

## **ENVIRONMENT**

Wulff Asset Management Ltd  
Ilkeston Road  
Ilkeston  
Coal Mining Risk Assessment

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Ilkeston Road  
Ilkeston  
Coal Mining Risk Assessment

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## EXECUTIVE SUMMARY

EXECUTIVE SUMMARY	
Site Address	Ilkeston Road, Ilkeston, Derbyshire, DE7 4QX.
Proposed Development	The proposed development is anticipated to comprise a residential scheme of c. 200 houses.
Current Site Use	The site currently comprises undeveloped land with mature boundary vegetation, with overhead cables present in the south-west of site.
Site History	<p>Historical mapping indicates that the site has remained a largely undeveloped plot of land with a small building in the west, marsh ground in the north and ponds in the west and east of the site. The building has subsequently been demolished and the ponds have been backfilled.</p> <p>The surrounding area is indicated to have a history of coal and mineral mining, with old mining pits mapped within approximately 400m of the site, the Kirk Hallam Colliery located approximately 800m north of the site and the Dale Abbey Colliery located approximately 1.2km north-west of the site.</p>
Published Ground Conditions	<p>BGS records indicate that the site is underlain by Alluvium superficial deposits in the north and west of the site, with bedrock of the Pennine Lower Coal Measures Formation and outcrops of Wingfield Flags (sandstone) formation in the south of the site. The site is indicated to lie in an area of 'old ironstone workings'.</p> <p>Geological mapping indicates that there are no geological faults on site. There are no outcropping coal seams indicated on site, but the Kilburn Seam is indicated to outcrop approximately 70m north of the site, whilst the Norton Seam outcrops approximately 310m south of the site.</p> <p>The Norton Seam is indicated to be the shallowest coal seam present beneath the site at approximately 97m below ground level (bgl).</p>
Identification and Assessment of Specific Coal Mining Risks	<p>A review of the Coal Authority report indicated the following risks:</p> <ul style="list-style-type: none"> <li>• There are two records of historic shallow mining on site, the working of the Kilburn Seam (coal) and the working of the Sow/Honey Croft Seam (ironstone);</li> <li>• There is one known disused mine shaft in the north-east of the site, with an additional two shafts noted approximately 30 to 40m north of the site; and</li> <li>• Due to the historic shallow workings, it is considered possible that there may have been unrecorded opencast mining on site. If the site was not subject to unrecorded opencast mining, it is considered that there is a risk of shallow bell pit mine entries on site.</li> </ul>
Recommendations	<p>It is recommended that an intrusive ground investigation comprising the advancement of boreholes is undertaken to determine the extent and condition of the shallow coal workings beneath the site.</p> <p>Furthermore, trial trenching or other intrusive/geophysical surveys should be undertaken to locate the abandoned mine entry and inform whether the site has been subject to historical opencast extraction.</p>
<p>This summary should be read in conjunction with BWB's full report (ref. IRI-BWB-ZZ-XX-RP-YE-0001_CMRA) and reflects an assessment of the Site based on information received by BWB at the time of production.</p>	

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Appendix 2: Consultant Coal Authority Mining Report  
Appendix 3: Coal Authority Mine Abandonment Plans

# 1. INTRODUCTION

## Instruction

- 1.1 BWB Consulting (BWB) was instructed by Wulff Asset Management Ltd (the Client) to carry out a Coal Mining Risk Assessment.
- 1.2 The proposed development is anticipated to comprise a residential scheme of c. 200 houses. A proposed site plan is presented as **Appendix 1**.

## Objectives

- 1.3 The objectives of this report are to assess the risks and hazards relating to potential coal mining activities at the site that may impact on the proposed development. The report will also seek to provide recommendations for mitigation or further investigatory works, if required. This Coal Mining Risk Assessment will follow the guidance outlined in The Coal Authority Model Report template – V4 2017.

## Scope of Works

- 1.4 The scope of work included review of the following information:
  - British Geological Survey (2015) 1:50,000 Scale, Sheet 125, 'Derby', Solid and Drift.
  - British Geological Survey (1998) 1:10,000, Sandiacre, SK43NE.
  - British Geological Survey online mapping.
  - Site Specific Coal Authority Coal Mining Report (**Appendix 2**).
  - Historical Ordnance Survey Mapping.
  - Coal Authority Mining Risk Data.
  - Coal Authority Mine Abandonment Plans (**Appendix 3**).
  - Provide a summary of key ground risks that require mitigation or further ground investigation in order to control the identified risks.
  - Produce a Coal Mining Risk Assessment (this report) providing ground-related constraints to the proposed development.

## 2. THE SITE

### Site Location

- 2.1 The site is located at Ilkeston Road, in Ilkeston located at National Grid Reference 446410, 339335. The approximate location of the site is shown below in **Figure 2:1**.

**Figure 2:1: Site Location Plan**



### Site Description

- 2.2 The site is an irregularly shaped plot of undeveloped agricultural land measuring approximately 10.35 hectares. The site currently comprises undeveloped land with mature boundary vegetation. Overhead cables are present in the south-west of site.
- 2.3 A fishing pond known as Rough Open Hole is located within a small parcel of woodland to the north-west of site. The disused Nutbrook Canal is located to the north of site, Ilkeston Road is located to the east and Sowbrook Lane to the south-west. A substation is located to the south-west of site, with industrial properties to the south-east.



## Aerial Photographs

- 2.4 An aerial photograph representative of the site and surroundings dated 23/04/2021 is presented as **Figure 2:2**.

**Figure 2:2: Aerial Photograph**



## Site and Surrounding Land - History

### On-Site

- 2.5 A review of freely available online historical mapping between 1880 - 2021 indicated that the site has remained a largely undeveloped plot of land with a small building in the west of the site around the 1880s. The northern portion of the site is indicated to be marsh ground on the 1880 plan and there are ponds in the west and east of site. By 1899, the small building previously on site was demolished. Satellite imagery from 1999 indicated that the ponds have subsequently been backfilled and the land is used for agricultural purposes.

## Surrounding Area

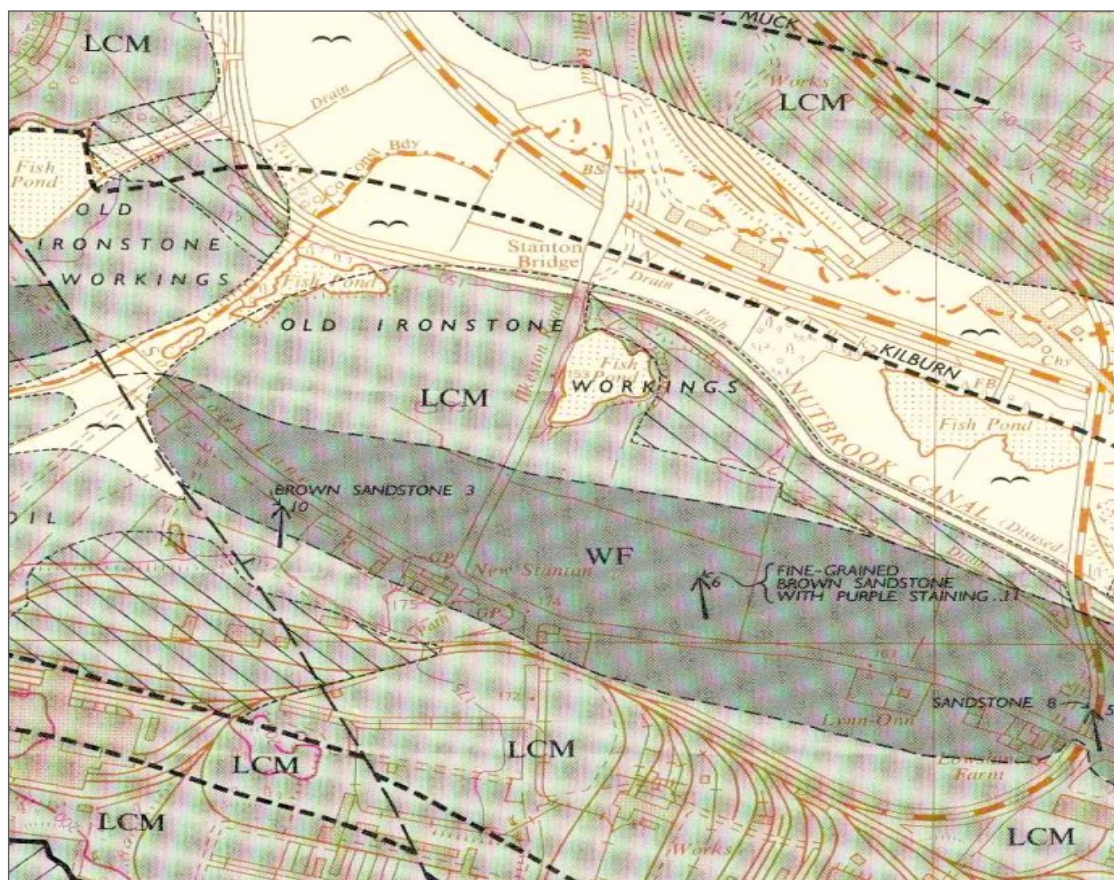
- 2.6 From the earliest available plans, the land surrounding the site was indicated to have a history of coal and mineral mining. Kirk Hallam Colliery was recorded approximately 800m north of the site and the Dale Abbey Colliery was recorded approximately 1.2km west of the site. Railway infrastructure was recorded 100m north and south of the site.
- 2.7 Coal, iron and sand pits were recorded from approximately 400m from the site. Iron works were recorded approximately 900m south-east of the site which in 1938 had expanded and was recorded approximately 400m south-west and 600m south-east of the site.

### 3. PUBLISHED GROUND CONDITIONS

#### Geological Mapping

- 3.1 A review of the 1:10,000 geological map and online information published by the BGS indicates that the site is underlain by Alluvium superficial deposits in the north and west of the site, with bedrock of the Pennine Lower Coal Measures Formation (PLCMF) and outcrops of Wingfield Flags (sandstone) formation in the south of the site.
- 3.2 The BGS Lexicon database described the PLCMF as interbedded grey mudstone, siltstone and pale grey sandstone, commonly with mudstones containing marine fossils in the lower part, and more numerous and thicker coal seams in the upper part.
- 3.3 There are no available BGS borehole records on or within 500m of the site.
- 3.4 A review of the Sandiacre (SK43NE) 1:10,000 geological plans (**Figure 3:1**) indicated that there are no geological faults present on site, but there is a fault approximately 50m west of the site. There are no outcropping coal seams indicated on site, but the Kilburn Seam outcrops approximately 70m north and the Morley Muck Seam outcrops approximately 400m north of the site, whilst the Norton Seam outcrops 310m south of the site.

**Figure 3:1: Geological mapping**



- 3.5 The BGS 1:10,000 plan indicates that the site lies in an area of 'old ironstone workings'. Local seam dip angles are indicated to be between 6 and 10 degrees.
- 3.6 Based on the BG1:10,000 plan, the Kilburn seam is not indicated to be present under the site, with the Norton Seam being the shallowest seam beneath the site. A list of the seams indicated below the site surface and an indication of their potential thickness is indicated in **Table 3:1** below.

**Table 3:1 Seams Indicated Below Site**

Seam Name	Appropriate Depth below ground (m) level at Stanton Sinking	Approximate Depth below ground level (m) at Northern Site Boundary	Indicated seam thickness (m)
Norton	107	97	0.69
Forty Yards	118	108	0.45
Alton	146	136	0.84

Seam thicknesses and depths taken from mine shaft labelled as 'Stanton Sinking' on BGS map located 660m east of site. Depths adjusted for northern site boundary based on estimated seam dip of 8 degrees.

## 4. IDENTIFICATION AND ASSESSMENT OF SPECIFIC MINING RISKS

### Underground Mining

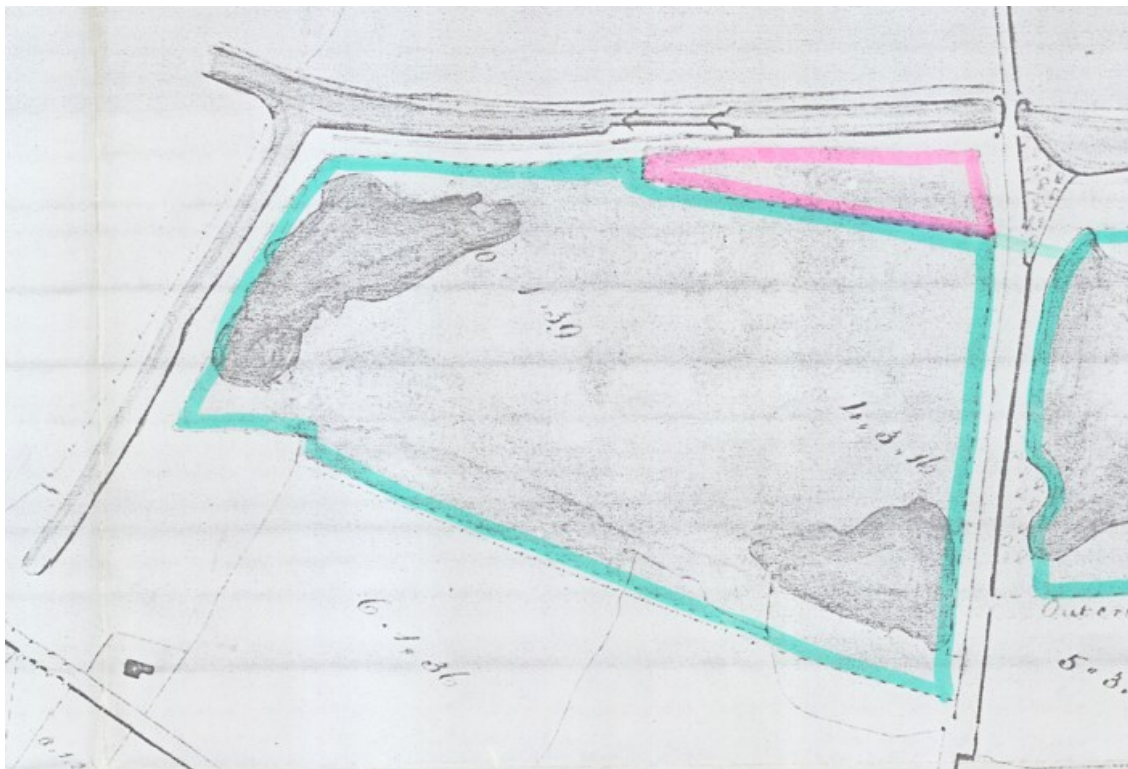
- 4.1 A review of the Coal Authority Report (**Appendix 2**) indicates that there are working beneath the site in two seams (**Table 4:1**).

**Table 4:1: Potentially Worked Seams beneath the Site**

Seam Name	Approximate Depth (m bgl)	Indicated Seam Thickness (m)		Worked Seam	Colliery Worked from	Date Abandoned
		Min	Max			
Sow/Honey Croft (ironstone)	6	1		Yes	Stanton	1900
Kilburn (coal)	6	1.4		Yes	Stanton/Springwell	1855

- 4.2 The relevant mine abandonment plans received from the Coal Authority are presented as **Appendix 3**. The plans indicate that there was 'Lady Wood Coal Workings' in the north-east of the site (pink on **Figure 4:1**) and 'Honey Croft Rake of Ironstone Workings' across the north and central areas of the site (turquoise on **Figure 4:1**).

**Figure 4:1: Mine Abandonment Plans**



- 4.3 **Figure 4:1** demonstrates that the Kilburn Seam may have actually outcropped in the north of the site.

- 4.4 If shallow workings are present at 6m below ground level, they would represent a significant risk to the proposed development. However, given the shallow depth to the workings, and considering that the ponds may well have been former areas of quarrying, it is considered likely that the ironstone and/or coal could have been extracted by unrecorded opencast mining operations.

### **Mine Entries (Shafts and Adits)**

- 4.5 The Coal Authority report indicates that there is one known disused mine shaft in the north-east of the site, with an additional two shafts noted approximately 30m and 40m north of the site. The pits are shown on the ironstone workings plan, and are adjacent to the former pond areas which implies that these were taken down to the ironstone workings.
- 4.6 There is no information regarding the condition/treatment of the mine entries located on or within close proximity of the site.
- 4.7 Due to the historic shallow workings, if the site has not been subjected to unrecorded opencast mining, there is a potential risk of unrecorded shallow bell pit mine entries on the site.

### **Coal Mining Geology**

- 4.8 The Coal Authority is not aware of damage arising due to geological faults or lines of weakness that may have been affected by coal mining.

### **Mine Gas Emissions**

- 4.9 The Coal Authority has no record of gas emissions within 500m of the site due to mining activity that required remedial action by the Coal Authority.

### **Coal Mining Subsidence**

- 4.10 The Coal Authority reports that they have not received a damage notice from subsidence or claim for the property since 31 October 1994.
- 4.11 There is no current Stop Notice delaying the start of remedial works or repairs to the property.
- 4.12 The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

### **Opencast Mining**

- 4.13 The Coal Authority reports that the site is not indicated to be within 500m of opencast workings. However, it is considered possible that unrecorded opencast workings may have occurred at the site, and the former ponds at the site and adjacent to the site represent former pits.

### **Withdrawal of Support**

- 4.14 The property is not in an area for which a notice of entitlement to withdraw support has been published; furthermore, the site is not within an area revoking the entitlement to withdraw support under the Coal Industry Act 1994.

### **Coal Seams with a History of Spontaneous Combustion.**

- 4.15 The Coal Authority website indicates that the coal seam present beneath the site is not liable to spontaneous combustion.

## 5. CONCLUSION AND RECOMMENDATIONS

### Conclusions

- 5.1 Based on the published records held by the Coal Authority, BWB considers the risks associated with historic mining and ground stability at the site to be **High**.
- 5.2 Two seams have been identified beneath the site, the Kilburn Seam (coal) and the Sow/Honey Croft Seam (ironstone). Both seams have been indicated to underly the site at depths of approximately 6m bgl.
- 5.3 The Coal Authority has indicated that there have been shallow coal workings in the north-east of the site and shallow ironstone working in the north and north-east. Additionally, there is one known disused mine shaft in the north-east of the site, and two shafts noted approximately 30m and 40m north of the site.
- 5.4 Given the shallow depth to the coal and ironstone seams, it is considered that there is a possibility that they have been extracted via unrecorded opencast mining techniques. It is possible that the on site and off site ponds are former extraction pits. If the site has not been subject to unrecorded opencast mining, it is considered that there is a risk of shallow bell pit mine entries in the northern and central areas of the site.

### Recommendations

- 5.5 It is recommended that an intrusive ground investigation comprising the advancement of boreholes is undertaken to determine the extent and condition of the shallow coal workings beneath the site.
- 5.6 Furthermore, trial trenching or other intrusive/geophysical surveys should be undertaken to locate the abandoned mine entry and inform whether the site has been subject to historical opencast extraction.

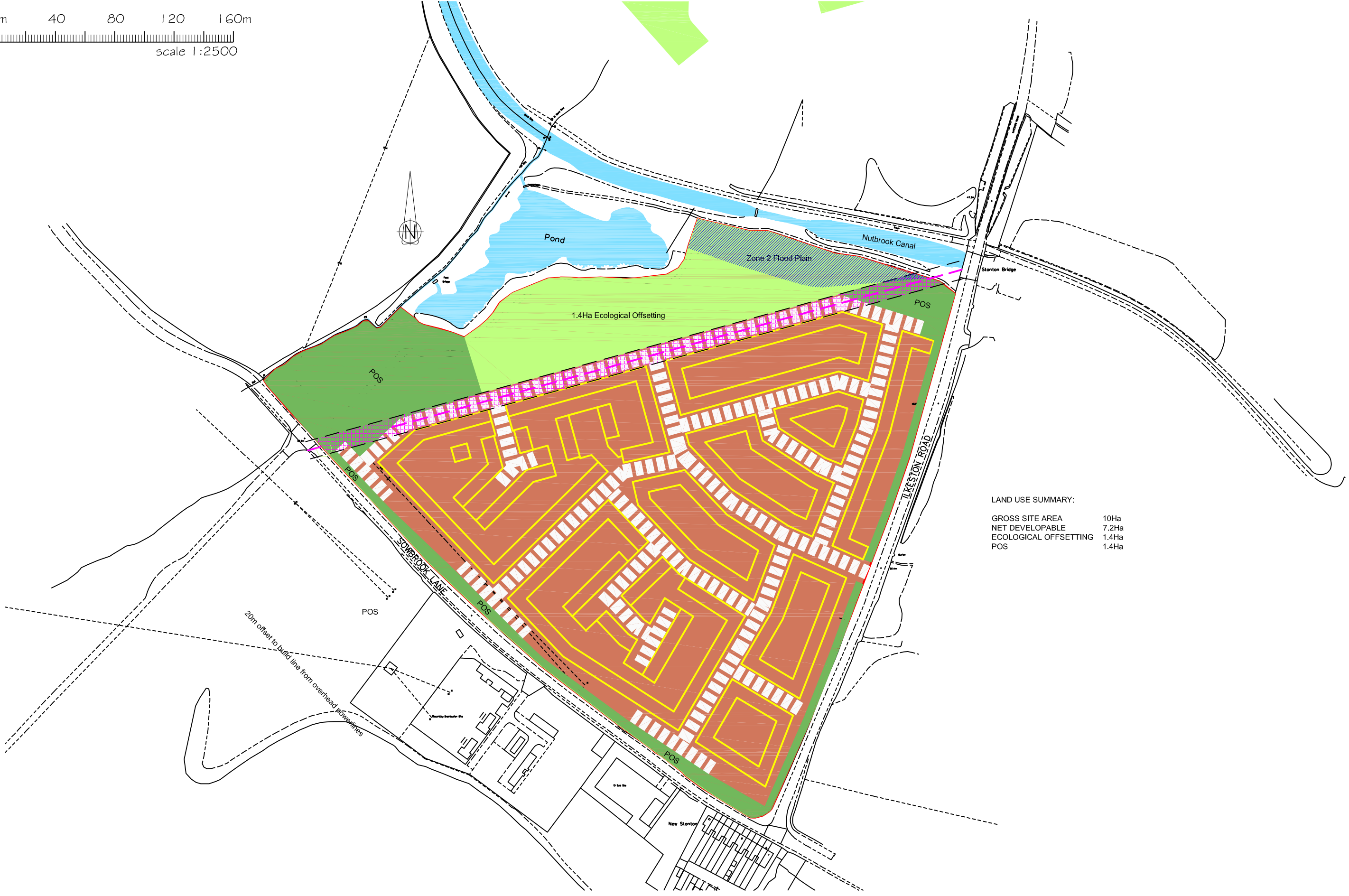


## ***APPENDICES***

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## **Appendix 1: Proposed Development Plan**

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LAND USE SUMMARY:

GROSS SITE AREA	10Ha
NET DEVELOPABLE	7.2Ha
ECOLOGICAL OFFSETTING	1.4Ha
POS	1.4Ha

Constraints/Land Use Plan 1:2500 @ A3

Land at Ilkeston Road/Sowbrook Lane, Ilkeston

**Appendix 2: Consultant Coal Authority Mining Report**

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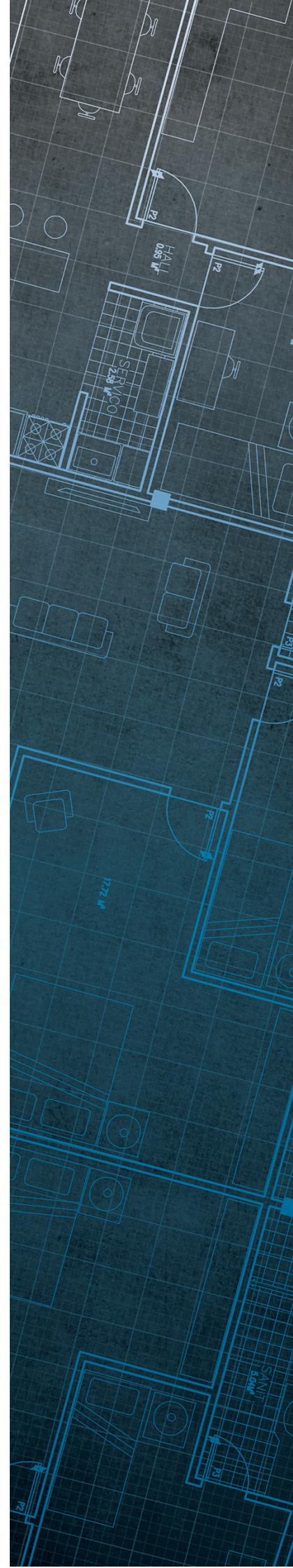


The Coal  
Authority

# Consultants Coal Mining Report

Ilkeston Road, Ilkeston, De7 4qx  
Derbyshire

Date of enquiry:	5 November 2021
Date enquiry received:	5 November 2021
Issue date:	5 November 2021
Our reference:	51002681974001
Your reference:	HMD-214-8316897



# Consultants Coal Mining Report

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

## Client name

GROUNDSURE LIMITED

## Enquiry address

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Derbyshire


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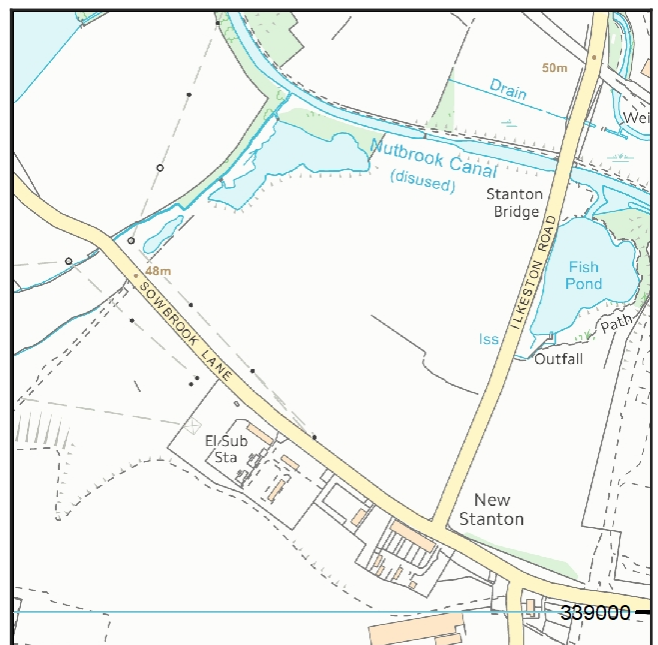
[www.groundstability.com](http://www.groundstability.com)

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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# Section 1 – Mining activity and geology

## Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
STANTON	SOW / HONEYCROFT I/S	Ironstone	7Z71	6	Beneath Property	6.3	North	100	1900
STANTON / SPRINGWELL	KILBURN	Coal	5RBS	6	Beneath Property	2.9	North	140	1855

## Probable unrecorded shallow workings

None.

## Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

## Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	446339-004	446379 339487		Ironstone	
Shaft	446339-005	446396 339493		Ironstone	
Shaft	446339-006	446533 339371		Ironstone	

## Abandoned mine plan catalogue numbers

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

EM522	16910	OM0
PO0	EM728	

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

## Outcrops

No outcrops recorded.

## Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

**Opencast mines**

None recorded within 500 metres of the enquiry boundary.

**Coal Authority managed tips**

None recorded within 500 metres of the enquiry boundary.



## Section 2 – Investigative or remedial activity

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

### Site investigations

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

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

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

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

### Mine gas

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

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

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

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

### Payments to owners of former copyhold land

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

## Section 4 – Further information

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

### **Development advice**

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

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

## Section 5 – Data definitions

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

### Past underground coal mining

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

### Probable unrecorded shallow workings

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

### Spine roadways at shallow depth

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

### Mine entries

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

### Abandoned mine plan catalogue numbers

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

### Outcrops

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

### Geological faults, fissures and breaklines

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

### **Opencast mines**

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

### **Coal Authority managed tips**

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

### **Site investigations**

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

### **Remediated sites**

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

### **Coal mining subsidence**

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

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

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

### **Mine gas**

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

### **Mine water treatment schemes**

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

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

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

### **Future underground mining**

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

### **Coal mining licensing**

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

### **Court orders**

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

### **Section 46 notices**

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

### **Withdrawal of support notices**



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

### **Payment to owners of former copyhold land**

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

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

**Key**

- Approximate position of the enquiry boundary shown 
- Disused mine shaft 

**How to contact us**  
0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)  
[www.groundstability.com](http://www.groundstability.com)



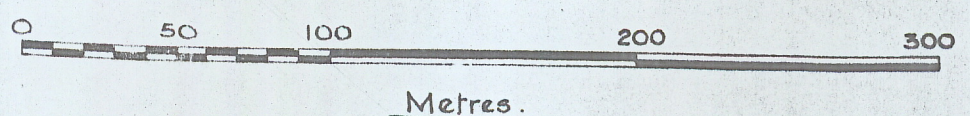
### **Appendix 3: Coal Authority Mine Abandonment Plans**

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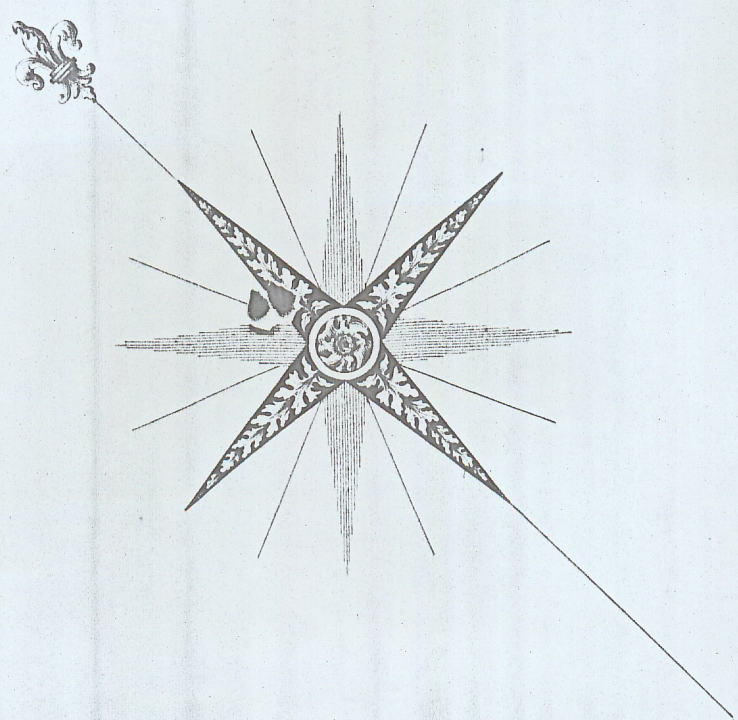


2 CHAINS TO 1 INCH

1:1584



MINERAL PLAN  
SHOWING WORKINGS IN THE  
MINES OF COAL & IRONSTONE  
IN PART OF THE  
MANOR OF STANTON BY DALE



KIRK HALLAM PARISH

P A  
R I V E R

HONEYCROFT RAKE OF IRONSTONE

From Kirk Bottom

Reference

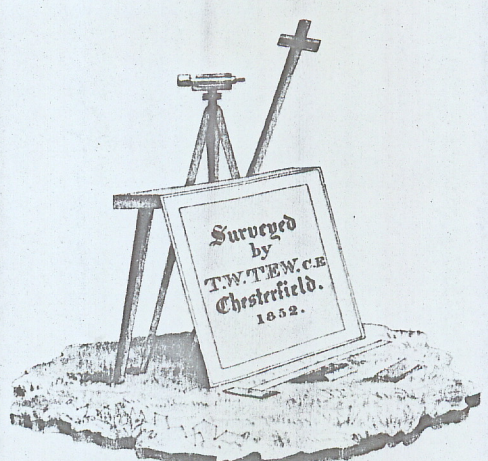
- Railways are represented thus:
    - Double Line
    - Single Line
    - Terminus
  - Engines
  - Pits
  - Workings or worked measures of Ironstone
  - Unworked measures of Ironstone
  - Waste land caused by the workings on the outside of the ironstone measures
  - Tunnels
  - Cuts
  - Shoals
- SYMBOL INDICATED IN RED INK

THIS PLAN IS PRODUCED FROM A MICROFILM OF THE ORIGINAL AND NOT UNDER THE LOCAL AUTHORITY. CANNOL COMPASTE THE ACCURACY OF THE ORIGINAL.



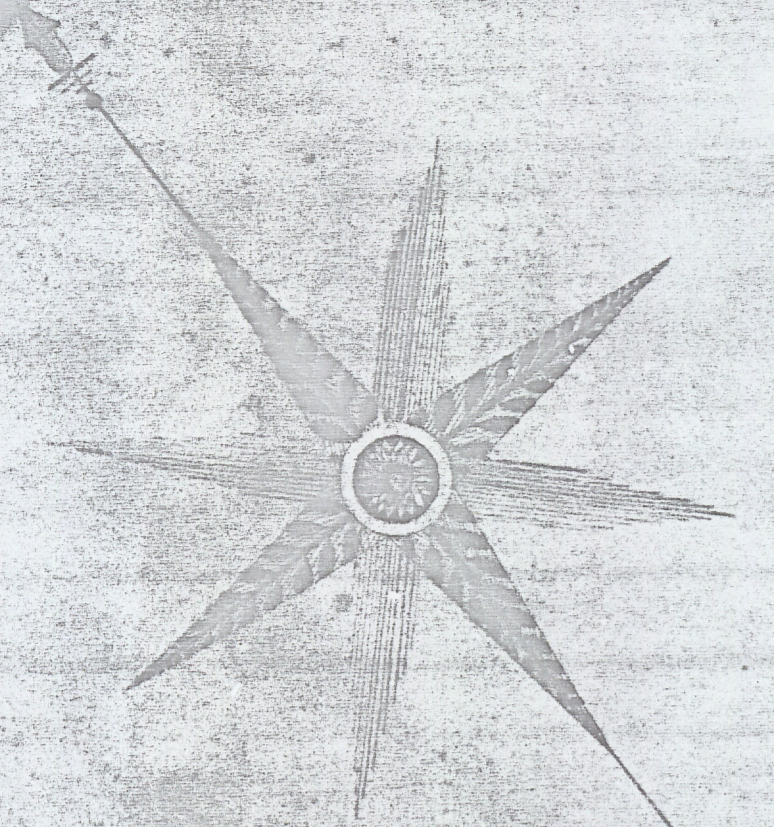
16910

SCALE: 1/2500



Scale 3 CHAINS TO 1 INCH 2376



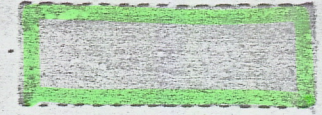





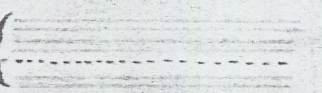
PLAN SHOWING IRONSTONE WORKINGS AT STANTON



PWEM 522

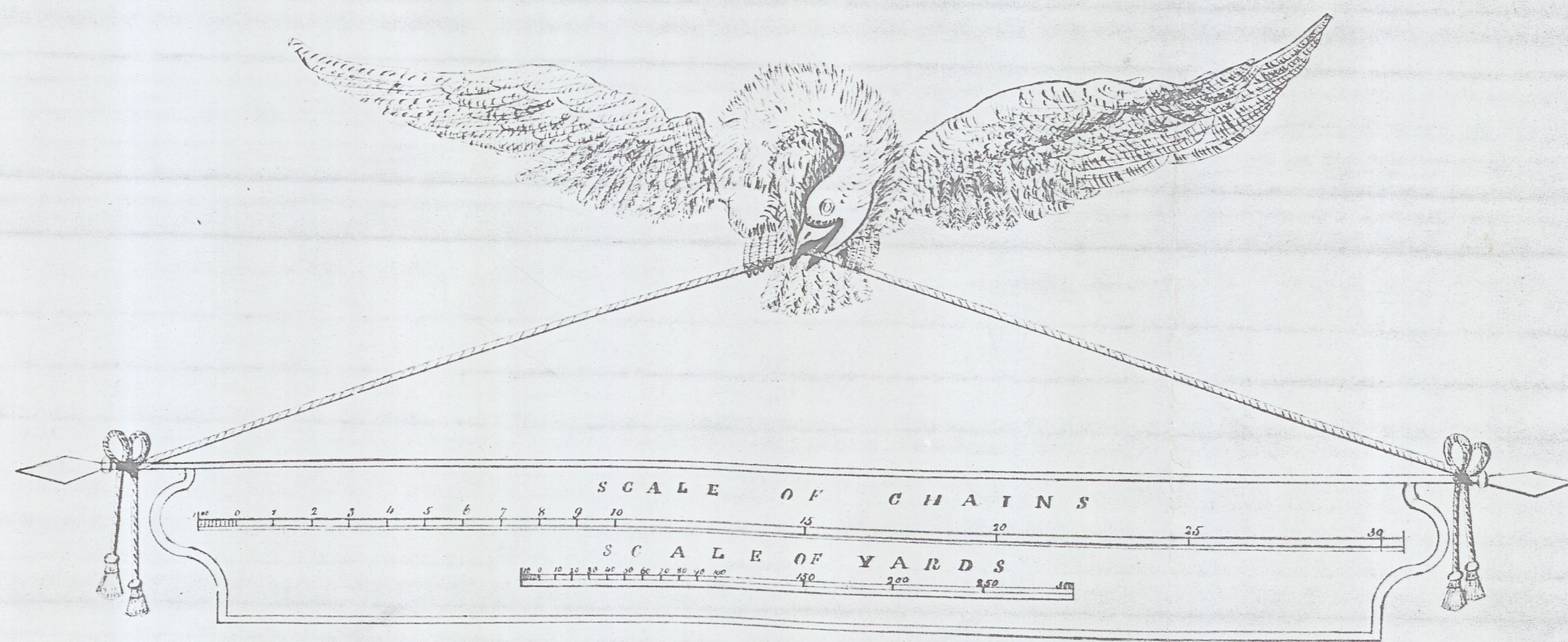


Reference

- Lady Wood Coal Workings are represented by Lady's Trees 
- Henry Croft Wake of Ironstone Workings.....do..... 
- Top Civil Wake of Ironstone Workings.....do..... 
- Bottom Civil Wake of Ironstone Workings.....do..... 
- Coal Wake of Ironstone Workings.....do..... 
- Dale Moor Wake of Ironstone Workings.....do..... 
- Faults, Leek downs or Throes.....do..... 
- Pits with Measures they are sunk down to do..... 
- Single and Double Lines of Railway..... 

SCALE : 1/2500

THIS PLAN IS PRODUCED FROM A MICROFILM OF THE ORIGINAL ABANDONED PLAN. THE COAL AUTHORITY CANNOT GUARANTEE THE ACCURACY OF THE REPRODUCTION OR SCALE.



THE OUTLINE OF WORKINGS COLOURED ON THE ORIGINAL PLAN ARE NOT COMPATIBLE WITH THE REFERENCE. THE COLOURING OF THESE PRINTS MUST, THEREFORE, BE VIEWED WITH CAUTION.

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