COAL MINING RISK ASSESSMENT AND COAL RECOVERY REPORT

Proposed Industrial Development
Higham Lane North
Dodworth

Reference	**JAM/CMRA/4173.v1**
Date	**February 2019**
Version	**1**

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JPG (Leeds) Ltd. Conceptual Geological Ground Model - Coal Mining Risks. Higham Lane North, M1 Jct 37. 4173 - GC01. Dated January 2019.

The Harris Partnership. Proposed Site Plan. Proposed Industrial Development - Capitol Park, Junction 37 M1, Higham Lane, Barnsley. Job/Dwg: 11138A-002. Dated March 2018. For Sterling Capitol PLC.

Appendix B Coal Authority Mining Reports

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CONFIDENTIALITY STATEMENT

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

Sterling Capitol PLC
2nd Floor
Victoria Wharf
4 The Embankment
Sovereign Street
LEEDS
LS1 4BA

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

Version	Purpose/Description	Date
1	Final – For issue to Client	February 2019

1.0 APPLICATION

Sterling Capitol PLC is to submit a planning application for the proposed industrial development of land adjacent to Higham Lane, Barnsley and the M1 motorway (the 'site').

JPG (Leeds) Ltd has subsequently been commissioned to prepare a Coal Mining Risk Assessment for the proposed development site, 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 comprises two irregularly-shaped agricultural fields with a total area of approximately 5.96 hectares. The approximate centre of the site is located at NGR 431550, 406370. A site location plan is presented as Figure 1 in Appendix A.

The northern field falls gradually to the north west, with ground levels of approximately 155m AOD in the south falling to approximately 145m AOD in the north. A hill is present in the southern field, the highest point of which is at approximately 163m AOD.

The north-eastern boundary of the site comprises a wooden fence running parallel to the M1 motorway, which is located within a cutting adjacent to the site. Higham Lane abuts the south-western boundary of the site. Higham Lane is raised on an embankment adjacent to the north west of the site before being bridged over the M1. The eastern, southern and western boundaries consist of mature trees and overgrown hedgerows. Capitol Park, a commercial/office development is present to the east.

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

1.2 Description and Layout of Proposed Development

The proposed development comprises two industrial units with associated roads and infrastructure. Access will be from Capitol Close to the south east of the site.

A proposed development plan has been provided, which is referenced below, and a copy is contained in Appendix A.

- The Harris Partnership. Proposed Site Plan. Proposed Industrial Development - Capitol Park, Junction 37 M1, Higham Lane, Barnsley. Job/Dwg: 11138A-002. Dated March 2018. For Sterling Capitol PLC.

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. CON29M Non-Residential Mining Report. Higham Lane, Higham, Barnsley, S75 3UB. Ref 51001978525001. Date of issue 14 December 2018.
- The Coal Authority. Consultants Coal Mining Report. Higham Lane, Higham, Barnsley, S75 3UB. Ref 51001978525002. Date of issue 14 December 2018.
- The Coal Authority. Abandonment Plan: NE375 Hunters Cottage and Extension Opencast Site., abandoned Aug 1949 and Nov. 1954.
- JPG (Leeds) Ltd. Geoenvironmental Desk Study Report. Higham Lane North. Ref JAM/DS/4173.v1.
- British Geological Survey (BGS), Sheet 87, Barnsley, 1:50,000 scale, Solid and Drift Edition, published 2008.
- BGS, Sheet SE30NW, Barnsley, 1:10,000 scale, dated 2005.
- BGS, The Pennine Lower and Middle Coal Measures formations of the Barnsley district, Internal Report IR/06/135, dated 2006.
- CIRIA Special Publication 32. Technical Guide 34. Construction Over Abandoned Mine Workings. Dated 1984.

3.0 IDENTIFICATION AND ASSESSMENT OF SITE SPECIFIC COAL MINING

Coal Mining Issue	Yes	No	Remarks
Underground coal mining	X		The CA Mining Reports, included in Appendix B, state that the site is affected by past recorded underground coal mining in six coal seams from 90m to 350m depth, and last worked in 1966. Based on their depth and respective thicknesses, any workings in these seams are not considered to pose a risk to the surface stability of the site. The Top Haigh Moor Coal seam outcrops on the site and dips approximately 1 in 10 to the north east. The upper leaf of the Low Haigh Moor Coal seam outcrops on/near the western site boundary. The lower leaf is shown to outcrop approximately 150m to the south west. The Coal Authority believes there is coal at or close to the surface which may have been worked at some time in the past. It is considered the shallow coal referred to by the Coal Authority relates to the Top and Low Haigh Moor coal seams. The next named seam beneath the Low Haigh Moor is the Lidget Seam. Based on the depth and the recorded coal seam separation, the Lidget Seam is not considered to pose a risk to the surface stability of the site. Mitigation measures, as outlined in Section 4, will be required with regard to the potential underground coal workings below the site. A plan showing the residual coal mining risks, including a geological cross section of the site, has been prepared. This is referenced below, and a copy is contained in Appendix A. J JPG (Leeds) Ltd. Conceptual Geological Ground Model – Coal Mining Risks. Higham Lane North, M1 Jct 37. 4173-GC01. Dated January 2019.
Surface mining (opencast workings)		X	The site is not located within the boundary of an opencast site from which coal has been removed by opencast methods, according to the Coal Authority Mining Report. A large opencast coal site, known as Hunters Cottage, is located approximately 30m to the north east of the site. However, the proposed development on the site will not be affected by this opencast. Abandonment plans, referenced in Section 2.0, indicate that the Swallow Wood and Top Haigh Moor coal seams were extracted by opencast methods within this opencast.
Mine entries (shafts and adits)		X	There are no known mine entries on the site or within 20m of the site boundary, according to the CA Mining Report. However, the presence of unrecorded mine entries (shafts, adits or bell pits) cannot be discounted.
Coal mining geology		X	No faults are recorded on the site. No fissures or breaklines are indicated on the site.
Record of past mine gas emissions or potential		X	None recorded within 500m of the site. (Coal Mining Reports). Ground gas monitoring is required to confirm any ground gas protection requirements for new buildings constructed on the site. Potential sources of ground gas include: deep made ground associated with adjacent backfilled opencasts and coal/mines gas associated with coal seams/potential underground coal workings. Measures may be required to mitigate the potential risks posed from ground gas. (See Section 4).
Recorded coal mining surface hazard		X	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. 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.

4.0 MITIGATION STRATEGY PROPOSED

4.1 Underground Coal Workings

There is a risk from unrecorded underground workings in the Top Haigh Moor and the two leafs of the Low Haigh Moor coal below the site, where insufficient rock cover is present, possibly leading to progressive failure. Large cut and fill earthworks are proposed for the site, which is likely to result in a decrease in the thickness of competent rock cover over the potentially worked coal seams.

A coal mining investigation is required to confirm the presence or otherwise of unrecorded underground coal workings below the site.

If coal workings are proven, mitigation measures are likely to comprise the drilling and grouting on a 3m grid below the footprint of the proposed buildings or highways where shallow mine workings are present. A Permit to Treat the coal workings will be required from the Coal Authority.

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 workings within these seams may be encountered. It is anticipated that an 'Incidental coal agreement' will be required. This is detailed in Section 5 of this report.

Foundation and pavement (road construction) design will need to take into consideration the presence of underground workings (if proven below the site).

4.2 Ground Gas

There are no records of past mine gas emissions within 500m of the site.

Potential sources of ground gas include: deep made ground associated with the adjacent backfilled opencast to the east and coal/mines gas associated with possible unrecorded underground coal workings.

Ground gas monitoring is required to confirm any ground gas protection requirements for new buildings constructed on the site.

Shallow wells will be installed and monitored as part of a ground investigation prior to the development on the site.

4.3 Other

Although the made ground and natural soils below the site are not expected to contain any significant quantities of coal debris, there may be shallow coal at or near the surface. It will be necessary to obtain samples and test for calorific value as part of future ground investigation works.

If any potentially combustible soils are proven, they will need to be removed at least 1m below the finished ground level and from service corridors.

5.0 COAL RECOVERY

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

The Top Haigh Moor coal seam is known to outcrop across the central part of the site and has a recorded thickness of between 0.69m and 1.19m. The upper leaf of the Low Haigh Moor coal seam is known to outcrop on/near the western site boundary and the lower leaf is shown to outcrop approximately 150m to the south west. The Low Haigh Moor coal seam has a recorded thickness of between 0.42m and 1.02m.

As part of the enabling works for the site, an earthworks operation comprising 'cut and fill' is required. It is likely that soils and rock will be cut from the southern half of the site and used to raise levels in the north. As part of these earthworks, coal seams and historical workings within the Top Haigh Moor and Low Haigh Moor coal seams may be encountered. There is the potential for extraction of the coal seam(s) below the site as part of these earthworks. The coal may be relocated on site or removed from the site.

It is anticipated that an 'Incidental coal agreement' will be required from the Coal Authority. This is an 'Agreement to Dig and Carry Away Coal in the Course of Non-Mining Activities'. A report detailing the extraction of coal will need to be submitted to the Coal Authority on completion of any extraction. This report will need to include details of any historical workings encountered.

6.0 CONCLUSION

Following the implementation of the mitigation measures, outlined in Section 4 above, the site can be considered suitable for development with respect to past coal mining activities.

Coal may be encountered during the earthworks operations. Any coal encountered during the earthworks shall be treated as 'Incidental' and an agreement to remove the coal from the Coal Authority will be required.



J. Morley
B.Sc. (Hons), M.Sc., F.G.S
For and on behalf of JPG (Leeds) Limited

February 2019

Appendix A Figures and Drawings

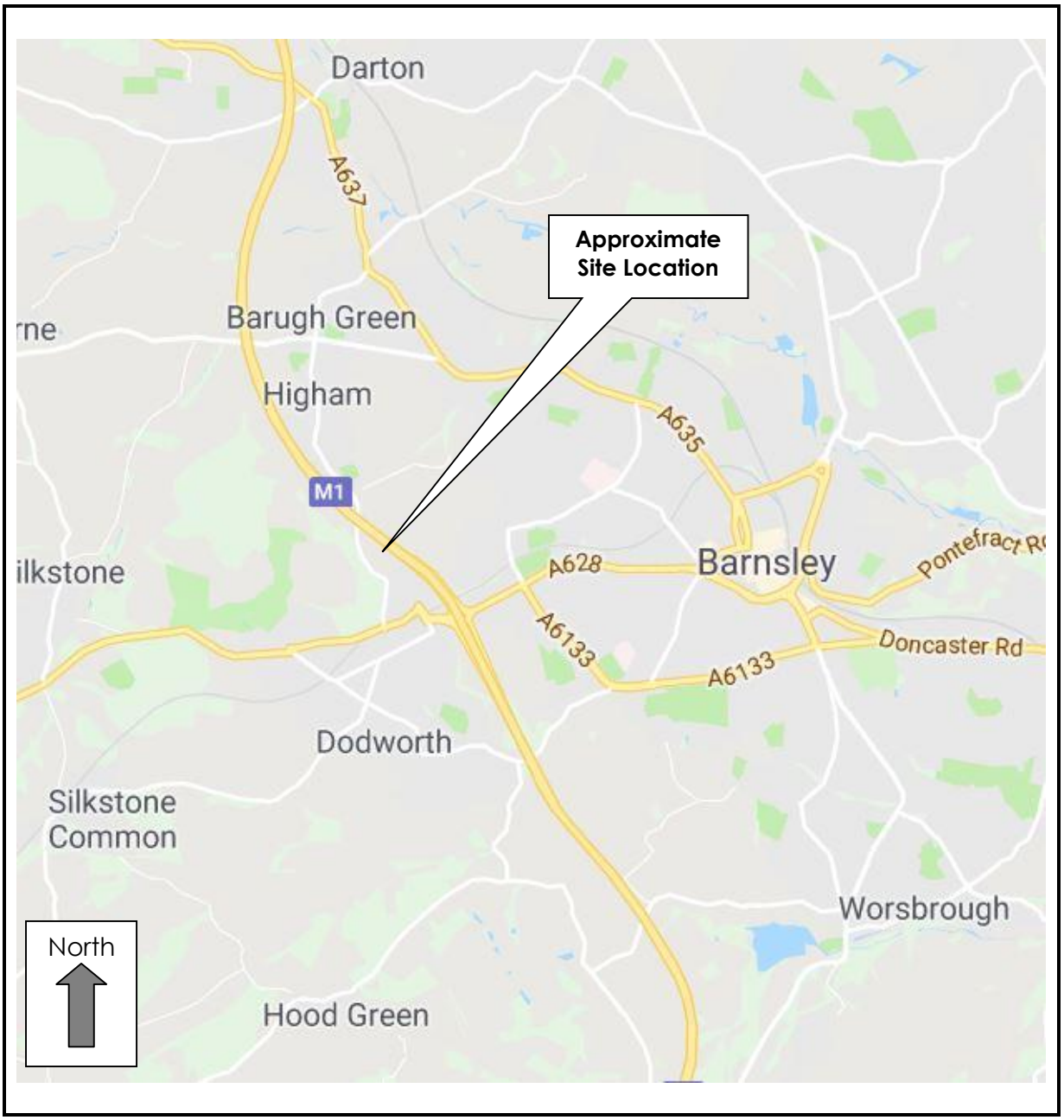


Figure 1 – Site Location Plan	
Site	**Higham Lane North**
Client	**Sterling Capitol PLC**
Job Number	**4173**
Scale	**NTS**

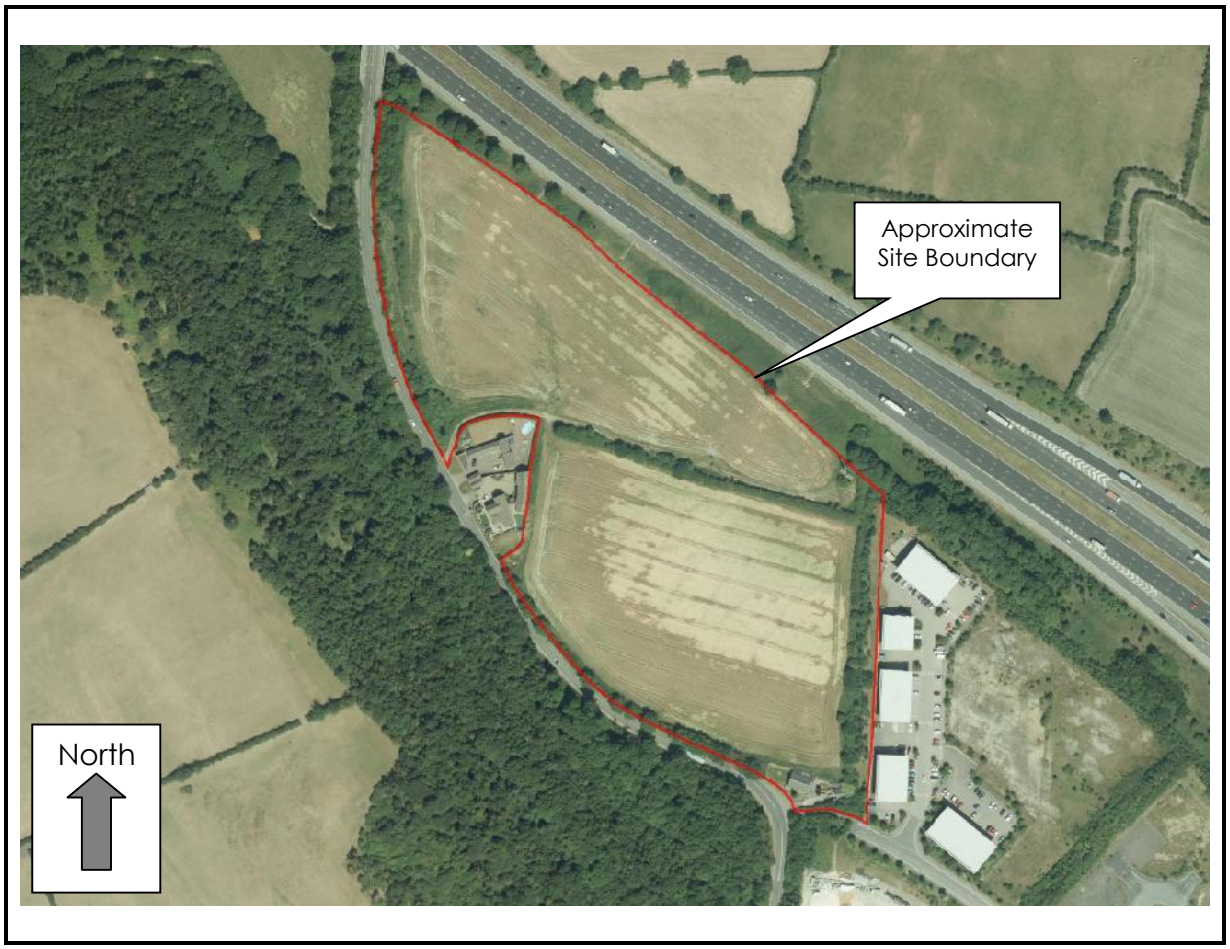


Figure 2 – Aerial Photograph	
Site	**Higham Lane North**
Client	**Sterling Capitol PLC**
Job Number	**4173**
Scale	**NTS**

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DO NOT SCALE

NOTES

LEGEND

- LHM — Coal Seam Outcrop
- SW — Swallow Wood Seam
- THM — Top Haigh Moor Seam
- LHM — Low Haigh Moor Seam
- Zone of Potential Shallow Mine Workings

Proposed Industrial Unit 1
7,803.9 m² 84,000 ft²

Proposed Industrial Unit 2
9,754.8 m² 105,000 ft²

Plateau Level 148.325

Plateau Level 160.425

Proposed Electric cable diversion

Embankment

Service Yard

Existing Buildings

Offices

Car Park

Proposed Access

Proposed Car Park 125 spaces inc 4 disabled & 4 no. charging spaces

Proposed deer park 92 spaces inc 3 disabled & 5 no. charging spaces

Existing Tower

Existing Unit

Proposed Access Road

Land required for highway improvements

Highham Lane

M1

OPENCAST

THM

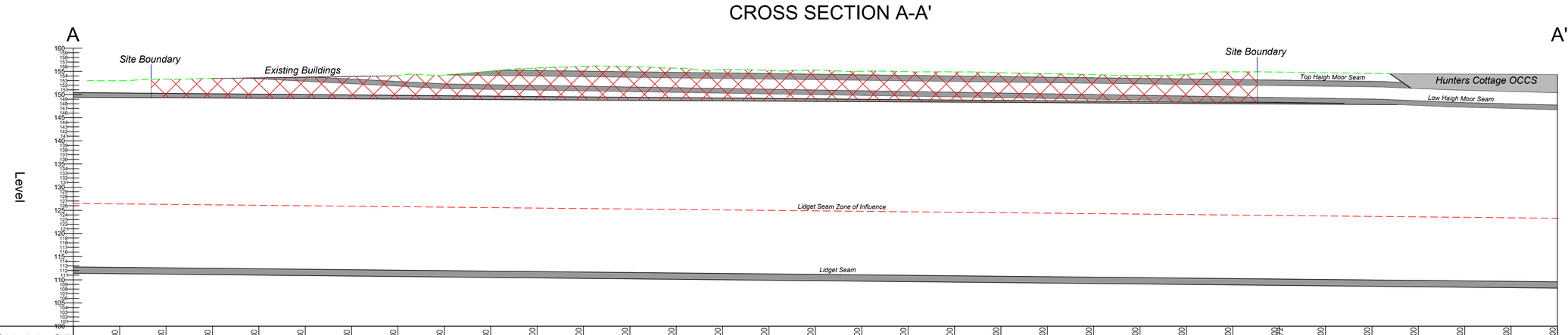
LHM

SW

A

A'

CROSS SECTION A-A'



CHAINAGE	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000
EXISTING LEVELS	152.982	153.319	153.458				154.042	154.200	155.045	155.719	156.040	156.012	155.685	155.474	155.224	155.248	155.029	154.953	154.891	154.714	154.486	154.287	154.098	154.327	154.895							
BASE OF OPENCAST																													151.28	150.91	150.64	150.36

REV	DESCRIPTION	DATE	BY

Job Title
Highham Lane North,
M1 Jct 37

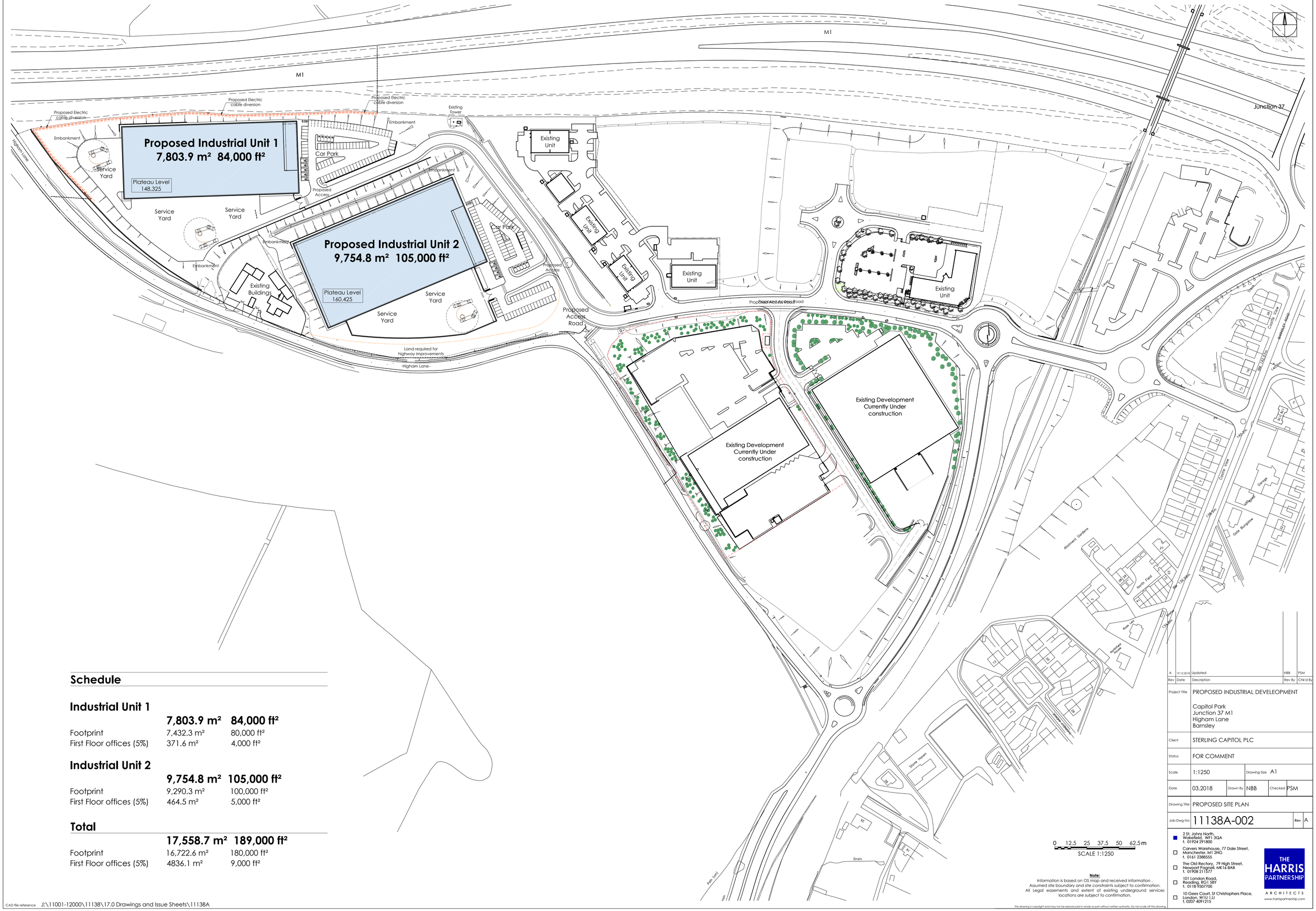
Drawing Title
Conceptual Geological Ground Model - Coal Mining Risks

Architect

JPG
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Leeds: 0113 263 1155 | London: 020 7947 4148

Checked	Date	Scale		Drawn
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Drawing No 4173-GC01



Schedule

Industrial Unit 1

	7,803.9 m²	84,000 ft²
Footprint	7,432.3 m²	80,000 ft²
First Floor offices (5%)	371.6 m²	4,000 ft²

Industrial Unit 2

	9,754.8 m²	105,000 ft²
Footprint	9,290.3 m²	100,000 ft²
First Floor offices (5%)	464.5 m²	5,000 ft²

Total

	17,558.7 m²	189,000 ft²
Footprint	16,722.6 m²	180,000 ft²
First Floor offices (5%)	4836.1 m²	9,000 ft²

0 12.5 25 37.5 50 62.5m

SCALE 1:1250

Note:
Information is based on OS map and received information .
Assumed site boundary and site constraints subject to confirmation.
All Legal easements and extent of existing underground services locations are subject to confirmation.

Rev	Date	Description	Rev By	Chk'd By
A	19.12.2018	Updated	NBB	PSM

Project Title	PROPOSED INDUSTRIAL DEVELEOPMENT Capitol Park Junction 37 M1 Higham Lane Barnsley
Client	STERLING CAPITOL PLC
Status	FOR COMMENT
Scale	1:1250
Drawing Size	A1
Date	03.2018
Drawn By	NBB
Checked	PSM
Drawing Title	PROPOSED SITE PLAN
Job-Dwg No	11138A-002
Rev	A

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Appendix B Coal Authority Mining Reports

The Coal Authority

Resolving the impacts of mining

CON29M Non-Residential Mining Report







HIGHAM LANE
HIGHAM
BARNSLEY
S75 3UB

Date of enquiry:	14 December 2018
Date enquiry received:	14 December 2018
Issue date:	14 December 2018
Our reference:	51001978525001
Your reference:	4173 - Higham Lane, Dodworth

CON29M Non-Residential Mining Report

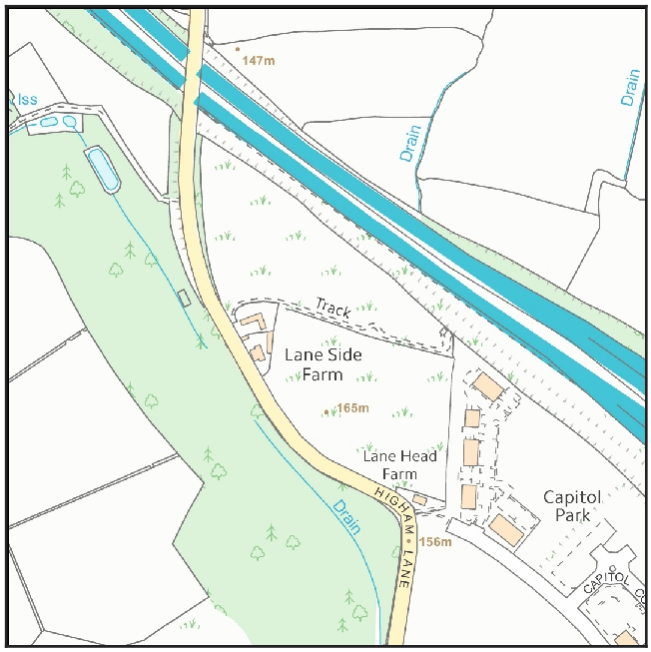
This report is based on, and limited to, the records held by the Coal Authority, at the time we answer the search.

Client name

JPG (LEEDS) LIMITED

Enquiry address

HIGHAM LANE, HIGHAM, BARNSLEY, S75 3UB



Approximate position of property

Map data

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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	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	No
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	No
13	Working facilities order	No
14	Payments to owners of former copyhold land	No

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 6 seams of coal at 90m to 290m depth, and last worked in 1966.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

In addition the property is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk. Your attention is drawn to the Comments on the Coal Authority information section of the report.

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

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

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

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 not 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
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.

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 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.

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.

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 2018, the User Guide 2006 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

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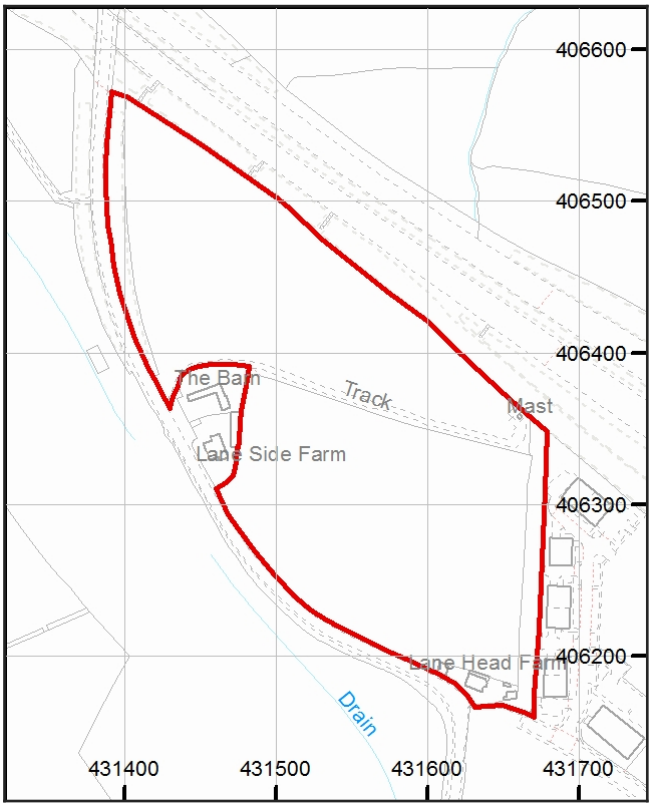
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Enquiry boundary

Key

Approximate position of enquiry boundary shown



Map data

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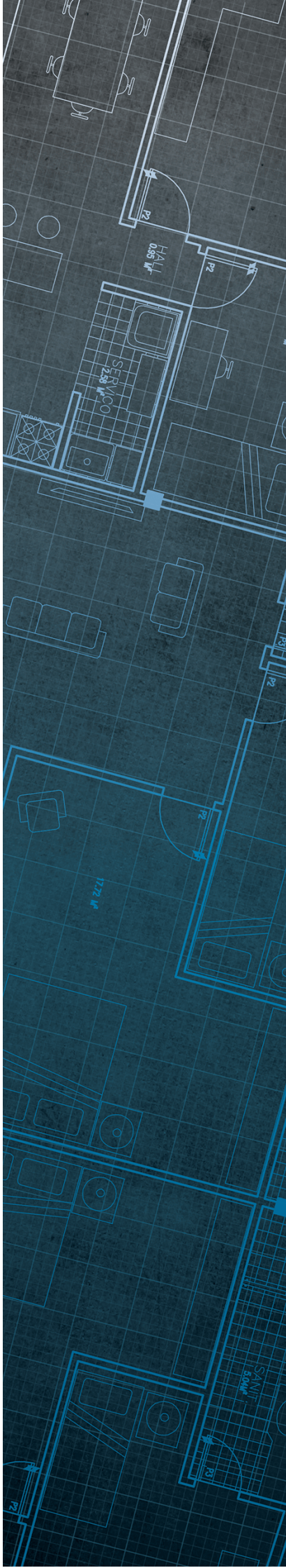
The Coal Authority

Consultants

Coal Mining Report

Higham Lane
Higham
Barnsley
S75 3UB

Date of enquiry:	**14 December 2018**
Date enquiry received:	**14 December 2018**
Issue date:	**14 December 2018**
Our reference:	**51001978525002**
Your reference:	**4173 - Higham Lane, Dodworth**



Consultants
Coal Mining Report

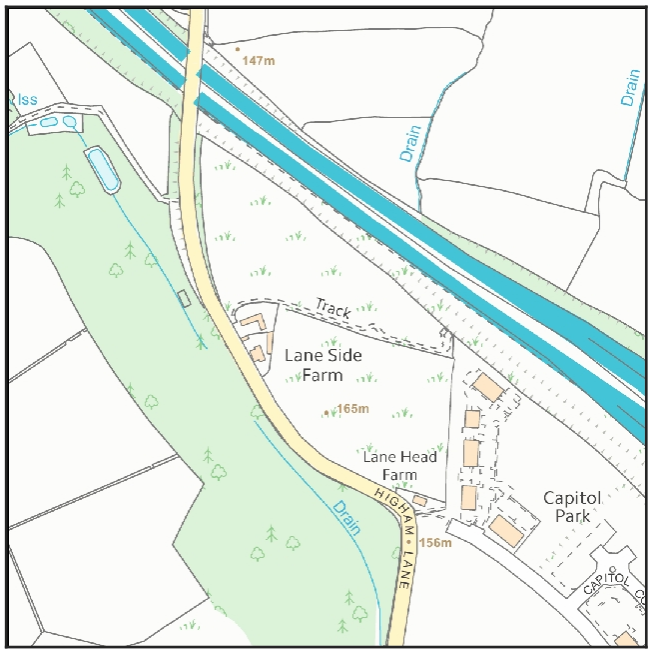
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

JPG (LEEDS) LIMITED

Enquiry address

Higham Lane
Higham
Barnsley
S75 3UB



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
DODWORTH	FLOCKTON THICK	Coal	64CW	86	Beneath Property	3.9	North-East	61	1905
DODWORTH	TOP FENTON	Coal	64CR	127	Beneath Property	3.9	North-East	74	1920
DODWORTH	PARKGATE	Coal	64CV	150	Beneath Property	2.2	North-East	137	1920
DODWORTH	WHEATLEY LIME	Coal	64D5	192	Beneath Property	1.3	North-East	109	1944
unnamed	SILKSTONE	Coal	6I53	235	South	3.7	North-East	147	1880
DODWORTH HIGHAM	SILKSTONE	Coal	64D3	237	Beneath Property	4.1	North-East	147	1891
unnamed	WHINMOOR	Coal	6I58	269	South-West	3.7	North-East	144	1964
WOOLLEY/REDBROOK	WHINMOOR	Coal	64D9	272	Beneath Property	4.1	North-East	107	1965
WOOLLEY/REDBROOK	WHINMOOR	Coal	64D8	278	South-East	4.5	North-East	128	1966
unnamed	WHINMOOR	Coal	6I59	278	South	4.1	North-East	107	1966

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

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Abandoned mine plan catalogue numbers

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

NE565	NE1050	NE584
NE375	NE1034	SCC9
NE498	NEST39	M711

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
TOP HAIGH MOOR	Coal	Yes	Within	N/A	355

Geological faults, fissures and breaklines

No faults, fissures or breaklines 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.

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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

Distance to site investigation (m)	Direction
5.8	South

See Section 4 for further information.

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.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

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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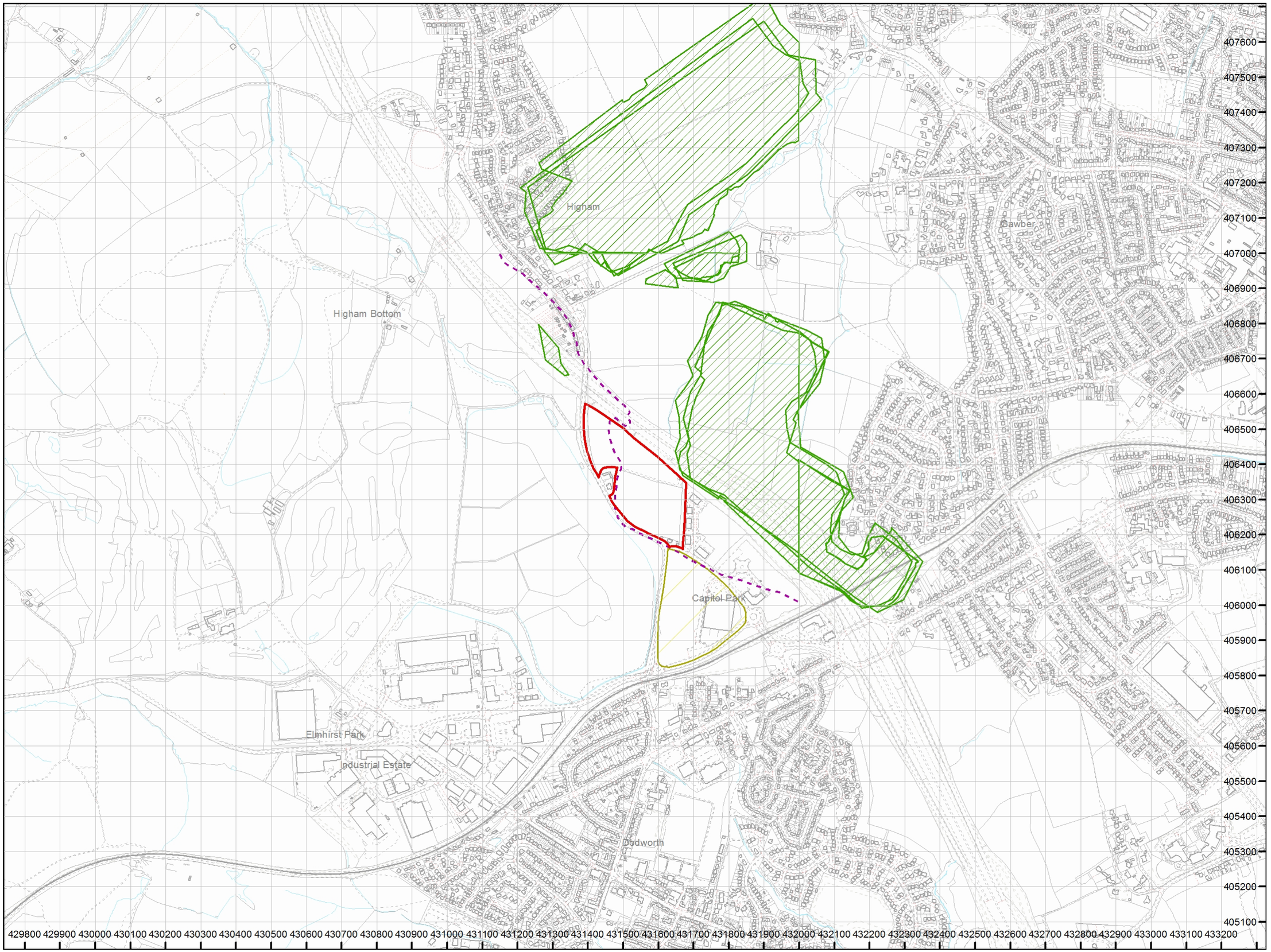
Summary of findings

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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
- Outcrop (Conjectured)
- Unlicensed opencast site
- Site investigations



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

Appendix C Coal Authority Abandonment Plans

NE. 375



LEGEND

LOCATION

QUANTITIES WORKED

GENERAL DESCRIPTION

OPERATIONAL DATA

OPERATIONS	DATES (FROM - TO)
SITE PREPARATIONS	
COMMENCEMENT OF COALING	
COMPLETION OF COALING	
COMPLETION OF FILLING	
SITE HANDED BACK TO AGRICULTURE	
FINAL RESTORATION OF SITE	

VERTICAL SECTION THROUGH ALL SEAMS

SECTION A

SECTION B

SECTION C

NATIONAL COAL BOARD

NAME OF SITE HUNTERS COTTAGE & EXTENSION

SITE REFERENCE NUMBER 030102 B

DETCOR/378

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