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Ms Lisa Cowley
Coda Studios
70-71 Cornish Place,
Cornish Street,
Sheffield, S6 3AF

KRP/KE/MDY/38967-001

25 September 2015

For the attention of Lisa Cowley

Dear Ms Cowley

Land off Worsbrough Road, Blacker Hill, Barnsley
Coal Mining Risk Assessment

We write to provide a risk assessment against the possibility of shallow coal mining affecting the above site. The risk assessment is based on a review and our interpretation of geological maps, memoirs and Ordnance Survey maps, as well as a Coal Authority Mining Report specific to this site. We have not visited the site.

The Site

The site is located to the west of Worsbrough Road in Blacker Hill, Barnsley. It comprises an open area of grass and shrub with occasional mature trees. It is proposed to build six semidetached residential plots. The site is triangular-shaped, rises to the east, and has an area of approximately 0.25 hectares. The site is centred on grid reference 436682, 402252.

Geological Review

The geological maps for the area, 282NE (1:10,560 scale) and SE30SE (1:10,000 scale), shows the site to be underlain by interbedded mudstones and siltstones of the Carboniferous Middle Coal Measures.

The general dip of the strata is expected to be 4° to the east. However, this may be significantly affected by faulting – a fault is present adjacent to the site's north eastern site corner trending north west-south east.

The Meltonfield coal seam (expected to be between 1.0 and 1.3 m thick) is inferred to outcrop in the eastern half of the site. Since the dip of the strata is towards the east, the

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seam is expected at very shallow depth (i.e. less than 5 m) over the eastern half of the site. It is known to have been extensively worked in the past.

The Two Foot coal seam (around 0.9 to 1.5 m thick) is inferred to outcrop along the western site boundary and is therefore expected at shallow depth below the whole site. This seam is also expected to have been worked. The Two Foot coal seam is estimated to lie around 8 m below the Meltonfield coal seam.

Due to the drop in site levels, which is estimated at around 15 m from western to eastern site boundaries, the Two Foot coal seam may re-emerge in the centre of the site if the seam is dipping at around 4°.

The seam below the Two Foot is the Abdy coal, and lies approximately 10 m below the Two Foot Coal. This seam is suggested to be 0.8 to 0.9 m thick and so may also have been worked.

There is one mine shaft shown approximately 100 m north west of the site, and an area labelled 'old workings' 200 m north of the site, on top of the Two Foot coal.

Coal Authority Mining Report

A Coal Authority mining report has been obtained for the site. A copy of this is appended to this letter.

The report states that coal is believed to be present at or close to the surface on site and it may have been worked at some time in the past. It is expected that this refers to the Meltonfield coal and the Two Foot coal. It also states that the site is within the likely zone of influence from workings in 10 seams of coal at 130m to 480m depth, and last worked in 1972. However, any ground movement from these coal workings should have stopped by now.

There are no recorded mine entries on the site or within 20 m of the boundary. However, The Coal Authority's records may be incomplete and there could exist in the local area mine entries of which the Coal Authority has no knowledge.

The site is not within an area where current workings are being undertaken, or where underground workings are currently proposed to begin in the future. The site is also not within the legal boundary of any past, current or currently proposed opencast sites.

There are no records of claims for mining related subsidence on the site, nor are there any records of any mine gas emissions which have required action by the Coal Authority.

The report does state that reserves of coal remain beneath the site which could be worked in the future, subject to the granting of planning consent and all other applicable permissions.

Risk Assessment

Based on information from the geological maps and memoirs, the Meltonfield and Two Foot coal seams are expected to outcrop on site and lie at very shallow depth (up to 15 m). The Abdy coal, expected around 10 m below the Two Foot, may also have been worked.

Any workings in the Meltonfield Coal, Two Foot or Abdy coal seams may affect the stability of the ground on site. It is considered prudent to carry out a site investigation comprising trial pits and rotary boreholes to determine what depths the seams underlie the site and whether they have been worked. Drilling and grouting may be required if shallow workings are found.

Conclusion

Based on the information from the geological maps and the Coal Authority report, the Meltonfield, Two Foot and Abdy coal seams are likely to be present at shallow depths (up to around 25 m) below the site. It is recommended that a site investigation is carried out to determine the depth of the seams and whether they have been worked.

We trust that the above is satisfactory. This risk assessment should be submitted to the regulators for their review.

Yours sincerely

K R Pursall.

K Pursall

Enc. Coal Authority Mining Report

The Coal Authority

Issued by:
The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG
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Our reference:	**51001002817001**
Your reference:	**72568373_1**
Date of your enquiry:	**16 September 2015**
Date we received your enquiry:	**16 September 2015**
Date of issue:	**16 September 2015**

This report is for the property described in the address below and the attached plan.

Non-Residential Coal Authority Mining Report

BLACKER HILL, BARNSLEY, SOUTH YORKSHIRE,

This report is based on and limited to the records held by, the Coal Authority, and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Coal mining	See comments below
Brine Compensation District	No

Information from the Coal Authority

Underground coal mining

Past

The property is in the likely zone of influence from workings in 10 seams of coal at 130m to 480m depth, and last worked in 1972.

Any ground movement from these coal workings should have stopped by now.

In addition the property is in an area where the Coal Authority believe 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 prior to any site works or future development activity. Your attention is drawn to the Comments on Coal Authority Information section of the report.

Present

The property is not in the likely zone of influence of any present underground coal workings.

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Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

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

The property is not in an area that is likely to be affected at the surface from any planned future workings.

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

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

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

Records may be incomplete. Consequently, there may exist in the local area mine entries of which the Coal Authority has no knowledge.

Coal mining geology

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

Opencast coal mining

Past

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

Present

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

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

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.

Coal mining subsidence

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

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

The 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

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

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

Withdrawal of support

The property is not in an area for which a notice of entitlement to withdraw support has been published.

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

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Working facilities orders

The property is in an area for which the Newton Chambers Order dated 1936 has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification.

Payments to owners of former copyhold land

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

Comments on Coal Authority information

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.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

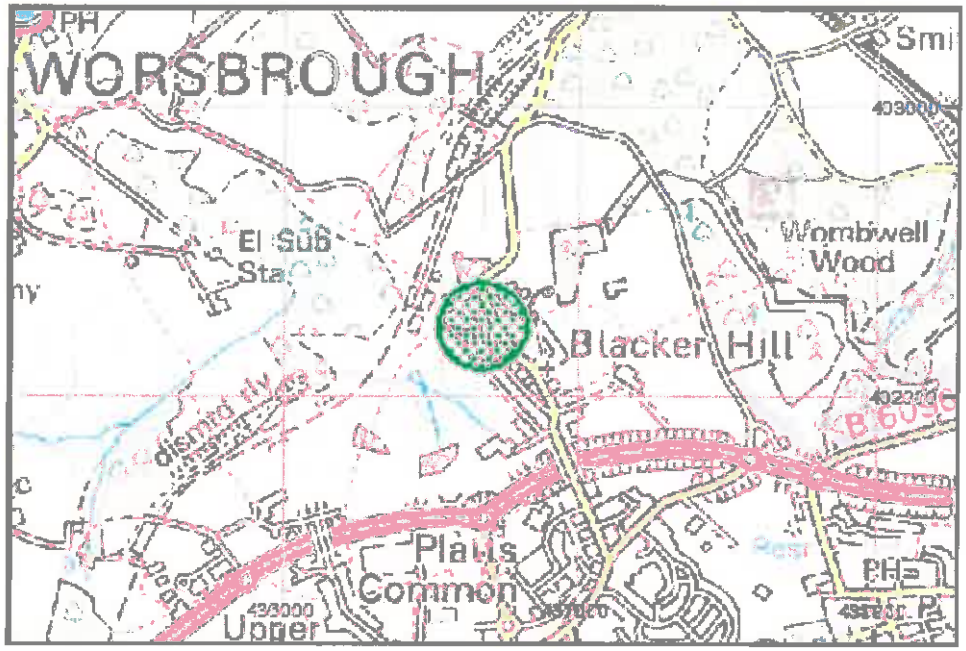
Additional Remarks

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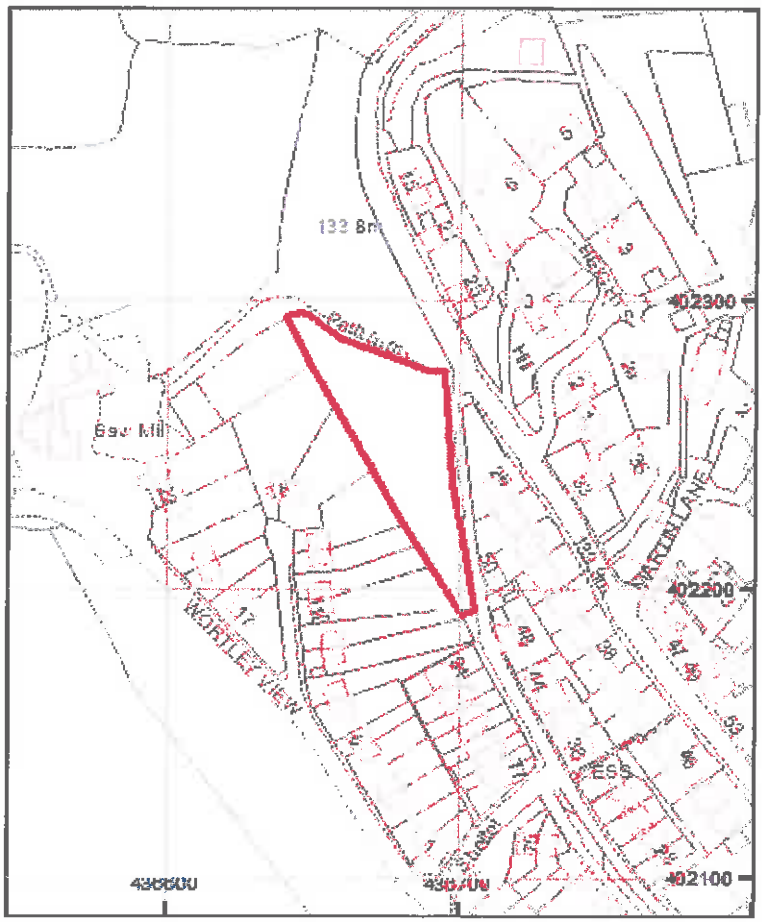
Location map

Approximate position of property



Enquiry boundary

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Key

Approximate position of enquiry boundary shown