



COAL MINING RISK ASSESSMENT AND COAL RECOVERY REPORT

Employment Land Barnsley West

Reference	4848-JPG-Z2-XX-RP-G-1102-S2-P04
Date	August 2019
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JPG Leeds Limited. Commercial Boundary Plan. Barnsley West. Drawing Ref: 4848-JPG-ZZ-ZZ-DR-C-1001-S2-P02. Dated March 2023.

JPG Leeds Limited. Barnsley West. Conceptual Ground Model - Coal Mining Risks Level Assessment. Drawing Ref: 4848-JPG-SW-XX-DR-G-1307-S2-P05. Dated July 2019.

Appendix B Coal Authority Mining Reports

The Coal Authority. Consultants Coal Mining Report. Barnsley West, South Yorkshire. Ref 51001983537002. Date of issue 28 November 2018.

The Coal Authority. CON29M Non-Residential Mining Report. Barnsley West, South Yorkshire. Ref 51001983537001. Date of issue 28 November 2018.

Appendix C Coal Authority Abandonment Plans

National Coal Board. Abandonment Plan. Hunters Cottage & Extension. Site Reference Number: 030102B. Operational Contract Number: OE/CON/3978. Drawing Number: OE/COMP/03/121. Dated December 1959.



CONFIDENTIALITY STATEMENT

This report is addressed to and may be relied upon by the following:

Strata Sterling Barnsley West Limited
Quay Point
Lakeside
DONCASTER
DN4 5PL

This report has been prepared for the sole use and reliance of the above-named party. This report shall not be relied upon or transferred to any other parties without the express written authorisation of JPG (Leeds) Limited. No responsibility will be accepted where this report is used, either in its entirety or in part, by any other party.

DOCUMENT HISTORY

Revision	Date	Revision Details	Status	Author	Approved
P01	August 2019	Issue to Client.	Draft	JAM	JBW
P02	May 2021	Updated to include the latest drawings.	Final	JAM	JBW
P03	March 2023	Updated to include the latest drawings.	Final	DMH	JBW
P04	October 2023	Redline boundary updated.	Final	JBW	JDM



1.0 APPLICATION

Strata Sterling Barnsley West Limited is to submit a planning application for the proposed employment land at Barnsley West for a commercial end-use.

JPG Leeds Limited has been commissioned to prepare a Coal Mining Risk Assessment Report for the proposed employment land, in order to provide the Local Planning Authority with information on coal mining and an assessment of its impact on land stability. This report also includes a commentary on the potential for the recovery of coal as part of the development in order to avoid sterilisation of this resource.

1.1 Site Location and Description

The site is located approximately 3km to the west of Barnsley town centre. The approximate centre of the site is located at NGR 431833, 406683.

The site is located to the northeast of the M1 motorway and to the south of Hermit Lane. A site location plan is presented as Figure 1 in Appendix A.

The site is irregular in shape and occupies an area of approximately 37 hectares. Ground levels are approximately 146m AOD in the west, generally falling to approximately 120m AOD in the northeast. The site generally consists of sloping arable and grazing land, which is divided into fields by hedgerows, fences and small watercourses.

A steep valley with a drainage ditch at its base extends northwards from the southeast; the drainage ditch is culverted where it passes below Hermit Lane. A second steep sided valley is present in the centre of the site and trends to the north.

The northern boundary is defined by Hermit Lane, beyond which is undeveloped farmland. A raised plateau of grassland is present to the east of the site, beyond which is the town of Pogmoor. The southern boundary is defined by the M1 motorway, beyond which is the town of Dodworth and the western boundary is defined by Higham Lane and the M1 motorway.

An aerial photograph of the site is presented as Figure 2 in Appendix A.

1.2 Description and Layout of Proposed Development

It is proposed to develop the site for commercial end use. A plan outlining the proposed commercial red line boundary is referenced below and provided in Appendix A.

- JPG Leeds Limited. Commercial Boundary Plan. Barnsley West. Drawing Ref: 4848-JPG-ZZ-ZZ-DR-C-1001.



1.3 Scope of the Coal Mining Risk Assessment

The purpose of the Coal Mining Risk Assessment Report is to:

- Present a desk-based review of all available information on the coal mining issues which are relevant to the application site.
- Use that information to identify and assess the risks to the proposed development from coal mining legacy, including cumulative impact of issues.
- Set out appropriate mitigation measures to address the coal mining legacy issues affecting the site, including any necessary remedial works and/or demonstrate how coal mining issues have influenced the proposed development.
- Demonstrate to the Local Planning Authority that the application site is, or can be made, safe and stable to meet the requirements of national planning policy with regard to development on unstable land.

2.0 SOURCES OF INFORMATION USED TO INFORM THIS REPORT

Sources of information upon which this risk assessment of coal mining is based are detailed below.

- The Coal Authority. Consultants Coal Mining Report. Barnsley West, South Yorkshire. Ref 51001983537002. Date of issue 28 November 2018.
- The Coal Authority. CON29M Non-Residential Mining Report. Barnsley West, South Yorkshire. Ref 51001983537001. Date of issue 28 November 2018.
- National Coal Board. Abandonment Plan. Hunters Cottage & Extension. Site Reference Number: 030102B. Operational Contract Number: OE/CON/3978. Drawing Number: OE/COMP/03/121. Dated December 1959.
- British Geological Survey (BGS), Sheet SE30NW (Barnsley), at 1:10,000 Scale, dated 2005.
- CIRIA Special Publication 32. Technical Guide 34. Construction Over Abandoned Mine Workings. Dated 1984.
- Eastwood & Partners. Geotechnical and Geo-environmental Site Appraisal. Barnsley West for Strata. Ref. 36284.001. Dated October 2013.
- JPG (Leeds) Limited. Geoenvironmental Desk Study Report. Barnsley West. Report Ref. 4848-JPG-XX-XX-RP-G-0604-S2-P04. Dated July 2019 for Strata Sterling Barnsley West Limited.
- JPG (Leeds) Limited. Preliminary Geoenvironmental Ground Investigation. Employment Land, Barnsley West. Report Ref 4848-JPG-SW-XX-RP-G-0609-S2-P01. Dated March 2023.
- JPG (Leeds) Limited. Geoenvironmental Ground Investigation. Higham Common Road Roundabout, Barnsley West. Report Ref: 4848-JPG-HC-XX-RP-G-0603-S2-P02. Dated October 2020 for Strata Sterling Barnsley West Limited.

Copies of the Coal Authority Reports and National Coal Board Abandonment Plan are provided in Appendix B.



3.0 IDENTIFICATION AND ASSESSMENT OF SITE SPECIFIC COAL MINING

Coal Mining Issue	Yes	No	Remarks
Surface mining (opencast workings)	Yes		<p>The Coal Authority Consultants Coal Mining Report indicates opencast workings below a large area of the proposed employment land associated with the Hunters Cottage opencast coal site (OCCS) and also the Hunters Cottage Extension OCCS is indicated to potentially encroach onto the northern boundary of the site.</p> <p>The National Coal Board abandonment plan indicates the Hunters Cottage OCCS to have worked the Thin, Swallow Wood and Top Haigh Moor (wrongly identified as Swallow Wood Bottom on the plan) coal seams, between 1945 to 1949. The lowest point of excavation is approximately 111m AOD and the maximum thickness of made ground is approximately 19m.</p> <p>Hunters Cottage Extension OCCS relates to two smaller areas of opencast extraction to the north of Hunters Cottage OCCS. The Hunters Cottage Extension OCCS worked the Gawber coal seam in the eastern area and the Thin coal seam in the western area, in 1954. The lowest point of excavation of the eastern area is approximately 110m AOD, with a maximum thickness of made ground of approximately 9m and the lowest point of excavation in the western is approximately 104m AOD, with a maximum thickness of made of approximately 9m.</p> <p>There is a risk to the proposed development due to settlement of the underlying made ground associated with the historical OCCSs on the site, including potential differential settlement where highwalls are present.</p> <p>Proposed mitigation measures are outlined in Section 4.</p>
Underground coal mining	Yes		<p>The Coal Authority Consultants Coal Mining Report and CON29M Non-Residential Mining Report, included in Appendix B, indicates that the site is located within the zone of influence of recorded underground workings in six coal seams: Flockton Thick seam (86m to 147m bgl), Top Fenton seam (144m to 221m bgl), Fenton seam (146m bgl), Parkgate seam (171m to 175m bgl), Silkstone seam (213m to 274m bgl) and Whinmoor seam (287m to 349m bgl).</p> <p>Based on the reported vertical separation between the coal seams and seam thicknesses, none of the recorded underground workings are likely to affect the surface stability of the site.</p> <p>A residual risk remains from unrecorded underground shallow coal workings in the Dunsil, Gawber, Thin, Swallow Wood, Top Haigh Moor and Low Haigh Moor coal seams where they are present within influencing depth of the surface. This includes below Hunters Cottage OCCS.</p> <p>The approximate extent of potential unrecorded underground shallow coal workings based on recorded information is shown on JPG Drawing No. 4848-JPG-SW-XX-DR-G-1309.</p> <p>Six boreholes were drilled as part of the 2019 JPG Preliminary Geoenvironmental Ground Investigation. No underground shallow coal workings were encountered. It is recommended that additional mining investigative works are carried out to ensure no shallow coal workings are present across the site.</p> <p>Five boreholes were drilled as part of the 2020 Higham Common Road Roundabout Ground Investigation on a parcel of land adjacent to the western boundary of the site. No underground shallow coal workings were encountered.</p> <p>Proposed mitigation measures are outlined in Section 4.</p>
Mine entries (shafts and adits)		No	<p>There are no recorded mine entries located within the boundaries of the proposed employment land.</p> <p>It is possible that unrecorded mine entries are present and vigilance should be maintained during any ground investigation.</p> <p>Proposed mitigation measures are outlined in Section 4.</p>
Coal mining geology		No	<p>The Coal Authority Consultants Coal Mining Report indicates one east to</p>



Coal Mining Issue	Yes	No	Remarks
(fissures/faults)			<p>west trending fault to the north of the site.</p> <p>The National Coal Board abandonment plan and BGS Sheet SE30NW indicates an additional east to west trending fault intercepting the Hunters Cottage OCCS, identified during the opencast works, in the centre of the site.</p> <p>The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.</p> <p>It is considered unlikely that geological faults or fissures could affect the proposed development on the site.</p>
Record of past mine gas emissions		No	<p>The Coal Authority Consultants Coal Mining Report indicates no records of past mine gas emissions have been recorded within 500m of the site.</p> <p>One ground gas installation, BH109A, was installed as part of the 2019 JPG Preliminary Geoenvironmental Ground Investigation and no elevated gas was recorded over a six-week monitoring period.</p> <p>Proposed mitigation measures are outlined in Section 4.</p>
Recorded coal mining surface hazard		No	<p>The Coal Authority Consultant report indicates a damage notice or claim for alleged subsidence damage was made in November 2003 for 1 Wharfedale Road, Barnsley, South Yorkshire, S75 2LJ, however, the claim was rejected.</p> <p>There is no current Stop Notice delaying the start of remedial works or repairs to the property.</p> <p>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.</p>
Coal Outcrop	Yes		<p>The Coal Authority Consultant report and the BGS 1:10,000 scale map indicates the outcrop of the Dunsil, Gawber, Thin and the Swallow Wood coal seam within the proposed employment land boundaries.</p> <p>Proposed mitigation measures are outlined in Section 4.</p>

4.0 MITIGATION STRATEGY PROPOSED

4.1 Settlement of Opencast Backfill below the Development

A robust geotechnical solution is required for development over the backfilled opencast coal workings.

The thickness of made ground below this part of the site is estimated to be up to approximately 19m in the north east of the Hunters Cottage OCCS.

As part of the 2019 JPG Preliminary Geoenvironmental Ground Investigation, an extensometer was installed in the opencast, BH109. To-date the extensometer has been monitored on seven occasions. The purpose of the extensometer monitoring is to confirm that self-weight settlement has ceased.

The geotechnical properties of the backfilled materials within the opencast will need to be further investigated as part of a comprehensive geoenvironmental ground investigation in order to assist with detailed settlement analysis.

The settlement analysis should comprise total, including primary consolidation and secondary creep compression, and differential settlement with respect to proposed development and highwalls.



It is likely that foundations for the proposed development will extend into competent bedrock strata following a large-scale earthworks operation. Depending on the thickness and properties of the made ground in the opencast, the following treatment methods may be appropriate.

- Removal of the full thickness of made ground and replacement with re-engineered fill.
- Combination of rapid dynamic compaction (RDC) and dynamic compaction (DC). RDC in areas of less than 5.0m of backfill and DC in areas of less than 8.0m of backfill.
- A combination of rapid dynamic compaction, dynamic compaction and/or partial removal of the non-engineered colliery spoil and re-compaction.
- Reloading and surcharging.

An assessment of the suitability of the colliery spoil materials and also natural 'cut' soils for re-use in earthworks was carried out as part of the 2019 JPG Preliminary Geoenvironmental Ground Investigation. The laboratory results confirmed the granular colliery spoil, cohesive made ground and residual soil are considered suitable for re-use in earthworks, but the cohesive colliery spoil material may be too wet to achieve suitable compaction.

Additional samples should be retrieved from the 'cut' areas as part of a comprehensive geoenvironmental ground investigation in order thoroughly assess the suitability for re-use in earthworks.

4.2 Unrecorded Underground Coal Workings

There remains a residual risk from unrecorded underground workings in the Dunsil, Gawber, Thin, Swallow Wood, Top Haigh Moor and Low Haigh Moor coal seams. Where the seams are present at shallow depths (including below opencast and opencast highwalls) there may be insufficient rock cover.

The approximate extent of the potentially affected area, based on recorded information, is shown on JPG Drawing No. 4848-JPG-SW-XX-DR-G-1309.

Further intrusive coal mining investigation is required as part of a comprehensive geoenvironmental ground investigation in order to confirm the presence of shallow coal or coal workings below the site within influencing depth of the surface.

If shallow coal workings are proven, JPG recommend that the worked areas are treated via drill and grout techniques on an initial 6m by 6m grid with tightening to a secondary 6m by 6m overlapping grid (effectively a 4.24m grid) where excessive grout takes are encountered, with consideration of tightening further with a tertiary 3m by 3m grid to ensure stabilisation of the potential shallow coal workings where higher loading is anticipated, and the workings are at shallow depth.

Foundation and highway design will need to take into consideration the presence of the treated underground workings (if proven).



4.3 Mine Entries

There are no recorded mine entries on the site, although there remains a residual risk of unrecorded mine entries.

Should any unrecorded mine entries be encountered, a suitably qualified person should be consulted. Before any treatment works, a detailed methodology for the stabilisation and capping of the shaft should be provided and agreed with the Coal Authority. A Permit to treat the mine entry will also be required.

4.4 Coal Outcrops

The following coal seams are conjectured to outcrop on the site and so need to be considered: Dunsil, Gawber, Thin and Swallow Wood coal seams.

Due to the potentially high calorific value of coal, there remains a residual risk of combustion where coal is present near to the surface. On this basis, coal seams and any coal-rich soils shall be removed from near the finished surface of the site.

Where coal is encountered during excavations, it should be treated as 'incidental coal' and will need to be removed at least 1.00m below the finished ground level and from service corridors.

No made ground soils with elevated calorific value (>2MJ/kg) shall remain within 1.00m of finished ground level in any soft landscaping. Confirmatory testing will be required as part the earthworks in order to confirm that the soils retained within 1.00m of the finished surface are not potentially combustible.

4.5 Hazardous Ground Gas

Although there are no recorded mine gas emission incidents within 500m of the site, consideration of ground gas in relation to the proposed development will need to be taken into consideration.

Potential sources of ground gas include deep made ground associated with the backfilled opencast and ground gas associated with the deep underground coal workings and possible shallow coal workings.

A monitoring well was installed in BH109A as part of the 2019 JPG Preliminary Geoenvironmental Ground Investigation. The report concluded that no gas protection measures are required as the site was classified as Characteristic Situation 1 (based on one monitoring well only).

It is recommended that additional ground gas monitoring wells are installed and monitoring undertaken post earthworks, in order to confirm the ground gas regime.

5.0 COAL RECOVERY

The site is located within a Surface Coal Resource Area, in accordance with the Coal Authority Interactive Map.



Shallow coal seams have already been extracted from below the majority of the site, yet coal may still be present in areas where no opencast extraction has been undertaken.

As part of the enabling works for the site, an earthworks operation comprising 'cut and fill' is required. As part of these earthworks, coal seams and historical mine workings may be encountered and extracted.

Where this 'incidental coal' is present in areas of development, it will be limited in volume and the economic value will need to be assessed.

Should it be viable to extract the coal and remove it from site for its economic value, a 'Incidental Coal Agreement' between the Coal Authority and the Site Operator is required. A report detailing the extraction of coal and any historical mine workings encountered will need to be submitted to the Coal Authority on completion of any extraction.

6.0 CONCLUSION

Based on the findings of this coal mining risk assessment, past mining activities, potential underground shallow coal workings and potential hazardous ground gas, there is a risk to the proposed development on the site.

The geotechnical properties of the backfilled materials within the opencast will need to be further investigated as part of a comprehensive geoenvironmental ground investigation in order to assist with detailed settlement analysis. The settlement analysis should comprise total, including primary consolidation and secondary creep compression, and differential settlement with respect to proposed development and highwalls.

Further intrusive coal mining investigation is required as part of a comprehensive geoenvironmental ground investigation in order to confirm the presence of shallow coal or coal workings below the site within influencing depth of the surface. If shallow coal workings are encountered, JPG recommend that the worked areas are treated via drill and grout techniques on an initial 6m by 6m grid with tightening to a secondary 6m by 6m overlapping grid (effectively a 4.24m grid) where excessive grout takes are encountered, with consideration of tightening further with a tertiary 3m by 3m grid to ensure stabilisation of the potential shallow coal workings where higher loading is anticipated, and the workings are at shallow depth.

Should any unrecorded mine entries be encountered, a suitably qualified person should be consulted. Before any treatment works, a detailed methodology for the stabilisation and capping of the shaft should be provided and agreed with the Coal Authority. A Permit to treat the mine entry will also be required.



Where coal is encountered during excavations, it should be treated as 'incidental coal' and will need to be removed at least 1.00m below the finished ground level and from service corridors. No made ground soils with elevated calorific value (>2MJ/kg) shall remain within 1.00m of finished ground level in any soft landscaping. Confirmatory testing will be required as part the earthworks in order to confirm that the soils retained within 1.00m of the finished surface are not potentially combustible.

It is recommended that additional ground gas monitoring wells are installed and monitoring undertaken post earthworks, in order to confirm the ground gas regime.

Coal may be encountered during the earthworks operations. Any coal which is to be extracted and removed from site for its economic value during the earthworks will require an 'Incidental Coal Agreement' from the Coal Authority.



Appendix A Figures

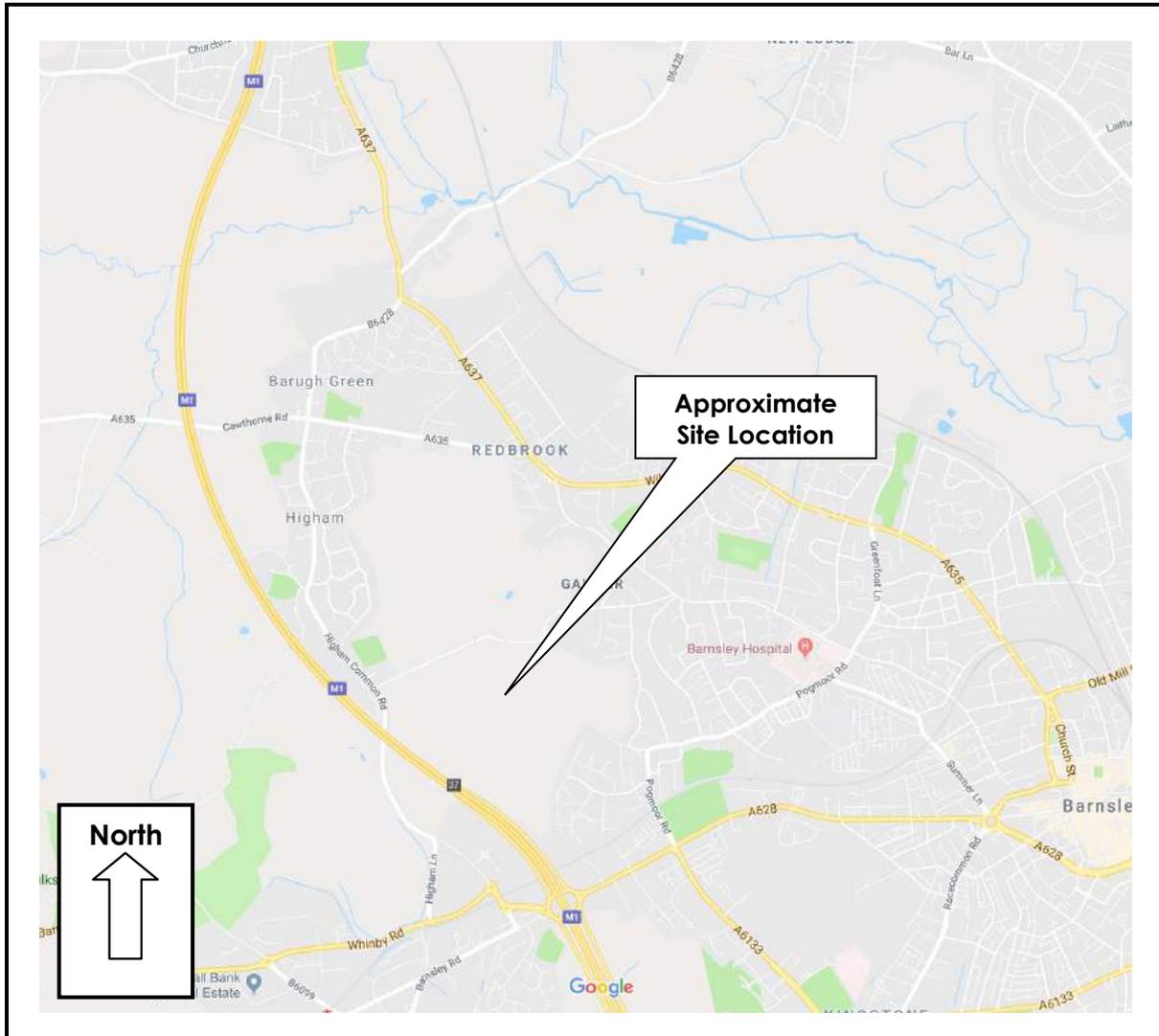


Figure 1 – Site Location Plan

Site	Employment Land, Barnsley West
Client	Strata Sterling Barnsley West Limited
Job Number	4848
Scale	NTS

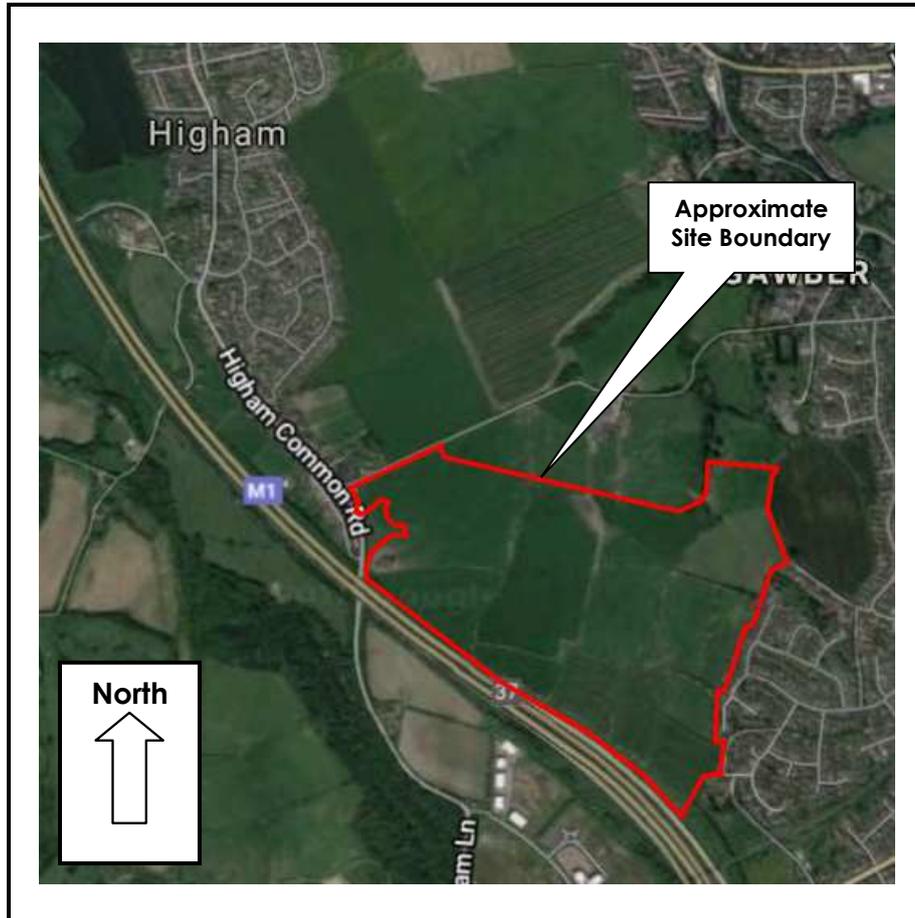


Figure 2 – Aerial Photograph	
Site	Employment Land, Barnsley West
Client	Strata Sterling Barnsley West Limited
Job Number	4848
Scale	NTS

DO NOT SCALE (A1)

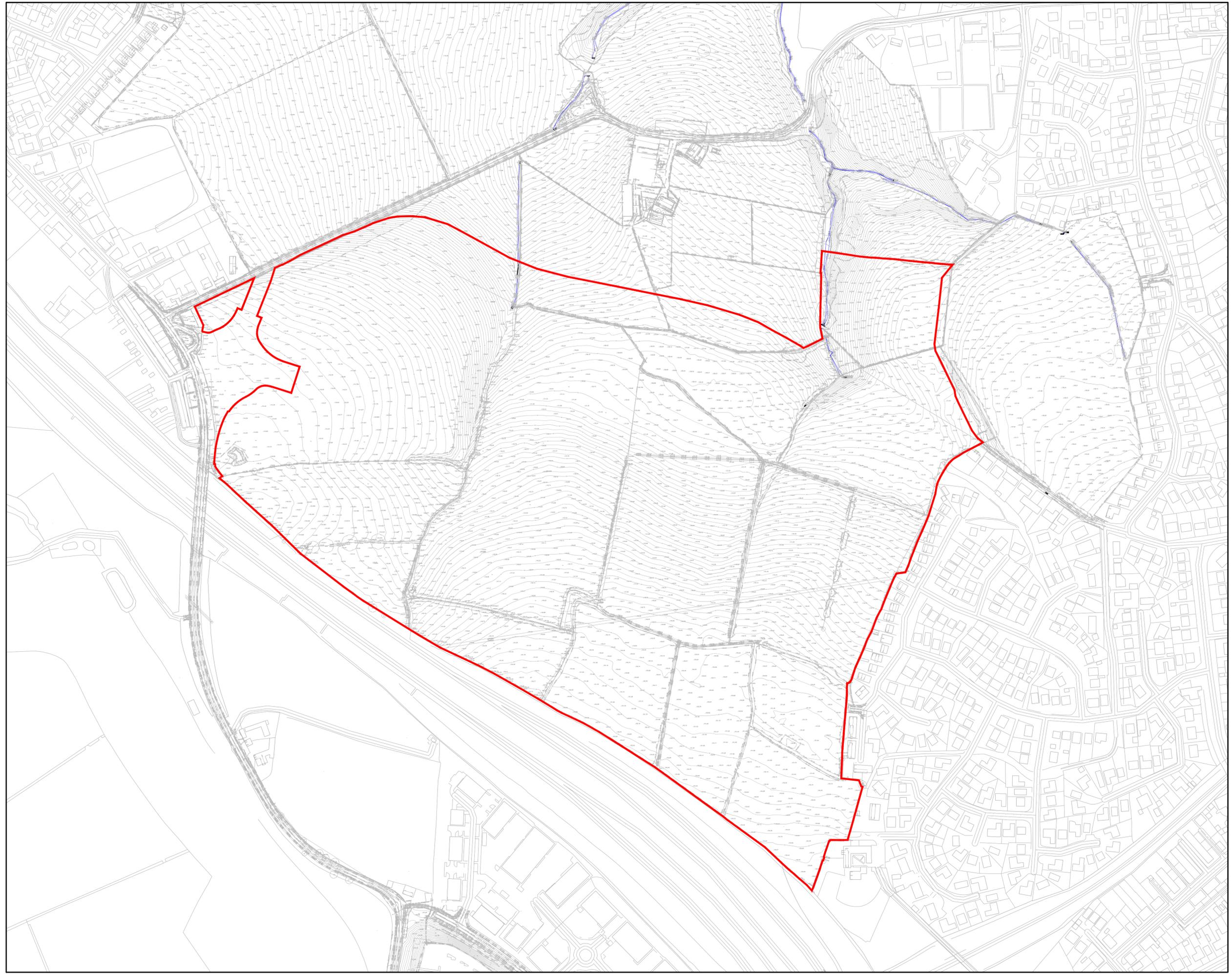
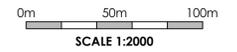
NOTES

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP IS TO COMPLY WITH JPG CONSULTANTS STANDARD SPECIFICATION & ALL RELEVANT BRITISH & EUROPEAN STANDARDS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, M & E CONSULTANTS AND JPG CONSULTANTS DRAWINGS.
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.

LEGEND

— COMMERCIAL BOUNDARY



P02	REDLINE BOUNDARY UPDATED	10/10/23	JDM	LSC
P01	FIRST ISSUE	30.03.23	JDM	EBH

REV	DESCRIPTION	DATE	CHK	BY
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Project
BARNSELY WEST

Drawing Title
COMMERCIAL BOUNDARY PLAN

INFORMATION



- COMMERCIAL SITE BOUNDARY
- INDICATIVE HIGHWALL WITH DIRECTIONAL DIP ARROW. HIGHWALL CREST PROJECTED AT 70° FROM BASE OF EXTRACTION.
- RECORDED WORKINGS IN BASE OF OPENCAST
- INDICATIVE HIGHWALL CREST
- INDICATIVE HIGHWALL TOE

PROJECTED HIGHWALLS HAVE BEEN ESTABLISHED USING HISTORICAL OPENCAST MINE ABANDONMENT PLANS: OE/COMP/03/311 - CRAVEN & B. OE/COMP/03/121 - HUNTERS COTTAGE & EXTENSION, FARM HOUSE LANE COLLIERY - NO. 2 MINE - BARNSELY BED PILLARS, N.E.415 FARM HOUSE LANE PRIVATE OPENCAST SITE. FURTHER SITE INVESTIGATION IS REQUIRED TO CONFIRM HIGHWALL LOCATIONS.

- CONJECTURED FAULT
- TICK INDICATES DOWNTHROWN SIDE
- B BARNSELY SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- UN UNNAMED SEAM ABOVE DUNSL
- DASHED INDICATES CONJECTURED
- D DUNSL SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- G GAWBER SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- THIN THIN SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- SW SWALLOW WOOD SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- THM TOP HAIGH MOOR SEAM OUTCROP
- DASHED INDICATES CONJECTURED
- LHM LOW HAIGH MOOR SEAM OUTCROP
- DASHED INDICATES CONJECTURED

COAL SEAM OUTCROPS HAVE BEEN DETERMINED USING BRITISH GEOLOGICAL SURVEY MAP: 1:10,000 SHEET SE20W (BARNSELY). COAL SEAM OUTCROPS RECORDED IN OCCS ABANDONMENT PLANS WHERE POSSIBLE.

- RECORDED MINE ENTRY
- RECORDED MINE ENTRY - ADIT

COAL MINING RISK ASSESSMENT

- VERY LOW RISK
NO FURTHER SITE INVESTIGATION REQUIRED
- LOW RISK
PREFER TO UNDERTAKE FURTHER SITE INVESTIGATION
- LOW - MODERATE RISK
FURTHER SITE INVESTIGATION REQUIRED
- MODERATE - HIGH RISK
REMEDIAL ACTION ANTICIPATED

CAUTION: MINE ENTRIES & SHALLOW WORKINGS
 CAUTION TO BE OBSERVED ON SITE AT ALL TIMES DUE TO RISK OF SUFFOCATION, LOCATIONS AND COORDINATES OF SHALLOW MINE WORKINGS AND MINE ENTRIES TO BE IN APPROPRIATE GROUND INVESTIGATION.
 ALL MINE BOREHOLES LOCATED ON SITE TO BE SURVEILLED WHERE POSSIBLE AND RECORDED OFF FROM PUBLIC ACCESS UNITS. APPROPRIATE REMEDIAL ACTIONS ARE TAKEN.

SITE INVESTIGATION

- EP-BH EASTWOOD & PARTNERS BOREHOLE 2013
- BH JYG ROTARY BOREHOLE 2019
- TP JYG TRIAL PIT 2019
- EBH JYG EXTENSOMETER BOREHOLE 2019
- BH JYG ROTARY BOREHOLE 2020
- TP JYG TRIAL PIT 2020

0m 31.25m 62.5m
SCALE 1:1250

REV	DESCRIPTION	DATE	CHK	BY
P05	REDLINE BOUNDARY UPDATED	10.10.23	JWM	LSG
P04	REVISED TO COMMERCIAL BOUNDARY ONLY	04.04.23	DMH	LSG
P03	ADDITION OF S278 INVESTIGATIONS	25.02.21	DLT	CLT
P02	AMENDMENT TO REDLINE BOUNDARY	31.07.19	JBW	CLT
P01	FIRST ISSUE	18.07.19	JBW	CLT

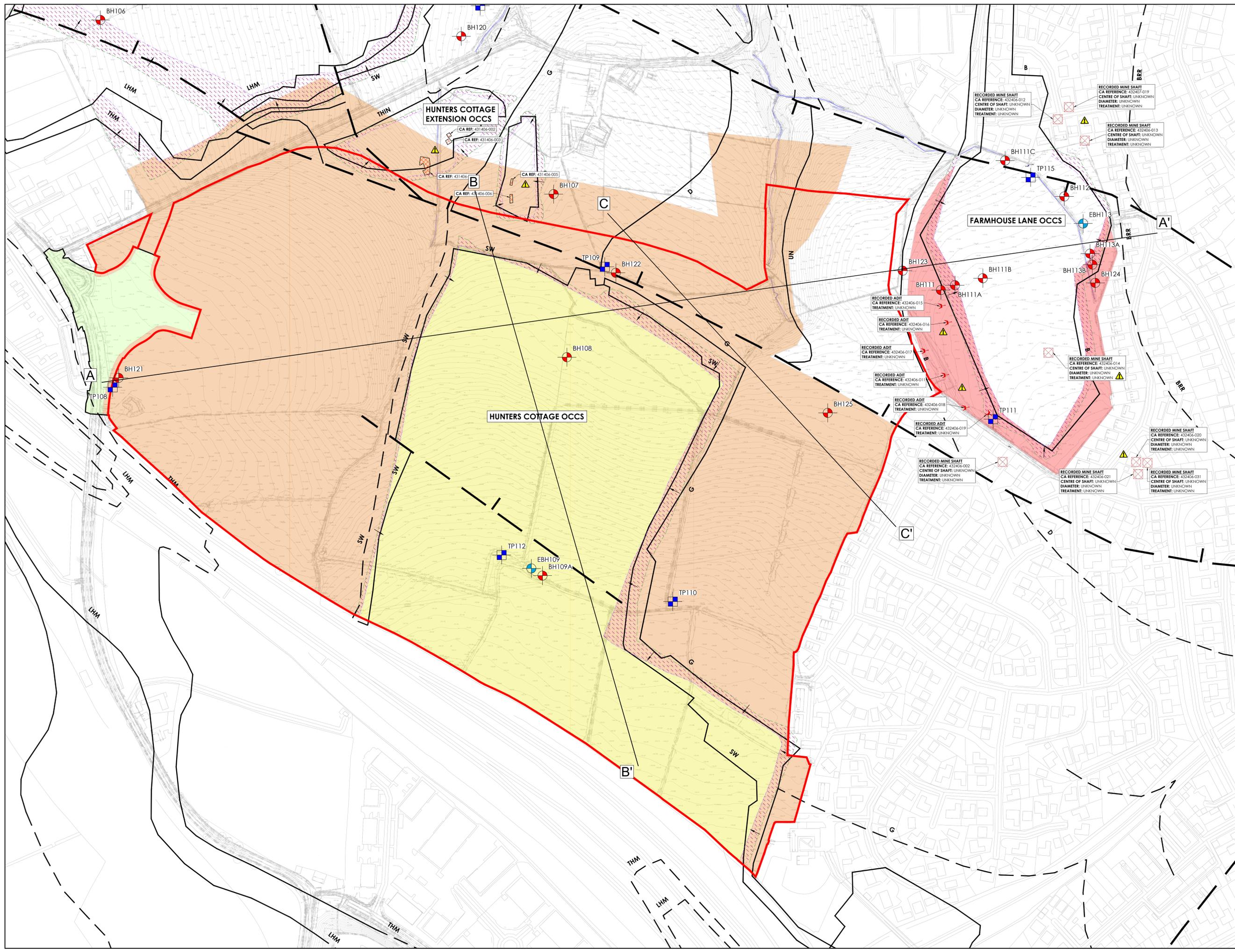
REV	DESCRIPTION	DATE	CHK	BY
P05	REDLINE BOUNDARY UPDATED	10.10.23	JWM	LSG
P04	REVISED TO COMMERCIAL BOUNDARY ONLY	04.04.23	DMH	LSG
P03	ADDITION OF S278 INVESTIGATIONS	25.02.21	DLT	CLT
P02	AMENDMENT TO REDLINE BOUNDARY	31.07.19	JBW	CLT
P01	FIRST ISSUE	18.07.19	JBW	CLT

Project
BARNSELY WEST

Drawing Title
CONCEPTUAL GROUND MODEL - COAL MINING RISK LEVEL ASSESSMENT

INFORMATION ISSUE

JPG
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 Leeds 0113 263 1155 | London 0207 947 4148





Appendix B Coal Authority Mining Reports



The Coal
Authority

Resolving the **impacts** of mining

CON29M Non-Residential Mining Report

BARNSLEY WEST
SOUTH YORKSHIRE

Date of enquiry: 28 November 2018
Date enquiry received: 28 November 2018
Issue date: 28 November 2018

Our reference: 51001983537001
Your reference: 4848/JBW



CON29M Non-Residential Mining Report

This report is based on, and limited to, the records held by the Coal Authority, at the time we answer the search.

Client name

JPG (LEEDS) LIMITED

Enquiry address

BARNSELY WEST, SOUTH YORKSHIRE

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www.groundstability.com

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



Approximate position of property



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Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	Yes
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	Yes
5	Coal mining geology	No
6	Past opencast coal mining	Yes
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	Yes
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	Yes
13	Working facilities order	No
14	Payments to owners of former copyhold land	No

Further recommended reports
Mine entry interpretive report
Mine entry plan and data sheets
Coal mining subsidence claims 50m buffer report
Coal mining subsidence claims history

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 7 seams of coal at shallow to 350m depth, and last worked in 1983.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4. Mine entries

Within, or within 20 metres of, the boundary of the property there are 14 mine entries, the approximate positions of which are shown on the enquiry boundary plot.

Our records disclose the following information:

432406-014. has probably been removed to some extent by opencast mining

432406-013. No treatment details.

431406-003. has probably been removed to some extent by opencast mining

431406-005. has probably been removed to some extent by opencast mining

432407-008. No treatment details.

432406-017. No treatment details.

432406-015. No treatment details.

432406-018. No treatment details.

431406-004. has probably been removed to some extent by opencast mining

431406-002. has probably been removed to some extent by opencast mining

431406-006. has probably been removed to some extent by opencast mining

432406-019. No treatment details.

432406-011. No treatment details.

432406-016. No treatment details.

There may however be mine entries/additional mine entries in the local area which the Coal Authority has no knowledge of.

For an additional fee, the Coal Authority can provide a Mine Entry Interpretive Report. The report will provide a separate assessment for the mine entry/entries referred to in this report. It gives an opinion on the likelihood of mining subsidence damage caused from ground movement as a consequence of the mine entry/entries. It also gives details of the remedies available for subsidence damage where the mine entry was sunk in connection with coal mining.

Please note that it may not be possible to produce a report if the main building to the property cannot be identified from Coal Authority plans (ie for development sites and new build).

For further advice on how to order this additional information please visit www.groundstability.com.

5. Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6. Past opencast coal mining

The property is within the boundary of an opencast site from which coal has been removed by opencast methods.

7. Present opencast coal mining

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

8. Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

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

9. Coal mining subsidence

A damage notice or claim for alleged subsidence damage was made in November 2003 for 1 WHARFEDALE ROAD, BARNSELY, SOUTH YORKSHIRE, S75 2LJ. However, the claim was rejected.

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

There are a further 2 claim(s) within 50 metres of the property boundary that do not match the property address. These are shown on the enquiry boundary plot.

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.

If further subsidence damage claims information is required, please visit www.groundstability.com.

10. Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12. Withdrawal of support

The property is in an area where notices to withdraw support were given in 1956, 1976, 1977 and 1987.

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.

13. Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14. 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.

Comments on the Coal Authority information

The Coal Authority own the copyright in this report and the information used is protected by our database right.

The boundary plot shows the approximate location of the disused mine entry/entries referred to in this report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991*). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting www.groundstability.com.

If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wish to examine the source plans from which the information has been taken, these are available to view, free of charge, at our Head Office in Mansfield. To book an appointment please ring 01623 637225. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission of the owner must be sought. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries). Our emergency telephone number is 01623 646333.

*Note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore if development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before

beginning work on site. All proposals should apply good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

Disclaimer

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Alternative formats

If you would like this report in an alternative format, please contact our communications team.

Enquiry boundary

The map image is too large for this page and will be sent in a separate document

How to contact us

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+44 (0)1623 637 000 (International)

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Mansfield
Nottinghamshire
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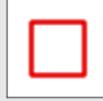
 /thecoalauthority

 /coalauthority

Enquiry boundary

Key

Approximate position of enquiry boundary shown



Disused adit



Disused mineshaft



Coal claims



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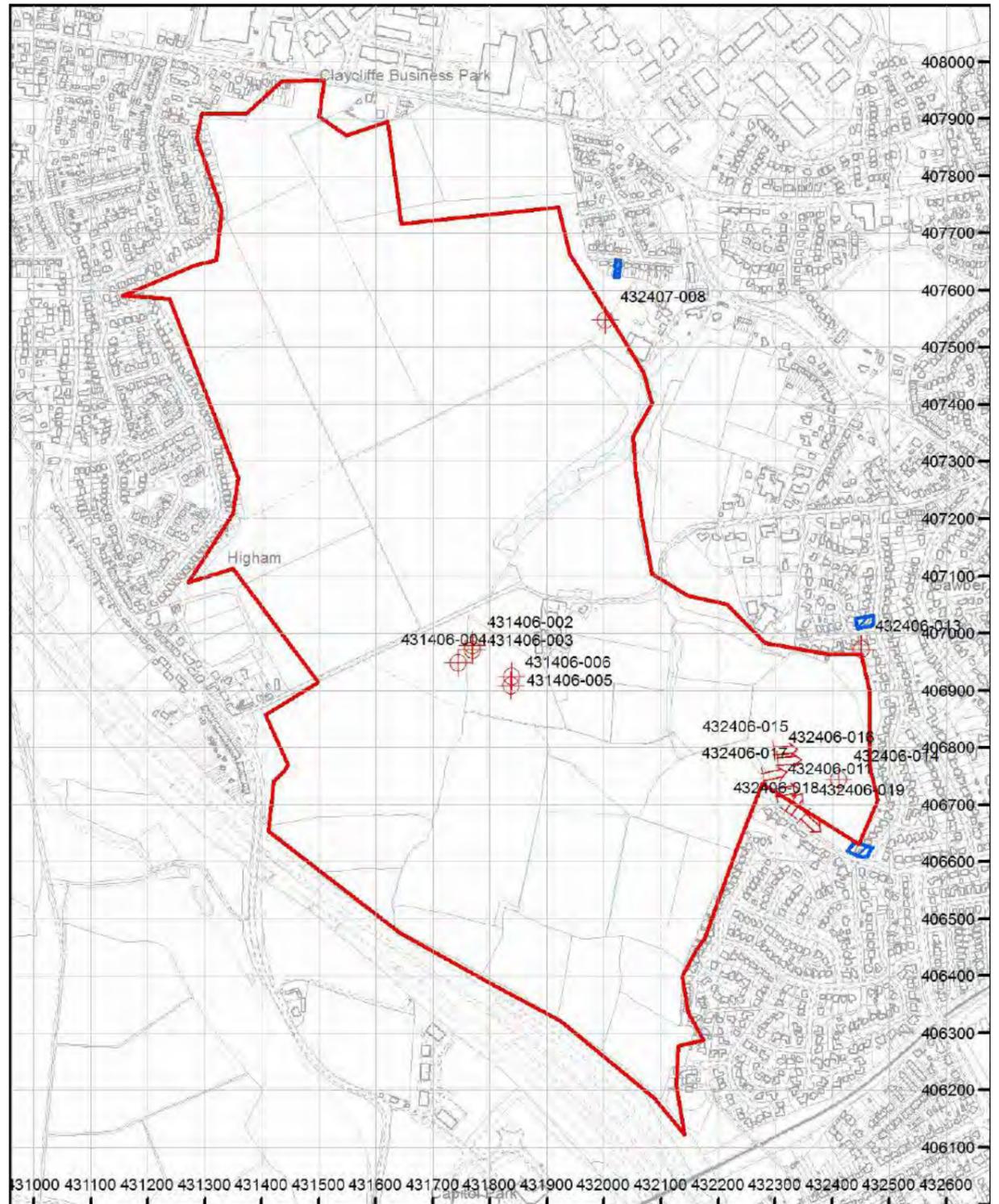
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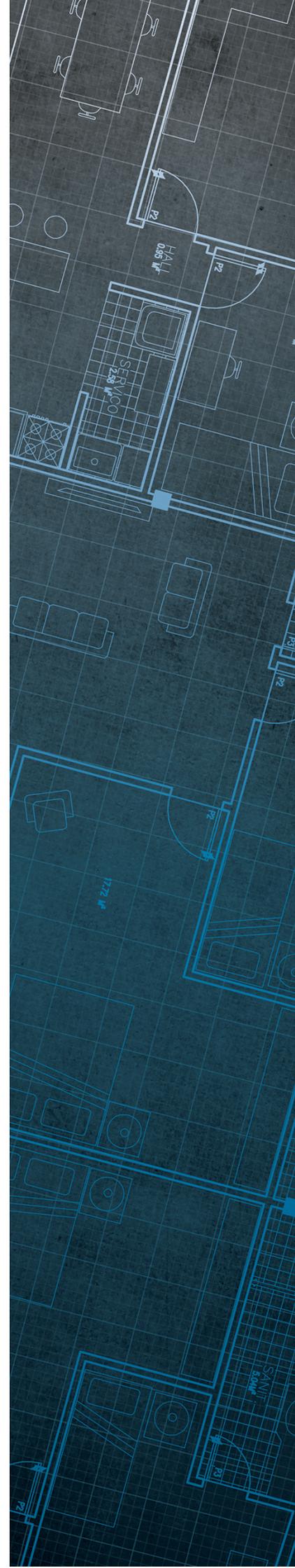
The Coal
Authority

Consultants Coal Mining Report

Barnsley West
South Yorkshire

Date of enquiry: 28 November 2018
Date enquiry received: 28 November 2018
Issue date: 28 November 2018

Our reference: 51001983537002
Your reference: 4848/JBW



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

JPG (LEEDS) LIMITED

Enquiry address

Barnsley West
South Yorkshire

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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
POGMOOR	BARNSLEY	Coal	6Z77	6	Beneath Property	4.7	North-East	297	1926
FARMHOUSE LANE	BARNSLEY	Coal	6Z78	11	Beneath Property	2.6	North-East	295	1910
FARMHOUSE LANE	BARNSLEY	Coal	6Z79	16	Beneath Property	2.5	North-East	297	1900
DODWORTH	FLOCKTON THICK	Coal	6NKR	86	Beneath Property	3.8	North-East	68	1958
DODWORTH	FLOCKTON THICK	Coal	6NJR	96	Beneath Property	3.8	North-East	71	1959
DODWORTH	FLOCKTON THICK	Coal	64CW	103	Beneath Property	3.9	North-East	61	1916
DODWORTH	FLOCKTON THICK	Coal	6Z7P	108	Beneath Property	4.5	North-East	70	1915
DODWORTH	FLOCKTON THICK	Coal	6Z6U	110	Beneath Property	4.1	North-East	76	1950
DODWORTH	FLOCKTON THICK	Coal	64CV	127	Beneath Property	5.2	North-East	66	1950
DODWORTH	FLOCKTON THICK	Coal	6Z7Q	127	Beneath Property	3.6	North-East	69	1950
DODWORTH	TOP FENTON	Coal	6NCR	128	Beneath Property	2.7	North-East	79	1943
DODWORTH	TOP FENTON	Coal	6NDR	133	Beneath Property	3.3	East	81	1958
DODWORTH	FLOCKTON THICK	Coal	6NLR	133	Beneath Property	2.8	North-East	70	1952
DODWORTH	TOP FENTON	Coal	64CR	144	Beneath Property	3.9	North-East	74	1910
DODWORTH	FENTON	Coal	6NNT	146	North	3.4	North-East	91	1958
DODWORTH	FLOCKTON THICK	Coal	6Z7R	147	Beneath Property	3.2	North-East	70	1954
DODWORTH	TOP FENTON	Coal	6NER	147	North-East	3.1	North	86	1958
DODWORTH	TOP FENTON	Coal	6Z7S	149	Beneath Property	4.6	North-East	91	1935
DODWORTH	TOP FENTON	Coal	6Z6S	153	Beneath Property	4.7	North-East	81	1935
unnamed	TOP FENTON	Coal	64CQ	159	Beneath Property	3.4	North-East	74	1930
DODWORTH	TOP FENTON	Coal	6Z7U	163	Beneath Property	2.7	South	86	1936
DODWORTH	TOP FENTON	Coal	64CP	170	Beneath Property	5.3	North-West	74	1936

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
DODWORTH	PARKGATE	Coal	64CV	171	Beneath Property	2.2	North-East	137	1950
DODWORTH	PARKGATE	Coal	6Z7X	173	Beneath Property	4.7	North-East	137	1921
DODWORTH	PARKGATE	Coal	6IEF	175	South	3.8	North-East	137	1915
STANHOPE SILKSTONE	SILKSTONE	Coal	6NDS	213	Beneath Property	4.4	North-East	107	1928
DODWORTH	TOP FENTON	Coal	626T	221	North-East	3.8	North-East	185	1930
DODWORTH	SILKSTONE	Coal	6NHS	226	Beneath Property	3.9	North-East	105	1977
STANHOPE SILKSTONE	SILKSTONE	Coal	6NCV	240	North	3.9	North-East	107	1928
HIGHAM	SILKSTONE	Coal	6NES	243	West	3.6	North-East	147	1880
DODWORTH	SILKSTONE	Coal	6Z70	244	Beneath Property	4.3	North-East	105	1971
DODWORTH HIGHAM	SILKSTONE	Coal	64D3	245	Beneath Property	4.1	North-East	147	1891
unnamed	SILKSTONE	Coal	6NFS	246	Beneath Property	4.7	North-East	107	1928
ROB ROYD	SILKSTONE	Coal	6Z80	248	South-West	4.1	North-East	176	1933
unnamed	SILKSTONE	Coal	6I53	251	South-West	3.7	North-East	147	1883
DODWORTH	SILKSTONE	Coal	6Z7Z	255	Beneath Property	2.6	East	105	1944
DODWORTH	SILKSTONE	Coal	6Z7Y	256	Beneath Property	3.8	North-East	147	1893
ROB ROYD	SILKSTONE	Coal	6IEJ	257	South	4.2	North-East	167	1935
unnamed	SILKSTONE	Coal	64D2	260	Beneath Property	3.4	North-East	147	1927
DODWORTH	SILKSTONE	Coal	6NGS	269	North-East	4.0	North-East	105	1979
DODWORTH	SILKSTONE	Coal	6NDW	274	North-East	3.0	North-East	100	1978
WOOLLEY/REDBROOK	WHINMOOR	Coal	64D9	287	Beneath Property	4.1	North-East	107	1965
DODWORTH	SILKSTONE	Coal	4VL6	289	Beneath Property	3.7	North-East	105	1972
WOOLLEY/REDBROOK	WHINMOOR	Coal	Z23A	294	Beneath Property	4.4	North-East	102	1983
WOOLLEY/REDBROOK	WHINMOOR	Coal	6Z72	295	Beneath Property	4.8	North-East	107	1979
WOOLLEY/REDBROOK	WHINMOOR	Coal	Z23A	297	Beneath Property	5.2	North-East	108	1983
WOOLLEY	WHINMOOR	Coal	6NLS	298	Beneath Property	4.3	North-East	107	1979
WOOLLEY	WHINMOOR	Coal	6Z7H	301	Beneath Property	3.8	North-East	109	1969

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
WOOLLEY	WHINMOOR	Coal	6NEV	321	North-East	4.8	North-East	115	1978
WOOLLEY	WHINMOOR	Coal	Z89	326	North-East	5.2	North-East	107	1980
WOOLLEY/REDBROOK	WHINMOOR	Coal	6Z75	343	North-East	4.7	North-East	110	1977
WOOLLEY/REDBROOK	WHINMOOR	Coal	6Z71	349	North-East	3.3	North-East	105	1976

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

Distance to spine roadway (m)	Direction to spine roadway
Within	N/A

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	431406-002	431771 406978	has probably been removed to some extent by opencast mining	Coal	
Shaft	431406-003	431771 406971	has probably been removed to some extent by opencast mining	Coal	
Shaft	431406-004	431746 406949	has probably been removed to some extent by opencast mining	Coal	
Shaft	431406-005	431840 406925	has probably been removed to some extent by opencast mining	Coal	
Shaft	431406-006	431838 406909	has probably been removed to some extent by opencast mining	Coal	
Shaft	432406-002	432364 406628		Coal	
Adit	432406-011	432302 406721		Coal	
Shaft	432406-012	432423 406995		Coal	
Shaft	432406-013	432452 406972		Coal	
Shaft	432406-014	432413 406745	has probably been removed to some extent by opencast mining	Coal	
Adit	432406-015	432298 406795		Coal	
Adit	432406-016	432305 406777		Coal	
Adit	432406-017	432280 406747		Coal	
Adit	432406-018	432324 406686		Coal	
Adit	432406-019	432349 406680		Coal	
Shaft	432406-020	432507 406628	was not encountered during drilling works undertaken by Abatech prior to development in 2007. We have no record of what steps, if any, have been taken to treat this shaft	Coal	
Shaft	432406-021	432509 406615		Coal	
Shaft	432406-031	432519 406627		Coal	
Shaft	432407-008	432004 407548		Coal	
Shaft	432407-019	432435 407008		Coal	

Abandoned mine plan catalogue numbers

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

12461	NE3	FGB6
7196	7198	NE565
NE1050	SY36	7698

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

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
BARNSLEY	Coal	Yes	Within	N/A	12
BARNSLEY	Coal	Yes	Within	N/A	340
DUNSIL	Coal	Yes	Within	N/A	0
DUNSIL	Coal	Yes	Within	N/A	342
SWALLOW WOOD	Coal	Yes	Within	N/A	164
SWALLOW WOOD	Coal	Yes	17.8	South-West	317
TOP HAIGH MOOR	Coal	Yes	49.2	South-West	318
TOP HAIGH MOOR	Coal	Yes	Within	N/A	319

Geological faults, fissures and breaklines

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

Faults under or close to the property recorded.

Opencast mines

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

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

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

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

A damage notice or claim for alleged subsidence damage was made in November 2003 for 1 WHARFEDALE ROAD, BARNSLEY, SOUTH YORKSHIRE, S75 2LJ. However, the claim was rejected.

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

There are a further 2 claim(s) within 50 metres of the property boundary that do not match the property address. These are shown on the enquiry boundary plot.

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.

If further subsidence damage claims information is required, please visit www.groundstability.com.

See Section 4 for further information.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

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

Withdrawal of support notices

The property is in an area where notices to withdraw support were given in 1956, 1976, 1977 and 1987.

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.

Coal mining subsidence

The site is within an area of previous interest. It is close to where the Coal Authority or licensed mine operator has investigated and where necessary remediated issues relating to coal mining subsidence.

The site requires further investigation and may influence your risk assessment. We recommend that you order the appropriate **Coal Authority Subsidence Claims Report**, which will include more information about the hazard.

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

Section 5 – Data definitions

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

Past underground coal mining

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

Probable unrecorded shallow workings

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

Spine roadways at shallow depth

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

Mine entries

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

Abandoned mine plan catalogue numbers

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

Outcrops

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

Geological faults, fissures and breaklines

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

Opencast mines

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

Coal Authority managed tips

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

Site investigations

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

Remediated sites

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

Coal mining subsidence

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

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

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

Mine gas

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

Mine water treatment schemes

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

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

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

Future underground mining

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

Coal mining licensing

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

Court orders

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

Section 46 notices

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

Withdrawal of support notices

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

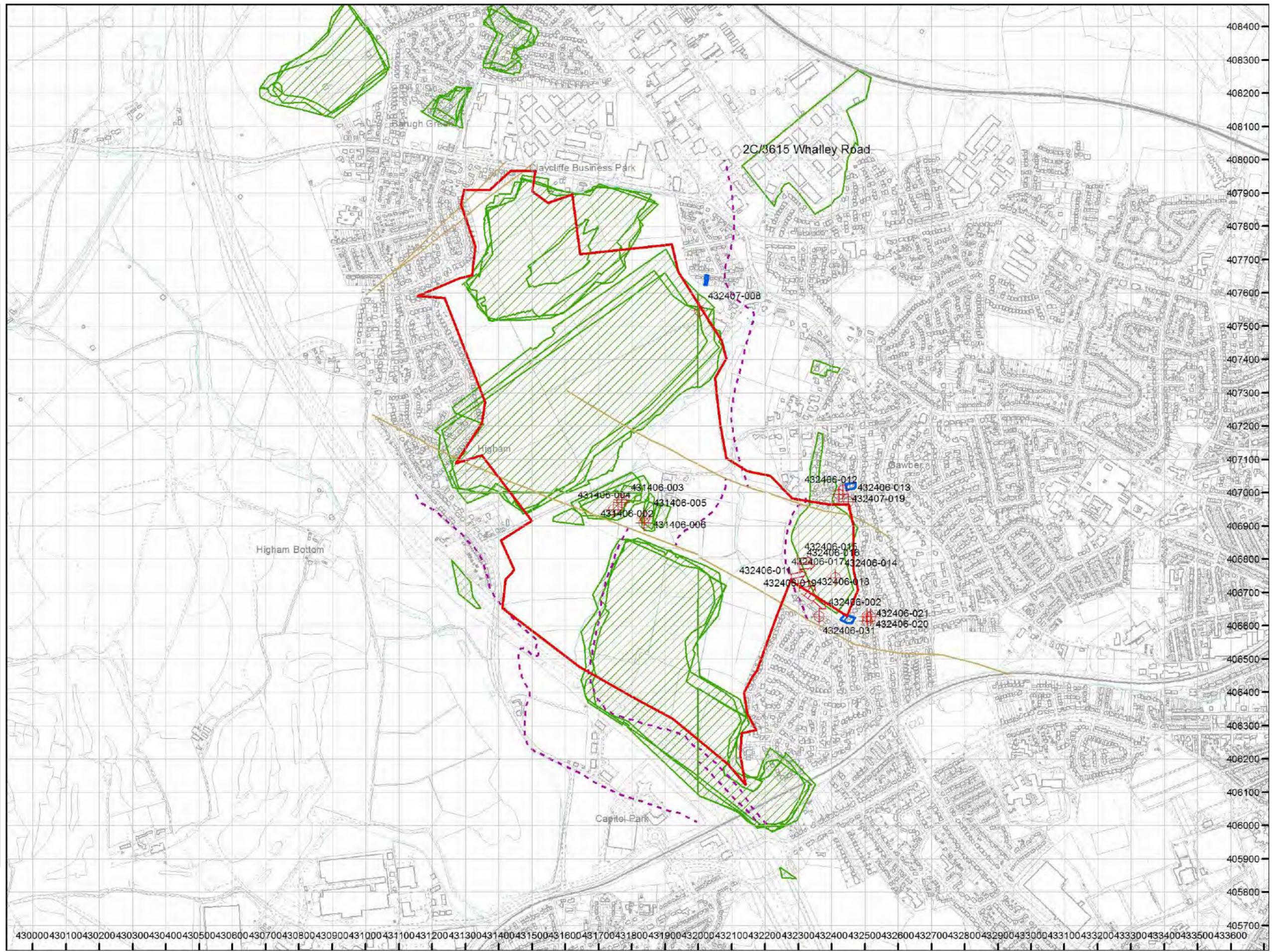
Payment to owners of former copyhold land

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

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

Key

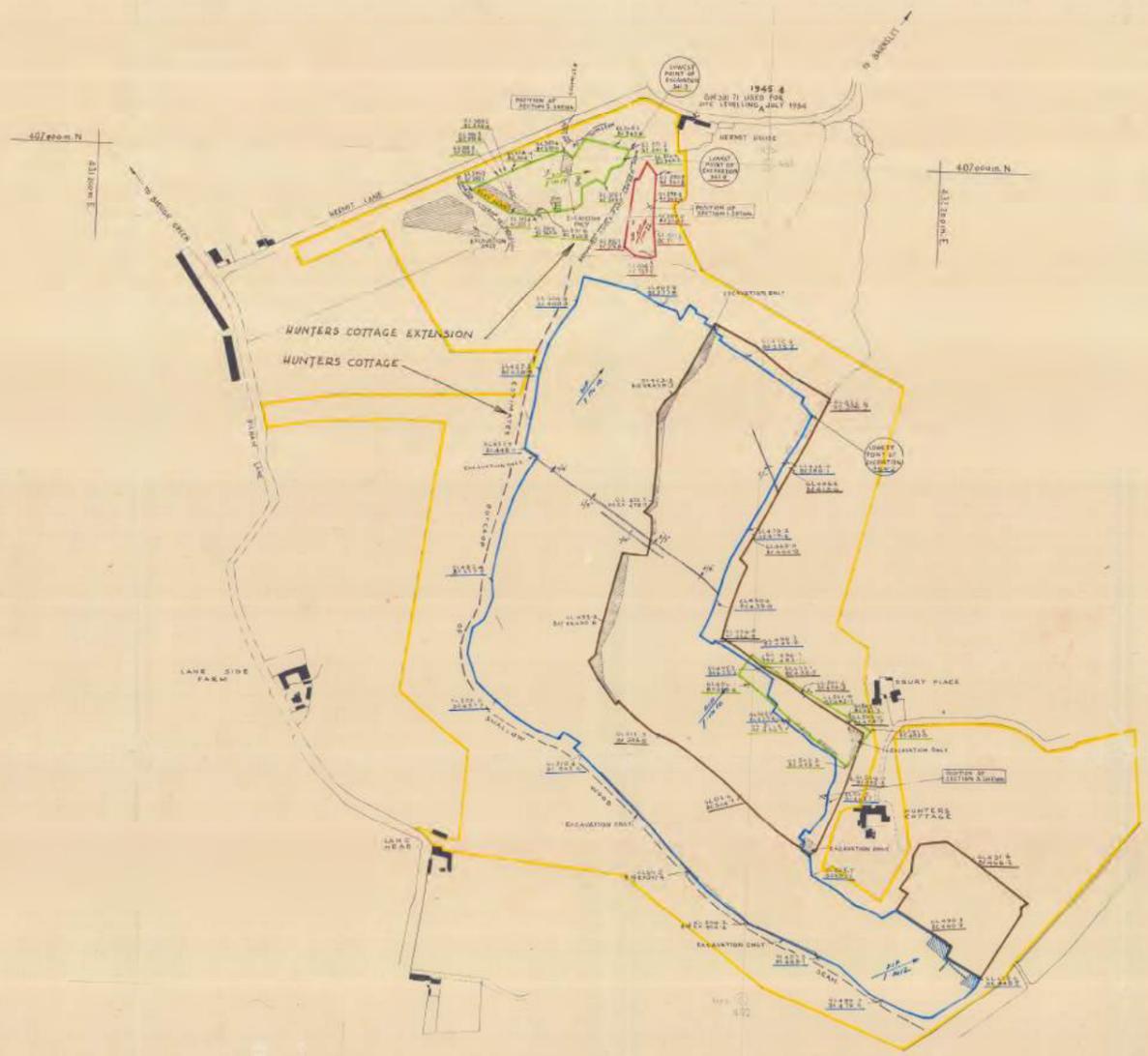
- Approximate position of the enquiry boundary shown 
- Disused mine shaft 
- Disused adit 
- Outcrop (Conjectured) 
- Geological faults 
- Opencast mine licence area 
- Unlicensed opencast site 
- Coal claim 



How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com



Appendix C Coal Authority Abandonment Plans



LEGEND

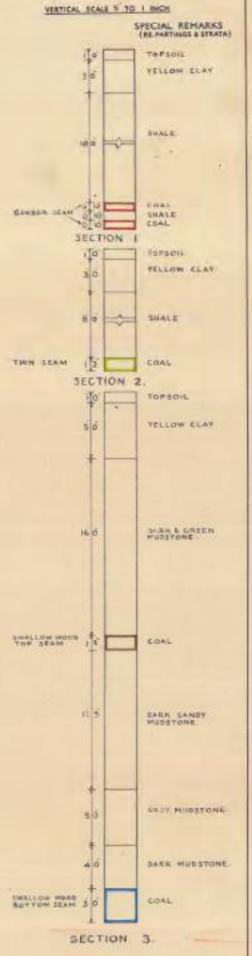
LOCATION
 1:2500 SCALE ORDNANCE SHEET REFERENCE: SE 5500, 6, 3, 10
 DATE OF ORDNANCE SHEET: 1931
 NAME OF SITE: HUNTERS COTTAGE & EXTENSION
 LOCATION OF SITE: 1 MILE WEST OF BARNESLEY
 COUNTY: YORKSHIRE
 PARISH: BARTON, BARNESLEY, OSBORTH

QUANTITIES WORKED
 TOTAL AREA REQUISITIONED: 134.922 ACRES SHOWN
 TOTAL AREA WORKED EXCLUDING BATTERS: 64.33 ACRES
 TOTAL COAL RECOVERED FROM ABOVE: 235,405 TONS

NAMES OF SEAMS WORKED FOR ABOVE TONNAGE (SEAMS NAMED FROM LEFT TO RIGHT IN GEOLOGICAL DESCENDING ORDER)
 AREA OF COAL SEAM WORKED COLOUR EDGED (SEAMS COLOURED FROM LEFT TO RIGHT IN GEOLOGICAL DESCENDING ORDER)
 TOTAL OLD WORKING VOIDS IN COAL SEAM IN CUBIC YDS.
 AREA OF SEAM WHERE OLD WORKING VOIDS WERE LOCATED
 DIP AND DIRECTION OF EACH SEAM SHOWN
 REDUCED LEVELS TO ORDNANCE DATUM SHOWN (GROUND LEVEL RELATIVE TO NEWLIN BOTTOM OF COAL)
 FAULTS SHOWN WITH THROW IN FEET ON DOWNTHROW SIDE

SEAM	THICKNESS	SWALLOW HOOD TOP	SWALLOW HOOD BOTTOM
BARBARA SEAM	17	75	350
THIN SEAM			

VERTICAL SECTION THROUGH ALL SEAMS



GENERAL DESCRIPTION

TYPE OF LAND: AGRICULTURAL & WOODLAND
 NATURE OF OVERBURDEN: TOPSOIL + CLAY & MUDSTONE
 NATURE OF COAL: FAIR QUALITY
 SPECIAL REMARKS:

OPERATIONAL DATA

	HUNTERS COTTAGE	HUNTERS COTTAGE EXT	COPY SENT TO	DATE	INITIALS
DATE REQUISITIONED	13-3-45	1-3-46 (1945)			
COMMENCEMENT OF COALING	12-11-45	1-10-46			
COMPLETION OF COALING	10-5-47	2-11-46			
COMPLETION OF RESOLING	1-10-49	29-5-46			
SITE HANDED BACK TO AGRICULTURE	4-50	29-5-56 (28-56)			
FINAL DEREGISTRATION OF SITE					

NATIONAL COAL BOARD
 OPENCAST EXECUTIVE
 85/87 JERMYN STREET
 LONDON, S.W.1

LAND SURVEY BRANCH
 DRAWN BY: W. S. Smead
 DATE: 1-12-45
 CHECKED BY: [Signature]
 DATE: 1-12-45
 SCALE: 1:2500

NAME OF ZONE OR CONTRACT

NAME OF SITE **HUNTERS COTTAGE & EXTENSION**

SITE REFERENCE NUMBER: O30102 B.
 OPERATIONAL CONTRACT NUMBER: OE/CON/3578.
 DRAWING NUMBER: OE/COMP/03/121

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