RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

Hillhouse and Birkby Bowling Club

Coal Mining Risk Assessment

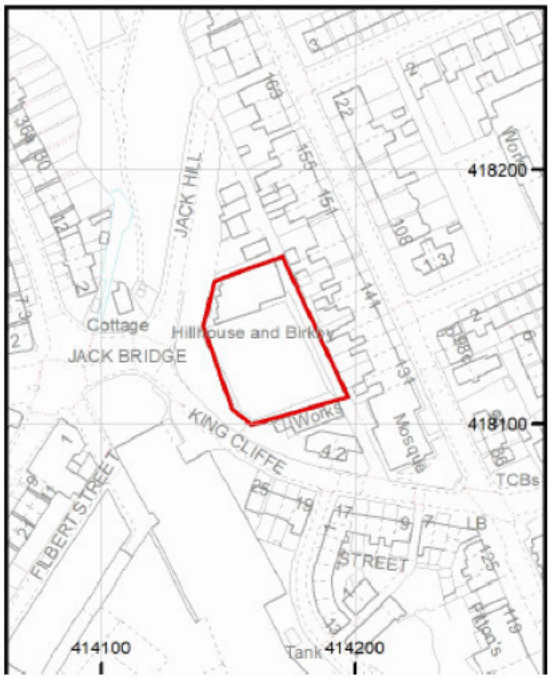
April 2023

RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com



Report Title	Hillhouse and Birkby Bowling Club Coal Mining Risk Assessment	**Site Address**	Hillhouse and Birkby Bowling Club, King Cliff Road, Birkby, Huddersfield, HD2 2RR
Author	RB Geotechnical	**Contamination / Geotechnical**	Geotechnical
Work Stage	Coal Mining Risk Assessment	**Report Date**	April 2023
Brief Description of the Report Contents	A desk-based assessment on the risks posed by coal mining to the site and the proposed new development		

RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

Document Control

Project:	Hillhouse and Birkby Bowling Club Coal Mining Risk Assessment
Client:	Kaandmi Properties Ltd
Job Number:	RBG345

Prepared and Issued by Ross Blake BSc MSc FGS, Engineer. Signed:

Issue	Date	Status
001	April 2023	Final

RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

Contents Page

1.0 INTRODUCTION..... 5

2.0 SOURCES OF INFORMATION USED..... 6

3.0 IDENTIFICATION AND ASSESSMENT OF SITE-SPECIFIC COAL MINING RISKS..... 7

4.0 CONCLUSIONS AND MITIGATION STRATEGY PROPOSED..... 9

Appendix A - Coal Authority Mining Report

Appendix B - Geological Map Extract

Appendix C - Proposed Development Plan

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

Disclaimer

This report was produced by RB Geotechnical for Kaandmi Properties Ltd (The Client), for the specific purpose of a Coal Mining Risk Assessment for the planning application related to the proposed construction of a new community sports complex at the Hillhouse and Birkby Bowling Club in Huddersfield, West Yorkshire. This report may not be used by anyone else other than the client without their express permission. In any event, RB Geotechnical accepts no liability for any costs, liabilities or losses arising from the use of reliance upon the contents of this report by anyone other than the client.

1.0 INTRODUCTION

RB Geotechnical was commissioned by the client to carry out a Coal Mining Risk Assessment of the proposed site, in order to assess the risk of possible unrecorded mining activities.

Terms and Conditions

Although every effort has been made to ensure the accuracy of the information contained herein, no checks have been carried out to ensure the accuracy of information obtained from third parties and no liability can be accepted for any errors or misinterpretation of the third-party information where it has been incorporated into this report.

This assessment is compliant with the 2017 Coal Authority Guidance *'Risk Based Approach to Development Management. Guidance for Developers. Version 4',* with this report structured as advised by this guidance. This report is concerned only with precautions related to potential mining issues.

Site Location and Description

The 0.22ha sized site, is situated at the former Hillhouse and Birkby Bowling Club in Birkby, Huddersfield, West Yorkshire. The site is currently occupied by a rectangular brick built building, which is largely in a state of disrepair. The South Eastern two thirds of the site are the former bowling green, which is now a rectangular area of overgrown grass.

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

The National Grid Reference for the centre of the site is 414173, 418125.

Proposed Development

The proposed development is to comprise the construction of a large community sports complex on the site of the Hillhouse and Birkby Bowling Club in Huddersfield. Proposed Development plan is shown in Appendix C.

Scope of the Coal Mining Risk Assessment

The purpose of this Coal Mining Risk Assessment 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;
- 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 Coal 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

The following information has been reviewed in this Risk Assessment, extracts from which are appended:

- A Coal Authority Coal Mining Report Dated 12th April 2023 – Appendix A; and
- Site Geological information obtained from the British Geological Survey Website (www.bgs.ac.uk). Map extract in Appendix B;

RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

3.0 IDENTIFICATION AND ASSESSMENT OF SITE-SPECIFIC COAL MINING RISKS

The table below summarises the potential risks associated with coal mining legacy for the proposed development site, identified from the listed sources above.

Coal Mining Issue	YES	NO	Comment
Underground Coal Mining (Recorded at shallow depths)		X	
Underground Coal Mining (probable at shallow depths)	X		**Intrusive Investigation Recommended**
Mine entries (shafts and adits)		X	
Coal mining geology (fissures)		X	
Record of past mine gas emissions		X	
Recorded coal mining surface hazard		X	
Surface mining (opencast workings)		X	

RB Geotechnical

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

Coal at or Close to Surface which could have been mined in past	**X**		**Intrusive Investigation Recommended**
Coal Seam Directly Adjacent to Site	**X**		**Intrusive Investigation Recommended**

- The Coal Authority Interactive Viewer indicates that proposed development site is located within what the coal authority deems to be a 'Development High Risk Area' in addition to being in an area of Probable Shallow Coal Mining with coal seams outcropping directly adjacent to it (shown as the hashed area below):



- The Coal Authority (CA) report (included as Appendix A) indicates that the site is in an area where coal is at or close to the surface and could have been mined in the past. No opencast sites or mine entries are mapped within 20m of the site boundary.

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

- The BGS GeoIndex and geological maps show the North Western tip of the site to be underlain by Middle Band Rock Sandstone, with the remainder of the site underlain by the Pennine Lower Coal Measures Mudstone, Siltstone and Sandstone. A fault is mapped encroaching into the Southern extent of the site, trending in a North to South direction. Two coal seams are mapped virtually adjacent to the Eastern and Western site boundaries, trending in North to South directions. The Soft Bed Coal is mapped to the West of the site (noted thickness of 0 to 0.80m) and the Middle Band Coal to the East of the site (noted thickness of 0 to 0.60m). The geological map extract is shown in Appendix B.

- Upon viewing the document 'Geology of the Country around Huddersfield and Halifax, Explanation of Sheet 77, 1930' it is evident that the Soft Bed Coal is known to have been extensively worked in the local area as a coking coal.

4.0 CONCLUSIONS AND MITIGATION STRATEGY PROPOSED

The Coal Authority have identified the site as being located within a 'Development High Risk Area' and being in an area of probable shallow mine workings, with coal seams mapped directly adjacent to the sites boundaries. These coal seams mapped adjacent to the site are known to have been historically worked in the local area.

RB Geotechnical are therefore of the opinion that an intrusive investigation will be required in the area of the proposed new building footprint in order to fully assess for potential unrecorded mine workings.

- 5-6 Rotary Open Hole Boreholes to maximum depth of 30.0m, in and around proposed new building footprint.

The Coal Authority Permission

Prior written permission from The Coal Authority is required for intrusive activities which will disturb or enter any coal seams, coal mine workings, or coal mine entries (shafts and adits). Further information on

7 Carr Manor View, Leeds, LS17 5AG

Telephone: 07909331251

Email: rbgeotechnical@gmail.com

The Coal Authority's permissions process can be found at:

www.coal.gov.uk/services/permissions/index.cfm