Scrub                                | Heath                          | Bracken                            |
|  |                                      |                                |                                    |
| Coniferous Tree (Surveyed)             | Coniferous Tree (Not Surveyed)       | Non-coniferous Tree (Surveyed) | Non-coniferous Tree (Not Surveyed) |

**Ordnance Survey Plan** 2  
 The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1895 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given on the right is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

**ORDNANCE SURVEY PLAN**  
 Published 1983  
 Source map scale - 1:1,250





**CLIENT DETAILS** Envirocheck Order No. EC16826351\_1\_1  
(10-Jan-2008 10:30)

Customer Ref: Ms V Griffin, 47943ICVK  
 Faber Maunsell  
 3 Cophall House Station Square  
 Coventry  
 West Midland CV1 2FZ

**SITE DETAILS** Grid Reference 411620 416070

Milnsbridge  
 Market Street  
  
 Huddersfield  
 HD3 4HT

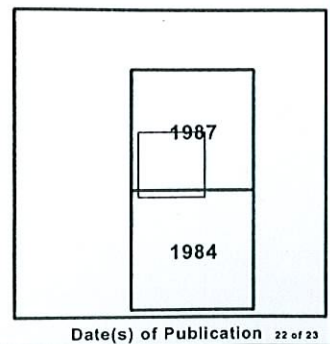
**Historical Map Legend**

|  |                                |  |                                 |  |                 |
|--|--------------------------------|--|---------------------------------|--|-----------------|
|  | Chalk Pit, Clay Pit, or Quarry |  | Non-coniferous Trees            |  | Bracken         |
|  | Gravel Pit                     |  | Coniferous Trees                |  | Heath           |
|  | Sand Pit                       |  | Scrub                           |  | Rough Grassland |
|  | Disused Pit or Quarry          |  | Lake, Loch or Pond              |  | Reeds           |
|  | Refuse or Slag Heap            |  | Pylon                           |  | Saltings        |
|  |                                |  | Pole                            |  | Marsh           |
|  |                                |  | Electricity Transmission Line   |  |                 |
|  |                                |  | Direction of Flow of Water      |  |                 |
|  |                                |  | Shingle                         |  |                 |
|  |                                |  | Sand                            |  |                 |
|  | Cutting                        |  | Embankment                      |  |                 |
|  | Standard Gauge Multiple Track  |  | Standard Gauge Single Track     |  |                 |
|  | Road Under                     |  | Road Over                       |  | Level Crossing  |
|  | Foot Bridge                    |  | Siding, Tramway or Mineral Line |  | Narrow Gauge    |

**Ordnance Survey Plan** 2

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1954 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given on the right therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overlaid with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**ORDNANCE SURVEY PLAN**  
 Published 1984 to 1987  
 Source map scale - 1:10,000



Date(s) of Publication 22 of 23



Produced by Landmark Information Group Limited. Tel: 0870 850 6670 Fax: 0870 850 6671



**CLIENT DETAILS**      Envirocheck Order No. **EC16826351\_1\_1**  
(18-Jan-2004 16:35)  
 Customer Ref: Ms V Griffin, 479431CVK  
 Faber Maunsell  
 3 Copthall House Station Square  
 Coventry  
 West Midlands CV1 2FZ

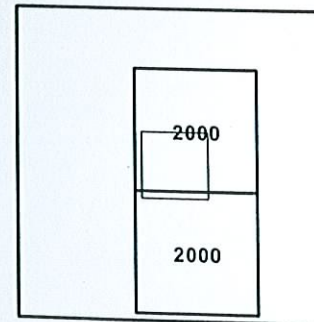
**SITE DETAILS**      Grid Reference    **411620    416070**  
 Milnsbridge  
 Market Street  
 Huddersfield  
 HD3 4HT

**Historical Map Legend**

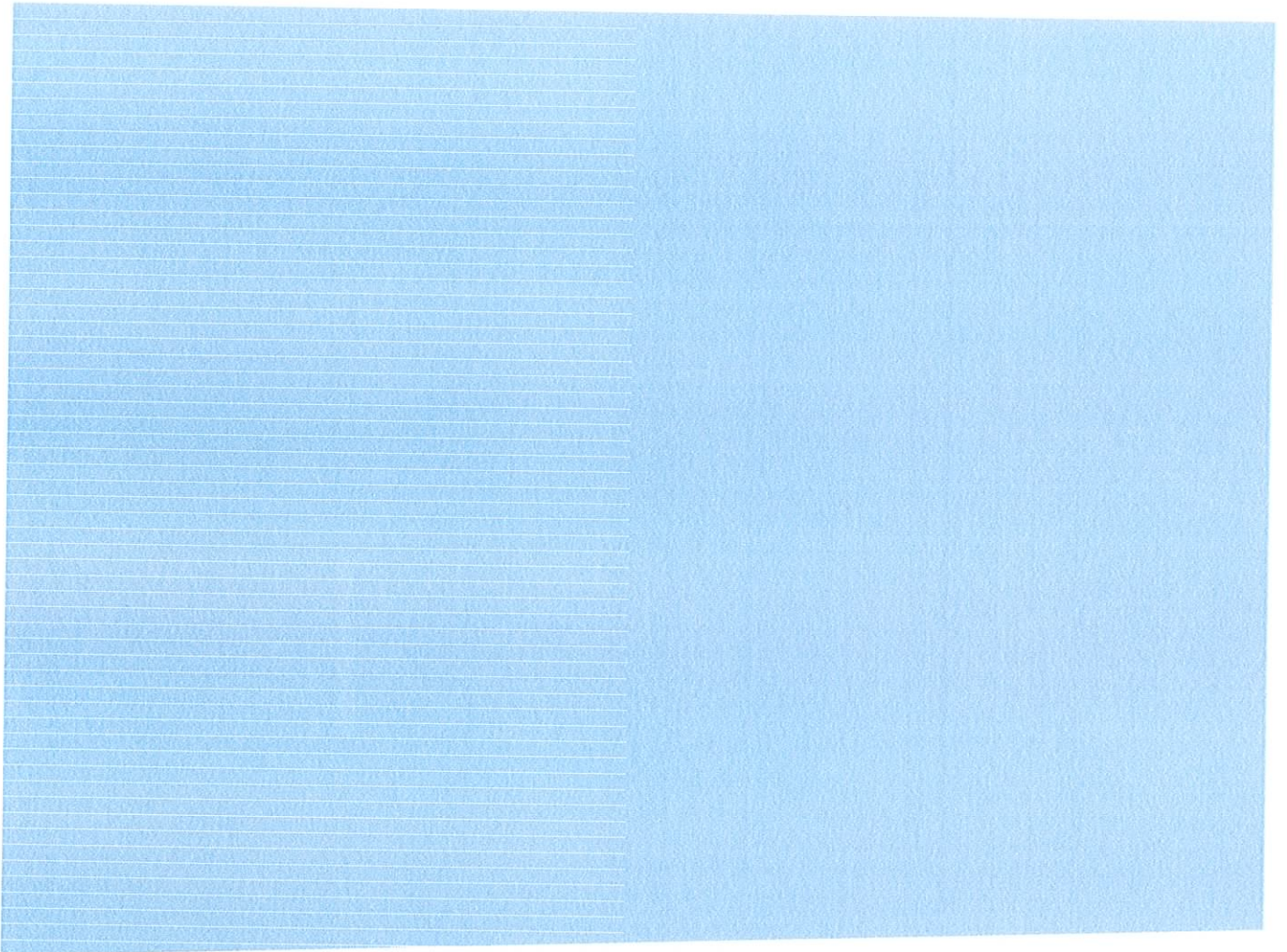
|  |                                    |  |  |
|--|------------------------------------|--|--|
|  | Non-coniferous Trees               |  | Pylon  |
|  | Coniferous Trees                   |  | Telephone Line (where shown)                             |
|  | Orchard                            |  | Electricity Transmission Line (with poles)               |
|  | Rough Grassland                    |  | Gravel Pit   |
|  | Heath                              |  | Shingle  |
|  | Scrub                              |  | Refuse Tip or Slag Heap                                  |
|  | Marsh, Salt Marsh or Reeds         |  | Sand   |
|  | County Boundary (England only)     |  | Sand Pit   |
|  | Civil Parish or Community Boundary |  | Slopes   |
|  | Constituency Boundary              |  | District, Unitary, Metropolitan, London Borough Boundary |

**10K Raster Mapping**      **1**  
 The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan<sup>®</sup> which replaced the old 1:10,000 maps originally published in 1970.  
 The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

**ORDNANCE SURVEY PLAN**  
 Published 2000  
 Source map scale - 1:10,000



# Appendix B



The Coal Authority,  
Mining Reports Office,  
200 LICHFIELD LANE,  
BERRY HILL,  
MANSFIELD,  
NOTTINGHAMSHIRE,  
NG18 4RG  
Telephone: 0845 762 6848  
DX 716176 MANSFIELD 5  
On-Line Service: www.coalminingreports.co.uk

# The COAL AUTHORITY

This matter is being dealt with by Darren Moody

FABER MAUNSELL LTD,  
COPTHALL HOUSE 3,  
STATION SQUARE,  
COVENTRY,  
WEST MIDLANDS,  
CV1 2FZ

Our Ref: **10037912-06**

Your Ref: CLS 479431CVK

Electronic Ref:

RRUID: 007.00010247940001

Date: 01 February 2006

Dear Sir,

## Coal Mining Report LAND OFF, DOWKER STREET, MILNSBRIDGE, HUDDERSFIELD

I refer to the enquiry dated 01st February 2006, received 01st February 2006, in connection with the above.

This report is based on and limited to the records in the possession of The Coal Authority at the time the search is answered.

### Past Underground Mining

According to the records in our possession, the property is not within the zone of likely physical influence on the surface from past underground coal workings.

### Present Underground Mining

The property is not within the zone of likely physical influence on the surface from any present underground coal workings.

### Future Underground Mining

The property is not within a geographical area for which a licence to extract coal by underground methods is awaiting determination by the Coal Authority.

The property is not within a geographical area for which a licence to extract coal by underground methods has been granted.

The property is not within the zone of likely physical influence on the surface from any future workings.

We have no record of any notice of the risk of the land being affected by subsidence being given under S.46 of the Coal Mining Subsidence Act 1991.

### Shafts and Adits

We have no knowledge of any mine entries within, or within 20 metres of, the boundary of the property.

**Surface Geology**

Records in our possession do not disclose any fault or other line of weakness at the surface as having affected the stability of the property.

**Past Opencast Mining**

The property is not located within the geographical boundary of an opencast site from which coal has been extracted by opencast methods.

**Present Opencast Mining**

The property does not lie within 200 metres of the geographical boundary of an opencast site within which coal is being extracted by opencast methods.

**Future Opencast Mining**

The property is not within 800 metres of the geographical boundary of an opencast site for which a licence to extract coal by opencast methods is awaiting determination.

The property is not within 800 metres of the geographical site boundary of an opencast site for which a licence to extract coal by opencast methods has been granted.

**Subsidence**

The records in our possession do not disclose any damage notice or claim having been given, made or pursued in respect of the property since 1 January 1984.

The records in our possession do not disclose any current "Stop Notice" affecting the property.

The records in our possession do not show any request having been made to execute preventative works under S.33 of the Coal Mining Subsidence Act 1991.

**Withdrawal of Support**

The property does not lie within a geographical area in respect of which a notice of entitlement to withdraw support has been published.

The property does not lie within a geographical area in respect of which a notice has been given under S.41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

**Working Facilities Orders**

The property is not within a geographical area that is the subject of an Order made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

**Payments to Owners of Former Copyhold Land**

The property is not within an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

**Additional Remarks**

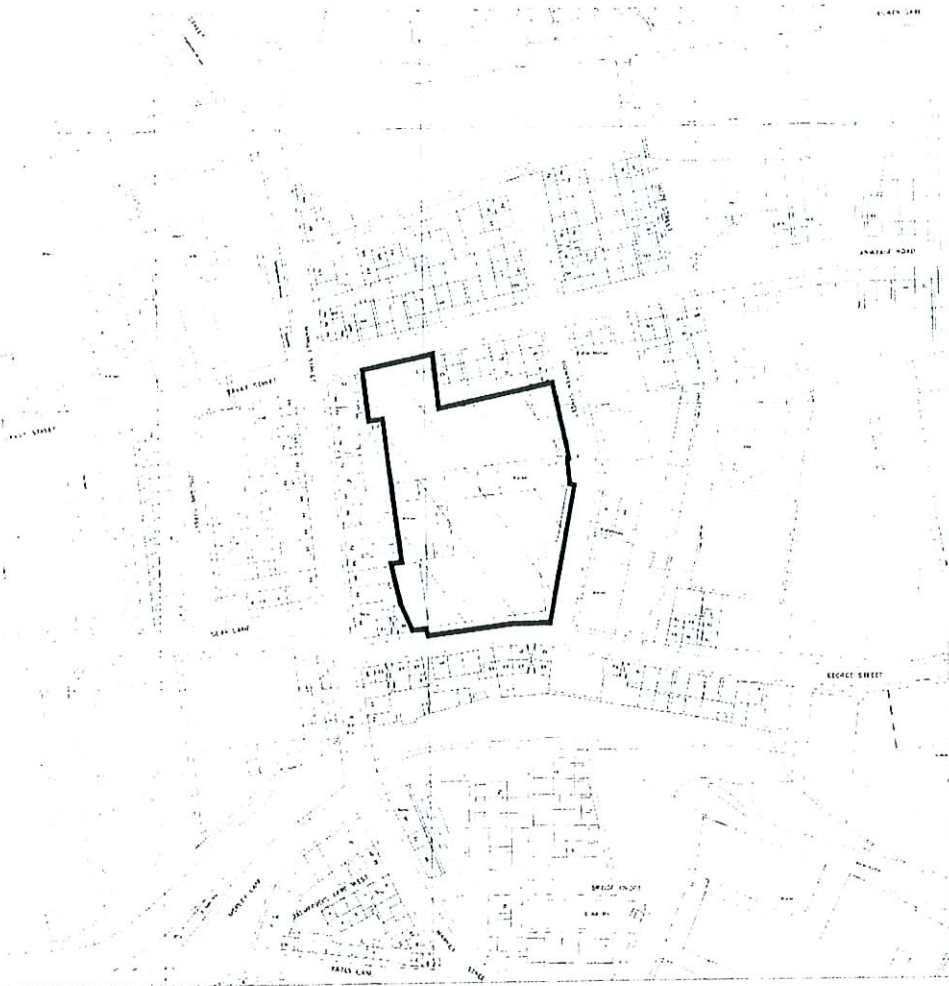
These replies are prepared in accordance with the 2003 editions of the Coal Authority's Terms and Conditions, User Guide and the Law Society's Guidance Notes.

Copyright in coal mining reports and certificates belongs to the Coal Authority. Information used to compile this report is protected by the Coal Authority's database right. All rights are reserved and unauthorised use is prohibited. Copyright and other intellectual property is not transferred to external parties by possession of a mining report or certificate, however those for whom the report is supplied have the right to use it.

Yours faithfully

**Stephen Pennell**

**Director of Mining Information and Services**



Crown Copyright.

PLAN NOT TO SCALE

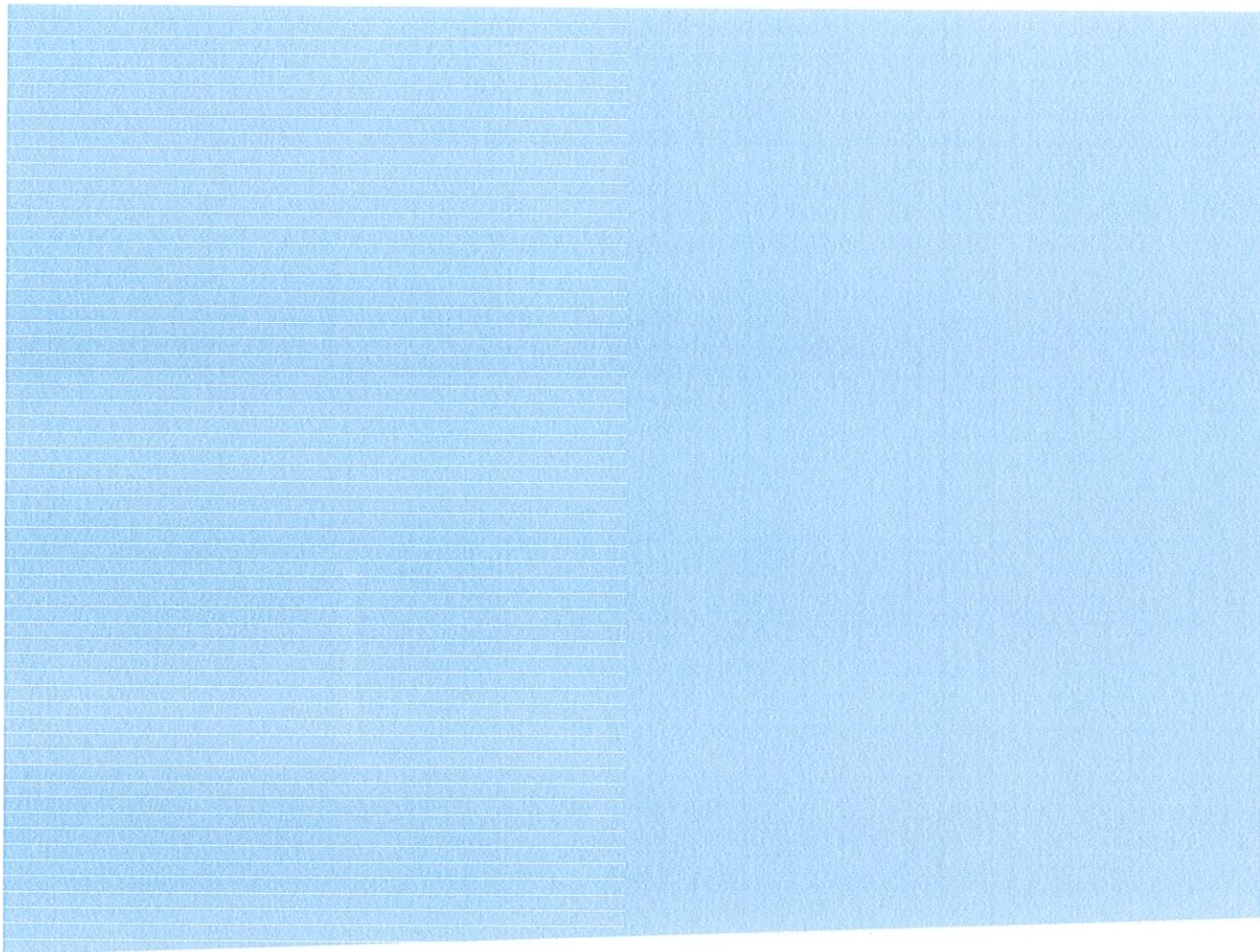
This map is reproduced from the Ordnance Survey material by The Coal Authority [or division hereof] with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: AL51060A001.

This is a plan of the boundaries of the property in respect of which this report has been prepared. It is the responsibility of the user to ensure that the boundaries shown correspond with those of the property.

APPROXIMATE POSITION OF ENQUIRY BOUNDARY SHOWN



# Appendix C

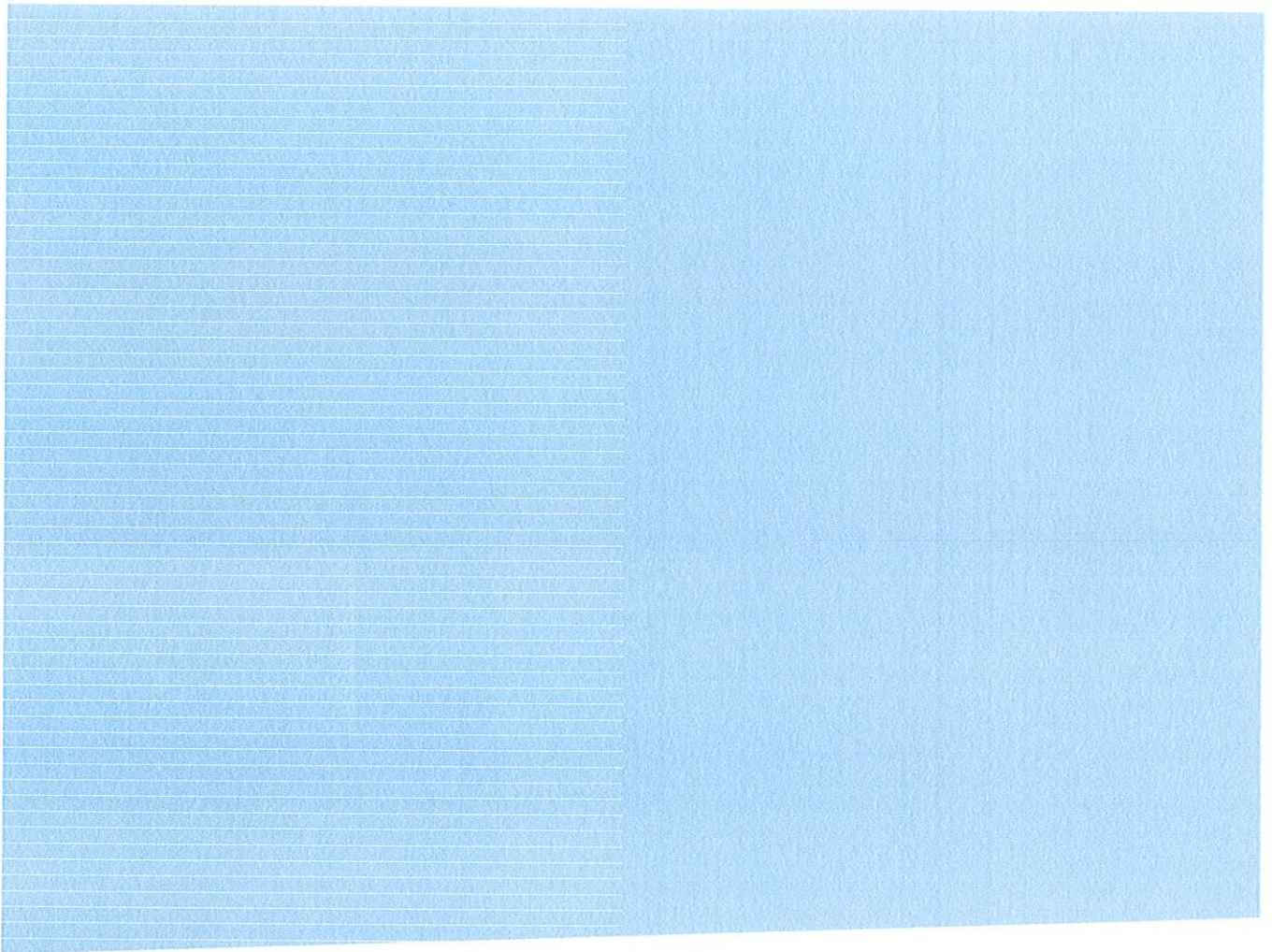


| Data Type   | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|---|---------|-----------|-------------|--------------------------------|
| <b>Agency &amp; Hydrological</b>                              |         |           |             |                                |
| Local Authority Pollution Prevention and Controls             |         | 1         | 3           | 3                              |
| Local Authority Pollution Prevention and Control Enforcements |         |           |             |                                |
| Contaminated Land Register Entries and Notices                |         |           |             |                                |
| Discharge Consents  |         | 19        | 11          | 9                              |
| Enforcement and Prohibition Notices                           |         |           |             |                                |
| Integrated Pollution Controls                                 |         |           | 6           | 1                              |
| Integrated Pollution Prevention And Control                   |         |           |             |                                |
| Local Authority Integrated Pollution Prevention And Control   |         |           |             |                                |
| Nearest Surface Water Feature                                 |         | Yes       |             |                                |
| Pollution Incidents to Controlled Waters                      |         | 23        | 15          | 25                             |
| Substantiated Pollution Incident Register                     |         | 1         |             | 1                              |
| Prosecutions Relating to Authorised Processes                 |         |           |             |                                |
| Prosecutions Relating to Controlled Waters                    |         |           |             |                                |
| Water Industry Act Referrals                                  |         |           |             |                                |
| Registered Radioactive Substances                             |         |           |             |                                |
| River Quality   |         | 4         |             |                                |
| River Quality Biology Sampling Points                         |         | 1         | 1           | 2                              |
| River Quality Chemistry Sampling Points                       |         | 2         |             |                                |
| Water Abstractions  |         | 4         | 4           | 10 (*24)                       |
| Groundwater Vulnerability                                     | Yes     |           |             |                                |
| Source Protection Zones                                       |         |           |             |                                |
| Extreme Flooding from Rivers or Sea without Defences          | Yes     |           |             |                                |
| Flooding from Rivers or Sea without Defences                  |         | Yes       |             |                                |
| Areas Benefiting from Flood Defences                          |         |           |             |                                |
| Flood Water Storage Areas                                     |         |           |             |                                |
| Flood Defences  |         | Yes       |             |                                |
| River Flood Data (Scotland)                                   |         |           |             |                                |

| Data Type   | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|---|---------|-----------|-------------|--------------------------------|
| <b>Waste</b>  |         |           |             |                                |
| BGS Recorded Landfill Sites   |         |           |             | 1                              |
| Integrated Pollution Control Registered Waste Sites                 |         |           |             |                                |
| Licensed Waste Management Facilities (Landfill Boundaries)          |         |           |             |                                |
| Licensed Waste Management Facilities (Locations)                    |         | 3         | 1           | 2                              |
| Local Authority Recorded Landfill Sites                             |         |           |             |                                |
| Registered Landfill Sites   |         |           |             | 3                              |
| Registered Waste Transfer Sites                                     |         |           | 1           |                                |
| Registered Waste Treatment or Disposal Sites                        |         | 4         |             | 1                              |
| <b>Hazardous Substances</b>   |         |           |             |                                |
| Control of Major Accident Hazards Sites (COMAH)                     |         |           |             |                                |
| Explosive Sites   |         |           |             |                                |
| Notification of Installations Handling Hazardous Substances (NIHHS) |         |           |             |                                |
| Planning Hazardous Substance Consents                               |         |           |             |                                |
| Planning Hazardous Substance Enforcements                           |         |           |             |                                |
| <b>Geological</b>   |         |           |             |                                |
| BGS Boreholes   |         | 6         | 22          | 14                             |
| BGS Recorded Mineral Sites  |         |           |             | 8                              |
| BGS 1:625,000 Solid Geology   | Yes     |           |             |                                |
| Brine Compensation Areas  |         |           |             |                                |
| Coal Mining Affected Areas  |         |           |             |                                |
| Shallow Mining Hazards  |         |           |             |                                |
| Potential for Collapsible Ground Stability Hazards                  |         |           |             |                                |
| Potential for Compressible Ground Stability Hazards                 | Yes     | Yes       |             |                                |
| Potential for Ground Dissolution Stability Hazards                  |         |           |             |                                |
| Potential for Landslide Ground Stability Hazards                    | Yes     | Yes       |             |                                |
| Potential for Running Sand Ground Stability Hazards                 | Yes     | Yes       |             |                                |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards   | Yes     | Yes       |             |                                |
| Mining Instability  |         |           |             |                                |
| Natural and Mining Cavities   |         |           |             |                                |
| Radon Affected Areas  | Yes     |           |             |                                |
| Radon Protection Measures   | Yes     |           |             |                                |
| <b>Industrial Land Use</b>  |         |           |             |                                |
| Contemporary Trade Directory Entries                                | 1       | 41        | 56          | 45                             |
| Fuel Station Entries  |         | 2         | 1           | 1                              |

| Data Type                            | On Site | 0 to 250m | 251 to 500m | 501 to 1000m<br>(*up to 2000m) |
|--------------------------------------|---------|-----------|-------------|--------------------------------|
| <b>Sensitive Land Uses</b>           |         |           |             |                                |
| Areas of Adopted Green Belt          |         |           | 1           |                                |
| Areas of Unadopted Green Belt        |         |           |             |                                |
| Areas of Outstanding Natural Beauty  |         |           |             |                                |
| Environmentally Sensitive Areas      |         |           |             |                                |
| Forest Parks                         |         |           |             |                                |
| Local Nature Reserves                |         |           |             |                                |
| Marine Nature Reserves               |         |           |             |                                |
| National Nature Reserves             |         |           |             |                                |
| National Parks                       |         |           |             |                                |
| National Scenic Areas                |         |           |             |                                |
| Nitrate Sensitive Areas              |         |           |             |                                |
| Nitrate Vulnerable Zones             | 1       |           |             |                                |
| Ramsar Sites                         |         |           |             |                                |
| Sites of Special Scientific Interest |         |           |             |                                |
| Special Areas of Conservation        |         |           |             |                                |
| Special Protection Areas             |         |           |             |                                |

# Appendix D





# West Yorkshire Fire & Rescue Service

www.westyorksfire.gov.uk

DIRECTORATE OF FIRE SAFETY  
& COMMUNITY RELATIONS

Petroleum Inspector Paul Dawson  
Halifax Fire Safety Office  
Skircoat Moor Road  
King Cross  
Halifax HX1 3JF  
Tel: 01422 386830 Fax: 01422 386849  
Email:

Cassandra Smith  
Faber Maunsell  
3 Copthall House  
Station Square  
Coventry  
CV1 2FZ

FSG5077 (Rev: 12/05)

File No 72:109:B  
Date 28 June 2006

Paul Dawson, on extension is dealing with this matter

Dear Madam

## **FIRE SAFETY – ENVIRONMENTAL IMPACT ASSESSMENT - REQUEST FOR INFORMATION - PETROL STORAGE - DOWKER STREET, HUDDERSFIELD, HD3 4JX**

I refer to your E-mail dated 5 June 2006 requesting information as to any previous storage of petrol at the above location.

**I have been unable to find any reference to the storage of fuels in underground tanks at the above location.**

Please note an invoice, which includes VAT, covering the cost of my time spent retrieving the information as you requested, will follow in due course.

If you require any further information, please do not hesitate to contact me.

Yours faithfully

P Dawson  
Fire Safety Inspector

|             |      |
|-------------|------|
| Job No      |      |
| Faber       | Ware |
| 30 JUN 2006 |      |
| CP          |      |



INVESTOR IN PEOPLE



www.westyorksfire.gov.uk

