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New Extension at Park Springs Industrial Estate

Coal Mining Risk Assessment

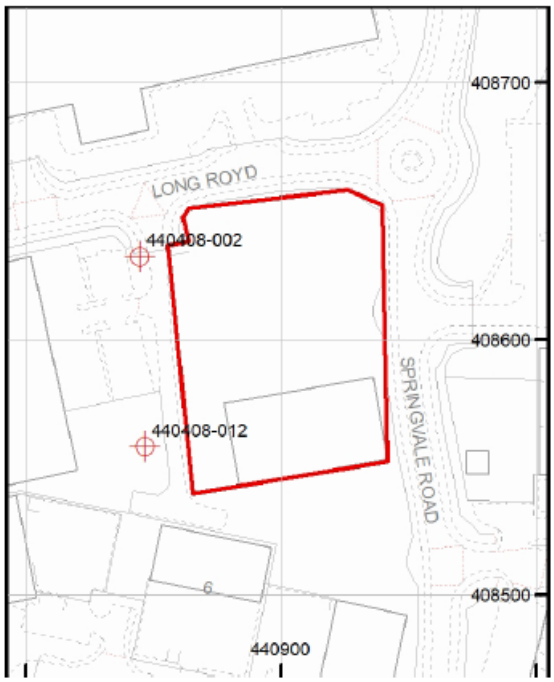
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Report Title	New Extension at Park Springs Industrial Estate, Coal Mining Risk Assessment	**Site Address**	Park Springs, Long Royd, Grimethorpe, Barnsley, S72 7GH
Author	RB Geotechnical	**Contamination / Geotechnical**	Geotechnical
Work Stage	Coal Mining Risk Assessment	**Report Date**	November 2021
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		

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Document Control

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Disclaimer

This report was produced by RB Geotechnical for Ultima Furniture Solutions Limited (The Client), for the specific purpose of a Coal Mining Risk Assessment for the planning application related to the proposed factory/warehouse building extension at Park Springs Industrial Estate in Grimethorpe, South 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

The client is preparing a planning application for a proposed new extension onto an existing warehouse building at Park Springs Industrial Estate in Grimethorpe, South Yorkshire.

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 development site is situated at Park Springs Industrial Estate in Grimethorpe, South Yorkshire. It is accessed through large gates off Long Road. The area of the site for the proposed extension is a large area

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of overgrown land. The existing steel framed warehouse building of which the extension is to be built upon, is located in the South of the site. The proposed new multi storey car park is located to the West of the main site and is currently occupied by a smaller tarmac car parking area.

Proposed Development

The proposed development is to comprise a large extension to the existing warehouse building, with a new multi-storey car park to be built to the West of this area. Proposed development plans are 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 11th November 2021 – Appendix A;

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- Coal Authority Mine Entry Data Sheets Dated 11th November 2021 – Appendix A;
- Site Geological information obtained from the British Geological Survey Website (www.bgs.ac.uk). Map extract in Appendix B;
- Other online sources.

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	Risk Assessment Mitigation Strategy
Underground Coal Mining (Recorded at shallow depths)		X	
Underground Coal Mining (probable at shallow depths)		X	
Mine entries (shafts and adits)	X		**Intrusive Investigation Recommended**
Coal mining geology (fissures)		X	
Record of past mine gas emissions		X	

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Recorded coal mining surface hazard		X	
Surface mining (opencast workings)		X	
Coal at or Close to Surface which could have been mined in past		X	
Coal Seam Directly Beneath Site		X	

- The Coal Authority Interactive Viewer indicates that only sections of the site located around the mine entry points are noted as being a 'Development High Risk Area'.

- The Coal Authority (CA) report (included as Appendix A) indicates that the site is in an area that could be affected by underground mining in seven seams of coal at depths from 70m. Two mine entry points have been mapped close to the site, with one situated in the North East corner of the proposed new multi-storey car parking area. This particular mine entry is noted to have been filled with hardcore and capped with reinforced concrete at rockhead, to British Coal specifications.

- The BGS GeoIndex and geological maps shows the site to be underlain by bedrock of the Pennine Middle Coal Measures. A fault is mapped running across the Northern section of the site in an East to West direction. A number of historical BGS boreholes have been carried out within the close surrounding area, the nearest of which do show evidence of coal, including broken coal and lost cores indicating possible evidence of workings.

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4.0 CONCLUSIONS AND MITIGATION STRATEGY PROPOSED

The mine entry situated on the site itself (440408-002) along with the one just off the site to the South (440408-012) are noted as being in a 'Development High Risk Area' by the Coal Authority. Upon assessing the Mine Entry Data Sheets, it is apparent that the mine entry on the site itself has been backfilled and capped to a suitable specification for the Coal Authority. This mine entry is therefore not deemed to pose any further risk to the site or future development. The mine entry point located just to the South of the proposed multi-storey car park (440408-012), does not have any information regarding how it has been backfilled. This mine entry therefore poses a risk to the proposed development, and it is therefore recommended that an intrusive investigation is carried out in this area to try and identify the presence of this mine entry point.

The remainder of the site is not deemed to be at risk from unrecorded mine workings.

RB Geotechnical therefore believes that the main risk to the proposed development is the presence of the mine entry point (440408-012). The following works are therefore recommended as a minimum:

- Reduced Level Dig with excavator to locate location of disused mineshaft.

By carrying out this intrusive investigation it will enable a suitable assessment of the risk posed to the new development, by this disused mine shaft.

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 The Coal Authority's permissions process can be found at:
www.coal.gov.uk/services/permissions/index.cfm