COAL MINING RISK ASSESSMENT

AT

FITZWILLIAM INN, 24 SACKVILLE STREET, S70 2DB

FOR

HIND PROPERTY CO. LTD

REPORT REF: HIND 3375

Engineering Geologists and Environmental Scientists



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APRIL 2019

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CONTENTS

1 INTRODUCTION

2 THE SITE

3 REPORT OBJECTIVE AND REPORT SCOPE

4 HISTORY AND HISTORIC MAPS

5 SITE GEOLOGY
- 5.1 Geology
- 5.2 Geological Faults

6 MINING
- 6.1 The Coal Authority Report
- 6.2 Shallow Coal Mining
- 6.3 Deep Coal Mining
- 6.4 Mine Shafts and Adits
- 6.5 Mine Gas
- 6.6 Fireclay

7 RISK ASSESSMENT

8 CONCLUSIONS AND RECOMMENDATIONS

9 GENERAL REMARKS

FIGURES

1 SITE LOCATION PLAN

2 DETAILED SITE LOCATION PLAN

3 GEOLOGY AND BGS BOREHOLE LOCATION PLAN

4 HIGH RISK DEVELOPMENT AREAS

5 AREAS OF PROBABLE SHALLOW COAL MINING

6 PLAN OF COAL SEAMS

APPENDICES

APPENDIX A	The Coal Authority Report and Abandonment Plan
APPENDIX B	Archival Maps
APPENDIX C	Plans of Existing and Proposed Development
APPENDIX D	Photographs



1. INTRODUCTION

This report describes the results of a Coal Mining Risk Assessment undertaken on a plot of land known as Fitzwilliam Inn, 24 Sackville Street, Barnsley, S70 2DB. The work was commission by Alan Power Architects for their client Hind Property Co. Ltd. The assessment was carried out by this Consultancy, the Ashton Bennett Consultancy.

The purpose of this Coal Mining Risk Assessment was to assess the risk of past shallow and deep underground coal mining and mine shafts being present beneath or within influencing distance of the site. It is proposed to construct an office block on the site. The coal mining risk assessment comprised the collation and assessment of available information on the site including geological and mining maps, topographical maps, available borehole records, mine abandonment plans and a Coal Authority Report.

This report describes the research work carried out, presents the results of the Coal Mining Risk Assessment (CMRA) and assesses the risk to the site stability from deep and shallow underground coal and fireclay mining and disused mine shafts and adits.

2. THE SITE

The site is located to the north west of Barnsley Town Centre and to the south east of Barnsley Hospital, in South Yorkshire. The site entrance is located from Sackville Street which runs alongside the east boundary of site.

The site is presently occupied by grassland and a disused public house and accompanying courtyard.

The site area is annotated on Figure 2 and is bounded to the west by a public footpath with a wooden fence and residential gardens and properties beyond. The site is bounded to the east by a wooden fence with Sackville Street beyond. The site is bounded to the north by a wooden fence and red brick wall with a residential property, No 38 Sackville Street beyond. The site is bounded to the south by an old stone wall with Fitzwilliam Street beyond.

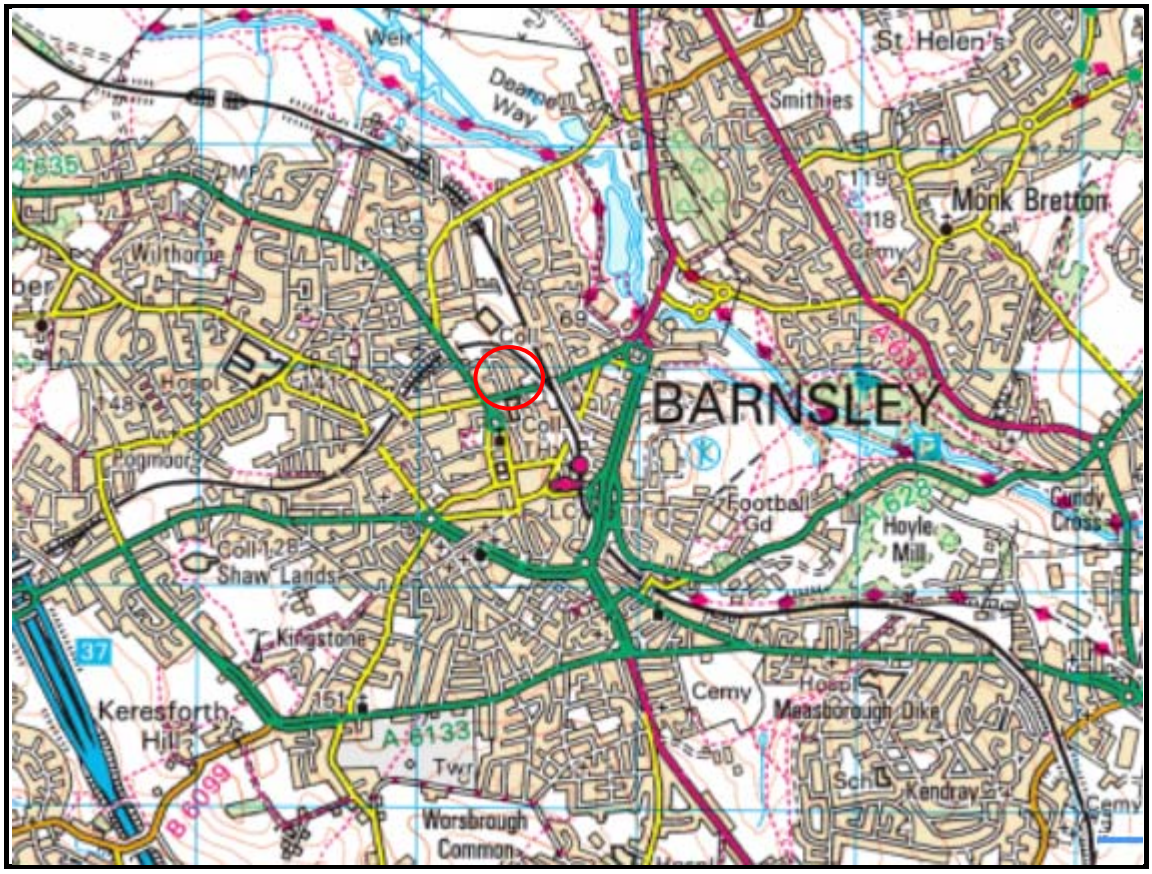


Figure 1 Site Location Plan

The present building on the site is a three storey building constructed of painted stone with rendered gables fronting onto Sackville Street and with two storey extended buildings to the rear extending to Colby Walk. There was a building on site in 1850, but the present building is only recognisable on the 1890 OS plans. The extended buildings to the rear were constructed circa 1950s. Former buildings adjacent to the public house were demolished in the 1960s.

There are signs of cracking along the rendered gable exterior walls, evidenced in the site photographs in Appendix D.

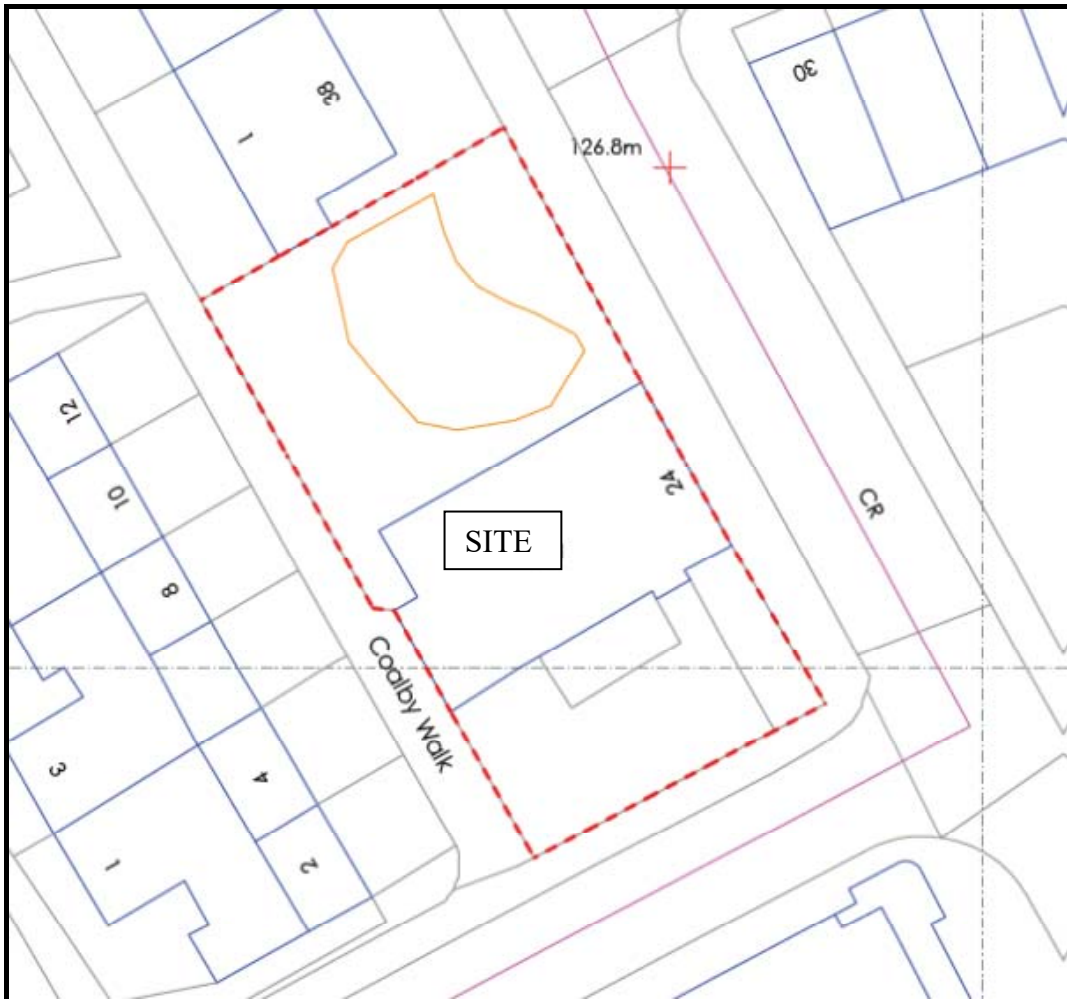


Figure 2 Detailed Site Location Plan

The site is centered at National Grid Reference 434073^{E} 406509^{N} at a height of approximately 114m above Ordnance Datum. The red dotted line denotes the site area shown in Figure 2.

A Site Location Plan is presented as Figure 1 and a Detailed Site Location Plan as Figure 2 and a Geology and BGS Borehole Location Plan as Figure 3. High Risk Development Areas are presented on Figure 4 and Areas of Probable Shallow Coal Mining as Figure 5. A Plan of Coal Seams as Figure 6.

The Coal Authority Report and Abandonment Plan are presented in Appendix A. Archival maps are presented in Appendix B. Plans of the existing and proposed development are presented in Appendix C. Photographs are presented in Appendix D.

3. REPORT OBJECTIVE AND REPORT SCOPE

The objective of this Coal Mining Risk Assessment (CMRA) desk study is to examine the topographical, geological and mining data readily available for the site and determine the risk to the proposed development from past deep and shallow underground coal mining and disused mine shafts and adits.

In addition to the above this study has used the extensive knowledge and experience of the staff of Ashton Bennett Consultancy to assess the data and to interpret the data findings.

4. HISTORY AND HISTORIC MAPS

Historical maps and plans dating from 1850 to 2014 and presented in Appendix B were inspected to assess the history of the site with regards to coal mining activities.

The 1850 map scaled at 1:10,560 indicates Fitzwilliam Inn building possibly existed during this time while an old foundry is annotated to the west of site. Several further industrial companies are annotated in the surrounding area, including Hope Works (Calender or flattening and glazing linen), Taylor's Mill (Linen), timber yards, union mills and reservoirs. Reservoirs are indicated east of Fitzwilliam Street associated with Hope Works between 1850 and 1929 when it appears to have been infilled. During this time and up until circa 1960 the existing inn was sandwiched between various smaller structures on either side fronting onto Sackville Street to the immediate east. Buildings also extended to the immediate west to the rear of the inn.

No coal mining activities/evidence is shown within the site area or its immediate vicinity on the historical maps.

5. SITE GEOLOGY

5.1 Geology

The published British Geological Survey (BGS) maps at a scale of 1:10,000 show the site area to be underlain by the Middle Coal Measures consisting of fine grained sandstone, mudstone and siltstone and interbedded coal seams of the Upper Carboniferous Period. The strata immediately beneath the site consists of mudstone potentially with outcropping Kent's Thin Coal along or within the west boundary of site, underlain by potentially a thin sandstone band and in turn underlain by mudstone with interbedded Kent's Thick Coal Seam underlain by further mudstones and sandstones. Plans of the geology and of the coal seams are presented in Figures 3 and 6.

Superficial deposits do not underlie the site area although made ground may be present.

The sequence of strata beneath the site comprises:

TABLE 1
Strata Beneath Site Estimated From Geological Plans

Strata	Thickness in m	Depth in m bgl	Workings recorded by Coal Authority beneath the site	Probability of unrecorded workings
Mudstone		GL – 0		
Kent's Thin Coal	0.29-0.76	GL – 1	No	Yes-Possibly Opencast worked and mined
Mudstone				
Thin Sandstone	6-8			
Mudstone				
Kent's Thick Coal	0.91-1.22	25-30	No	Yes
Mudstone				
Sandstone	0-19			
Mudstone				
Barnsley Rider Coal	0.16-0.61	70	No	Yes
Mudstone				
Barnsley Coal	2.29-3.10	82	No (workings to NE)	yes

BGS boreholes hold records of local boreholes which have been used to assist in interpretation of the geology. Boreholes sunk in the vicinity of the site encountered strata as described in Table 2.

TABLE 2
Local Borehole Logs

BGS Reference no	Location	Geology in m bgl	Groundwater In m bgl
SE30NW901	434000E 406400N	Gl-10.64 sandstone, 10.64- 31.69 shale 31.69-82.60 grey rock and shale 82.60-83.51 **coal** 83.51-108.20 grey rock and shale	7.62m bgl
SE30NW39	434141E 406396N	Gl-3.40 Fill 3.40-12.00 mudstone	
SE30NW250	434160E 406350N	GL-2.50 clay 2.50-5.50 mudstone 5.50-7.00 coal and black mudstone 7.00-12.00 sandstone 12.00-16.00 mudstone 16.00-16.20 **coal** 16.20-17.00 mudstone	7.00m bgl
SE30NW253	434220E 406380N	GL-3.00 clay 3.00-12.00 mudstone 12.00-13.20 **coal** 13.20-15.00 sandstone	7.50m bgl

The borehole records indicate varying depths of coal and do not indicate depths to the shallow Kents Thin Coal, although the coal encountered at 12.00m and 16.00m may be the Kents Thick Coal. The coal at 82.51m is likely to be the Barnsley Coal.

5.2 Geological Faults

The geological maps indicate the presence of several known geological faults on all sides of the site.

Geological faults are noted to the NW and SE of the site trending SW to NE, and are noted NE and SW of the site trending NW to SE.

The faults are unlikely to detrimentally affect the stability of the site unless shallow mined ground is present beneath the site.

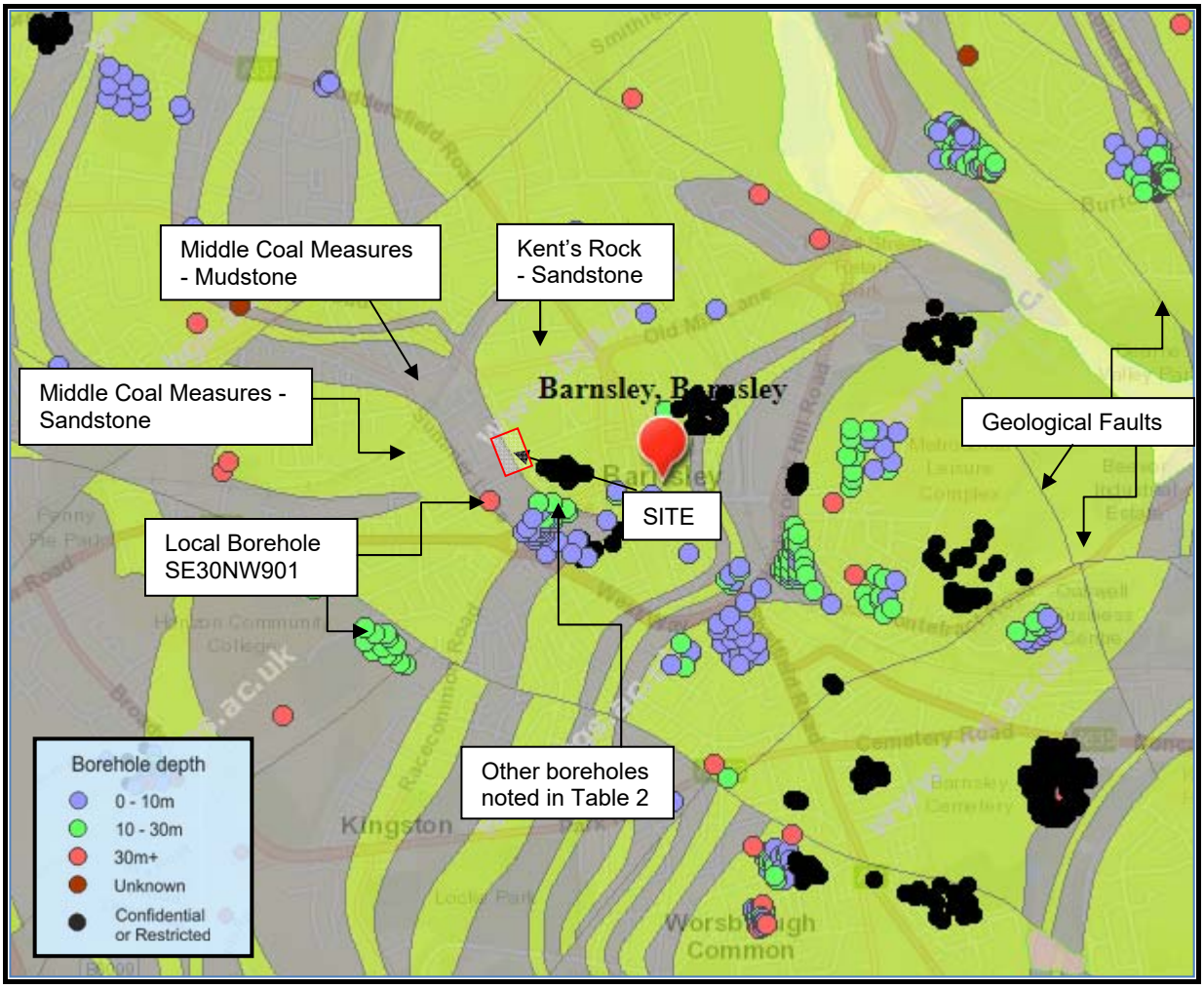


Figure 3 Geology and BGS Borehole Location Plan

6. MINING

6.1 The Coal Authority Report

The Mining Report from The Coal Authority for the site states that according to their records the property is within a surface area that could be affected by unrecorded shallow workings. The property is not known to be underlain by spine roadways at shallow depth.

The Kent's Thin Coal Seam is shown to outcrop within the site area.

There are no opencast mines within 500m of the property. There are no Coal Authority managed tips within 500m of the property boundary. There are no site investigations or remediated sites within 50metres of the property boundary.

The Coal Authority has not received a damage notice or claim for the subject property, since 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 preventative works before coal is worked under Section 33 of the Coal Mining Subsidence Act 1991.

There is no mine gas recorded within 500m of the site boundary. There are no mine water treatment schemes within 500 metres of the enquiry boundary.

There is no record of future underground mining and no coal mining licence within 200m of the site boundary. There are no court orders recorded on the site.

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

The site lies within an area of historical coal mining activity. The Kents Thin Coal is recorded to outcrop within the site, bearing 320 degrees. The Barnsley Coal is recorded as being mined at a depth of 100m north east of the site. The thickness of extraction was 274cm in 1834 with the coal seam dipping at 3.7 degrees to the horizontal. Three abandonment plans are recorded of mining within influencing distance of the site namely, M158, SCC10 and 1082. Plan M158 is reproduced in Appendix A and does not record mining beneath the site. The other plans record mining at a depth and distance from the site where they are unlikely to detrimentally affect the site.

Two mine shafts are recorded by the Coal Authority to the immediate south east of the site on the far side of Fitzwilliam Street. The mine shafts are recorded as being drilled by South Yorkshire Mining Service in 1993 to check their condition, and proved to be infilled to full depth and capped with a 150mm thick concrete cap.

The Coal Authority Report is presented in Appendix A and should be read in full.

6.2 Shallow Coal Mining

The Coal Authority Report states that they believe there is coal at or close to the ground surface beneath the site. The Coal Authority records only date from 1872 and as shallow mining occurred before that date, there are often no records of the early mined coal seams. The coal seams present at shallow (<30m bgl) depth beneath the site are shown in Table 1 with the probability of each seam being worked.

The Kent's Thin Coal Seam is shown to outcrop in the west of the site, parallel with the western boundary. The Coal Authority hold records of the Kent's Thin Coal and Kent's Thick Coal being mined in influencing distance from the site.

Local boreholes indicate workable coal at depths of 5.50m, 12.00m, 16.00m and 83.51m bgl. It is possible that the Kents Thin Coal was removed on the site where it outcrops, but the Kents Thick lies at shallow depth and was extensively mined in the Barnsley Area.

The site lies within a high risk area for development as shown in Figure 4 and is probably underlain by shallow mining according to the Coal Authority maps reproduced in Figure 5.

There is a **medium to high risk** that the site has been undermined at <30m depth bgl. Any voids remaining in workings at this depth may migrate by successive roof collapse and reach the ground surface to cause subsidence.

There is evidence of ground subsidence on the existing building and boundary walls.



Figure 4 High Risk Development Areas

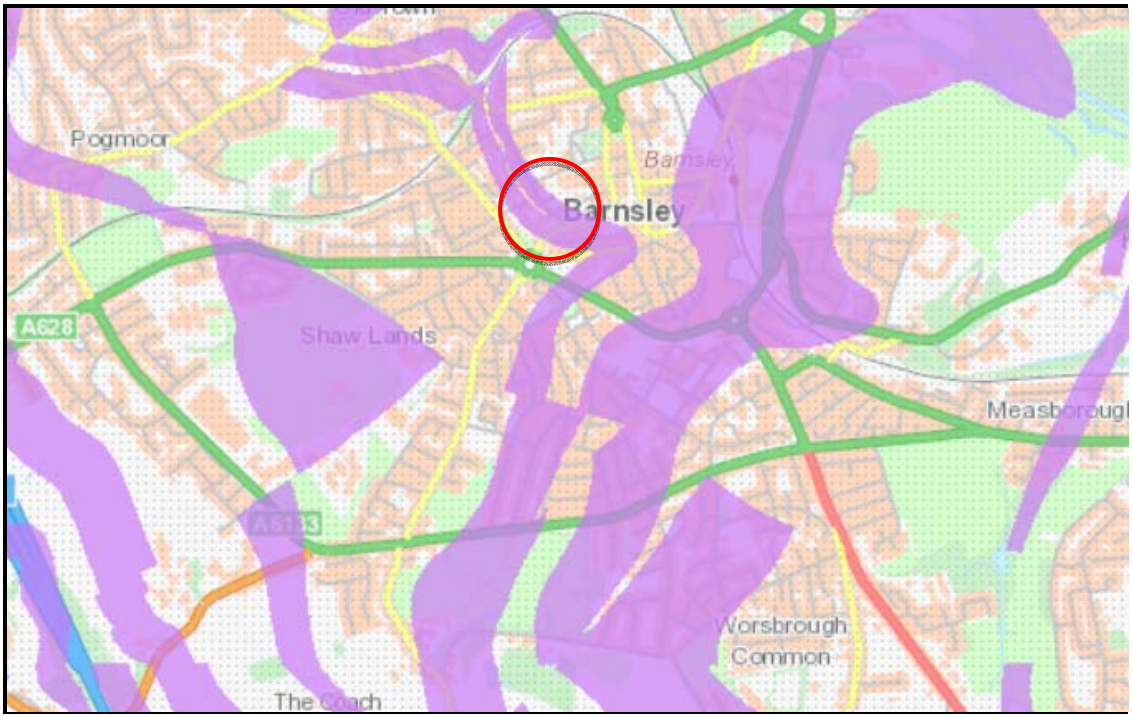


Figure 5 Areas of Probable Shallow Coal Mining

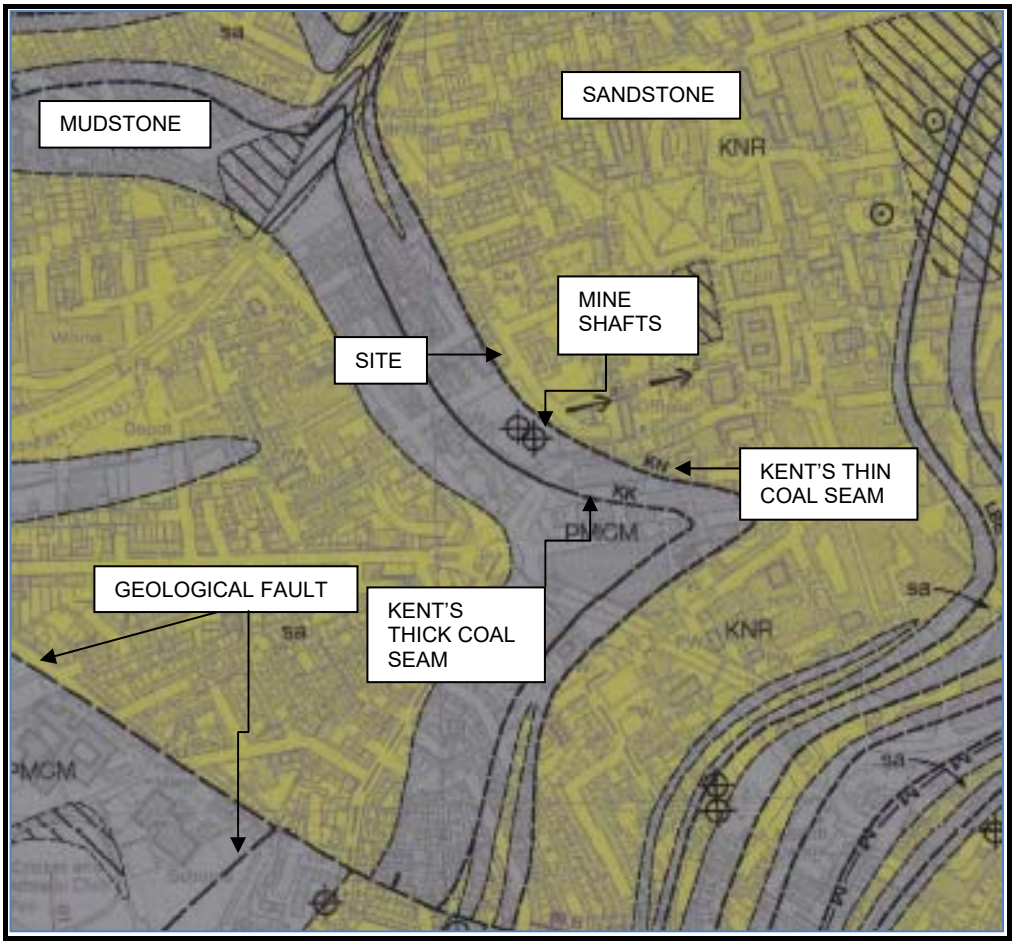


Figure 6 Plan of Coal Seams

The risk that collapse of underground workings could cause subsidence at the ground surface above is normally empirically assessed using the T10 rule (developed by the National Coal Board in 1973 and based on experience) whereby if a thickness of 10 x the worked seam thickness of competent cover (i.e. rock) is present over the worked seam then it is deemed sufficient to be able to choke the voided ground without giving rise to surface settlement.

In summary there is a **medium to high risk** that ground subsidence may occur on the site due to shallow mining in the Kents Thin or Kents Thick Coal seams. Although the Coal Authority hold no records of such mining, mining may have occurred before the date of 1872, after which it was required by law to deposit abandonment plans with the then Ministry of Power.

6.3 Deep Coal Mining

The Coal Authority have no records of coal being worked at >30m bgl beneath the site. Records held by the Coal Authority of mining in the Barnsley Coal within influencing distance of the site are presented in Appendix A. Mining is not shown to extent beneath the site. The Barnsley Coal lies at circa 80m bgl.

It is a **low risk** that any deep mining (>30m bgl) will detrimentally affect the stability of the site due to the substantial cover of competent strata above any workings.

6.4 Mine Shafts and Adits

The Coal Authority Report states that the Coal Authority have records of 2 mine shafts within 20m of the site. The Mine Entry details are presented in Table 3 and their locations are shown on the Coal Authority Plan presented in Appendix A.

TABLE 3
Mine Shaft Details

Mine Shaft/Adit BGS Reference	Grid Reference	Depth in m	Diameter in m	Stabilisation Details
434406-004	434100 406447	unknown	unknown	Drilled in 1993 and proved to be filled to full depth and capped with a 150mm thick concrete cap
434406-005	434120 406432	unknown	unknown	Drilled in 1993 and proved to be filled to full depth and capped with a 300mm thick stone cap

The shafts are recorded as filled to the full depth and capped. A high rise building is constructed over the shafts and they present no risk to the stability of the site.

The Coal Authority records are incomplete and any circular features detected on site should always be assessed by an engineer in case it represents an unrecorded mine shaft.

There is a **low risk** that mine shafts and adits may cause ground subsidence and affect the stability of the site in the future.

6.5 Mine Gas

The Coal Authority have no record of any mine gases in the site area. However, mine gas should be considered during any drilling and construction on the site.

6.6 Fireclay

There is no evidence that fireclay was mined from this site.

7. RISK ASSESSMENT

The Coal Mining Risk Assessment undertaken has indicated that the site is underlain by the Coal Measures comprising mudstones, sandstones and interbedded coal and ironstone seams. Based on the BGS geological maps and Coal Authority Report, the site is expected to be underlain by mudstones and sandstones with two shallow (<30m) interbedded coal seams and further sandstones and mudstones and coal seams at greater depths.

The Kent's Thin Coal is recorded as outcopping on the site and the Kent's Thick Coal underlies the site at shallow depth. Both coal seams dip towards the east. The underlying Barnsley Rider and Barnsley Coal Seams are expected to underlie the site at circa 70m to 80m bgl, and to be 0.16-0.60m and 2.00m to 3.00m in thickness.

The Coal Authority hold no records of mining beneath the site, although mining may have taken before abandonment records were required. The Coal Authority plans indicate the site lies in a high risk area for development and an area of probable shallow mining.

If voids remain in any pillar and stall workings in the shallow coal seams at <30m bgl, then they may migrate to the surface and cause ground subsidence if insufficient thickness of competent strata overlies the workings.

Any **shallow coal** workings therefore pose a **medium to high risk** to future site stability.

Any subsidence from mining at depths >30m bgl in the coals should be complete.

The risk of the site being detrimentally affected by workings in **coal at depth** (>30m bgl) is a **low risk** due to the significant cover of competent strata.

The risk that collapse of underground workings could cause subsidence at the ground surface above is normally empirically assessed using the T10 rule (developed by the National Coal Board in 1973 and based on experience) whereby if a thickness of 10 x the worked seam thickness of competent cover (i.e. rock) is present over the worked seam then it is deemed sufficient to be able to choke the voided ground without giving rise to surface settlement.

Two mine shafts are present to the south east of the site. The shafts have been infilled to full depth and capped. They are now covered by developments. The shafts are unlikely to affect the stability of the site as they are infilled and capped. There are no records of any adits near the site.

8. CONCLUSIONS AND RECOMMENDATIONS

The evidence gathered in this coal mining risk assessment report suggests that there is a medium to high risk that ground subsidence from shallow coal mining could occur in the future.

If ground subsidence occurs due to shallow mining, the risk is that any development constructed on the site may suffer structural damage in the future. It is therefore recommended that an intrusive mining investigation is undertaken to assess the depth and condition of any coal seams. The investigation should comprise 4 to 6 openhole water flush boreholes to 30m bgl with installations to enable monitoring for methane gas. If voids or loose ground and evidence of mining is detected a grouting programme may be required to enable development. Foundation design would need to take into account any grouted mine workings as the grout prevents roof collapse, but does not have bearing strength to support buildings.

If any new circular features appear on the ground in the future development these should be checked by an engineer.

9. GENERAL REMARKS

This report truly reflects the conditions found during the coal mining risk assessment study. Whilst the mining risk assessment was undertaken in a professional manner taking due regard of additional information which became available as a result of ongoing research, the results portrayed only pertain to the information attained and the ground and mining conditions expected. It is possible that other undetected information, undetected ground conditions and undetected mining conditions may exist. The mining risk assessment was only undertaken within the site boundaries and should not be used for interpretation purposes elsewhere. The conclusions are

only a brief summary of the report, and it is recommended that the report is read in full to ensure that all recommendations have been understood.

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Tristan Bennett
BSc

Frances A Bennett
BSc, CGeol, FGS, FIMMM, C.WEM, MCIWEM, CEnv, AIEMA, MIEnvSci.

Appendix **A**



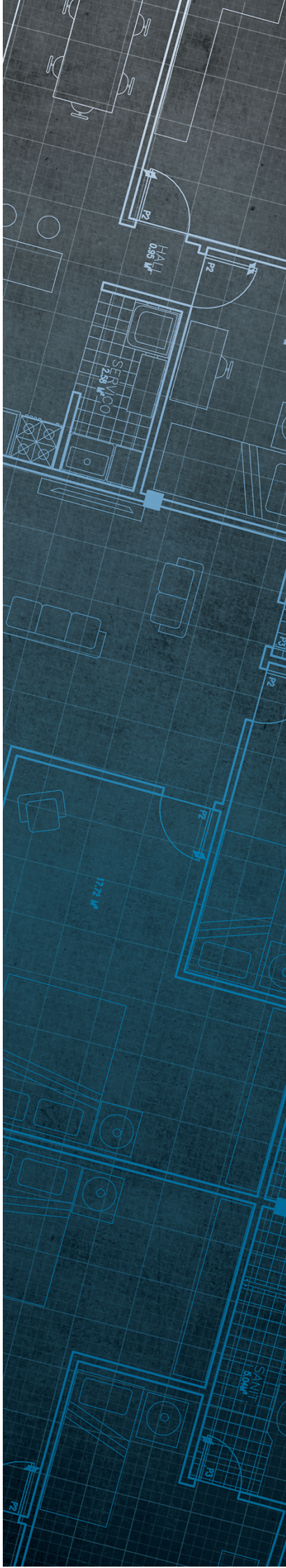
The Coal Authority

Consultants

Coal Mining Report

24 Sackville Street
Barnsley
S70 2DB

Date of enquiry:	**22 March 2019**
Date enquiry received:	**22 March 2019**
Issue date:	**22 March 2019**
Our reference:	**51002059783001**
Your reference:	**3375**



Consultants
Coal Mining Report

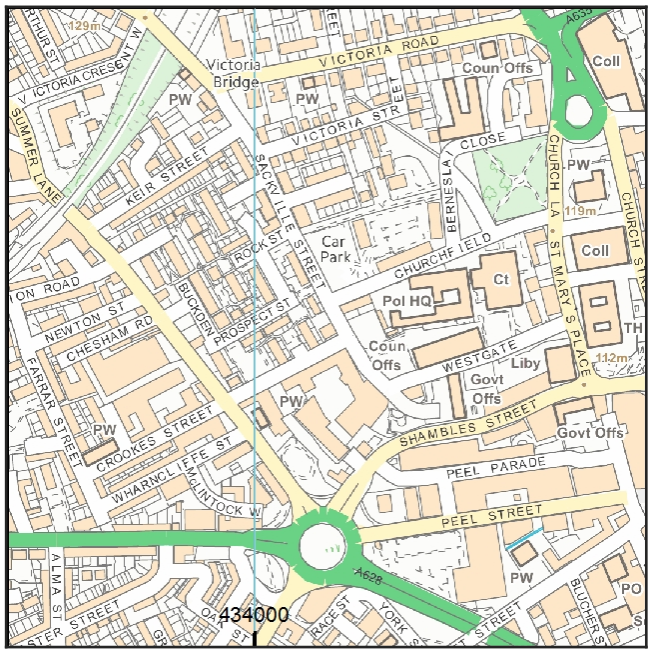
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

ASHTON BENNETT CONSULTANCY

Enquiry address

24 Sackville Street
Barnsley
S70 2DB



Approximate position of property

Map data

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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
unnamed	BARNSLEY	Coal	64SP	100	North-East	3.7	East	274	1834

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	434406-004	434100 406447	was drilled by SYMAS in 1993 and proved to be filled to full depth and capped with a 150mm thick concrete cap	Coal	
Shaft	434406-005	434120 406432	was drilled by SYMAS in 1993 and proved to be filled to full depth and capped with a 300mm thick stone cap	Coal	

Abandoned mine plan catalogue numbers

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

M158	SCC10	1082

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
KENTS THIN	Coal	Yes	Within	N/A	320

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

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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.

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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.

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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.

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Section 5 – Data definitions

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

Past underground coal mining

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

Probable unrecorded shallow workings

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

Spine roadways at shallow depth

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

Mine entries

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

Abandoned mine plan catalogue numbers

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

Outcrops

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

Geological faults, fissures and breaklines

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

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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.

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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.

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VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	22 March 2019
Issued to	ASHTON BENNETT CONSULTANCY UNIT K BRIDGE MILLS HOLMFIRTH WEST YORKSHIRE HD9 3TW
Property search for	24 SACKVILLE STREET BARNSLEY S70 2DB
Reference number	51002059783001
Date of issue	22 March 2019
Cost	£106.79
VAT @ 20%	£21.36
Total received	£128.15
VAT registration	598 5850 68

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Summary of findings

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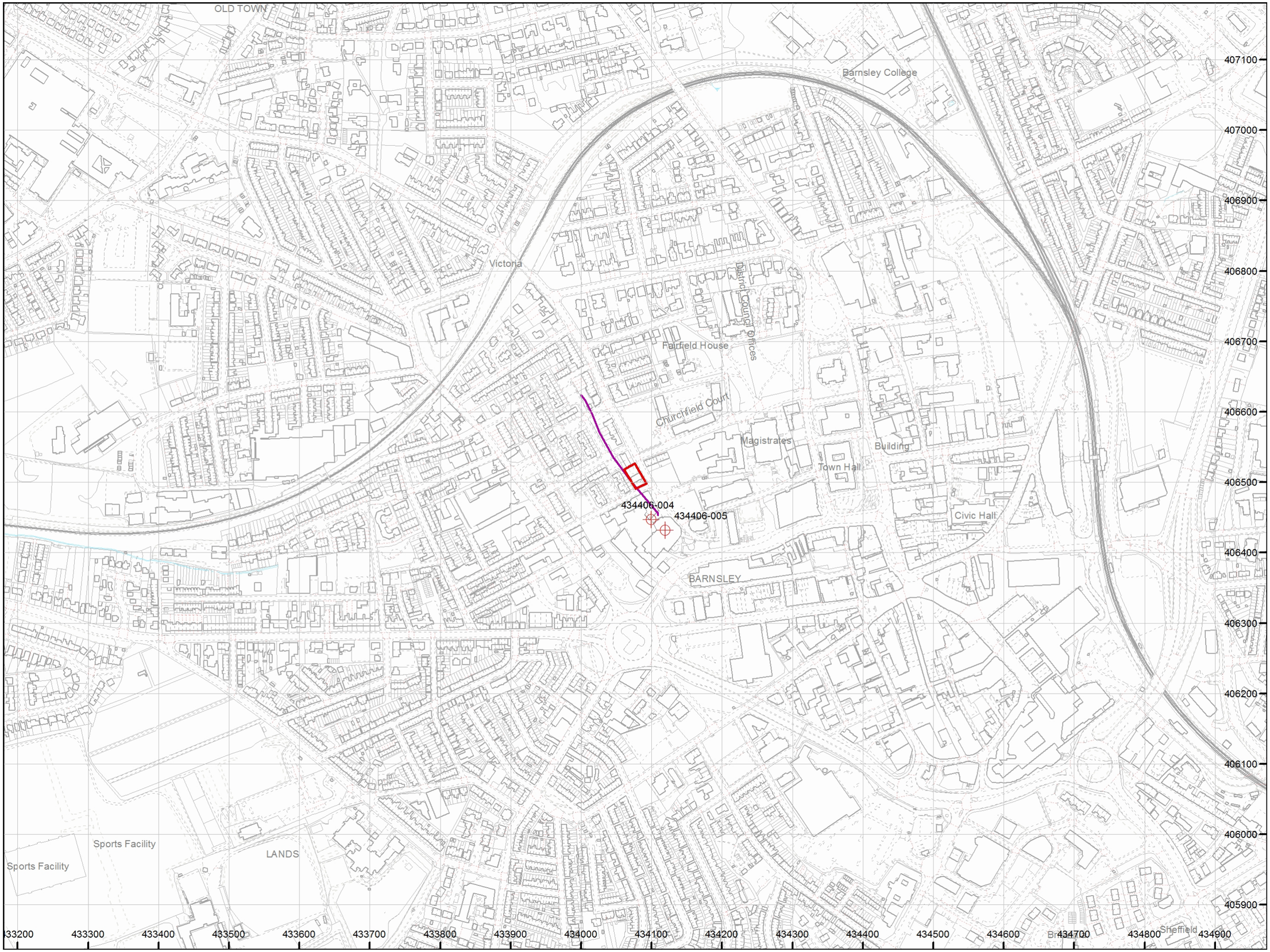
The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

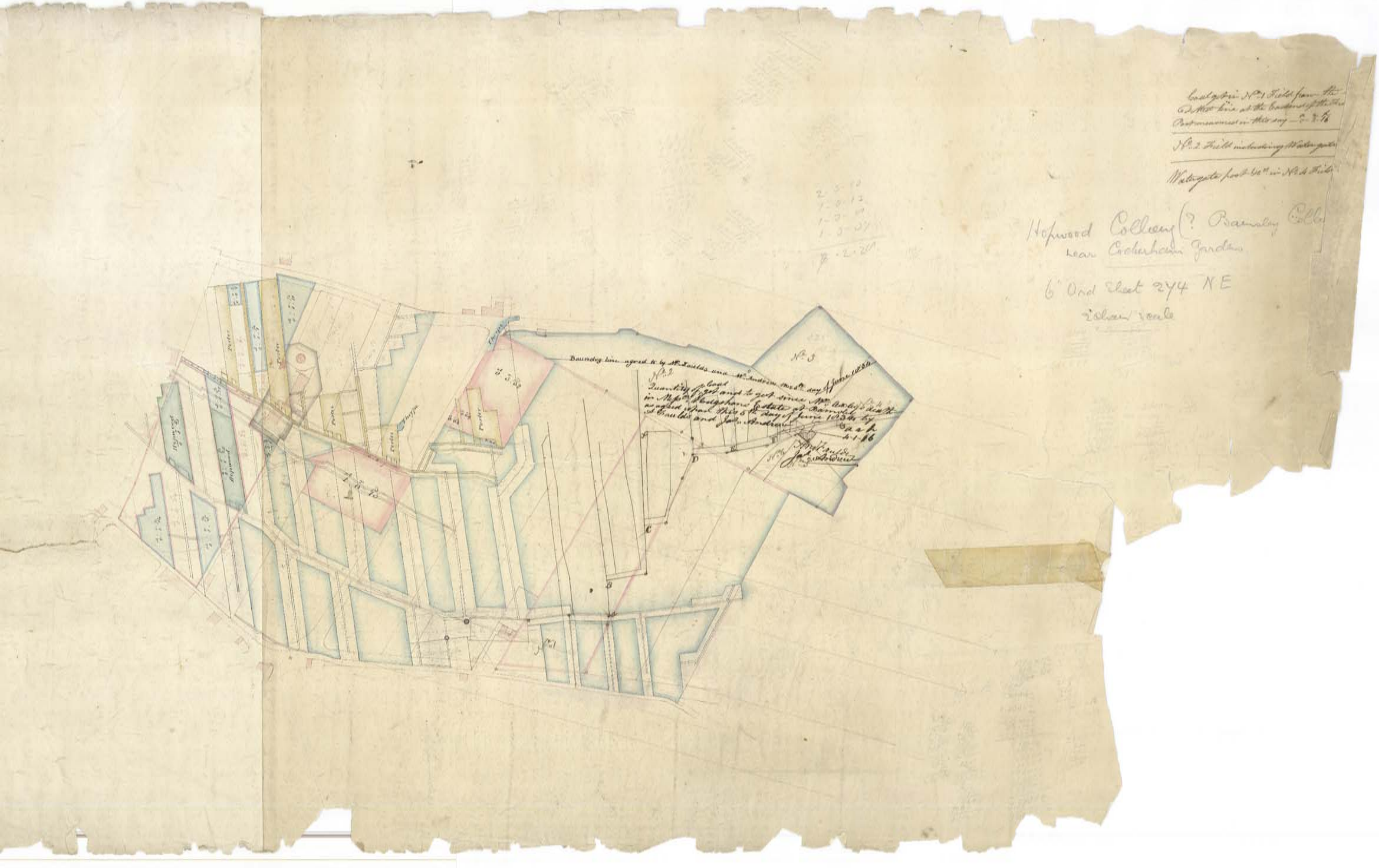
Approximate position of the enquiry boundary shown

Disused mine shaft

Outcrop (Proven)



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+44 (0)1623 637 000 (International)
www.groundstability.com


No. 2 Field including Watergate
Hopwood Colliery (? Barnsley Coll
near Cockerham Garden
6" Ord Sheet 274 NE
2 chain scale
No. 3
No. 1
Porter
Thorpe
Hopwood