11a Roydhouse
Drinker Lane
Shelley
Huddersfield
Kirklees
HD8 8LR

LYONS CMC
COAL MINING & GEOTECHNICAL CONSULTANCY
Web: www.lyonscmc.co.uk
Email: mark@lyonscmc.co.uk
Mob: 07887555580

Date: 23rd October 2026
Your ref: (HD8 8LR)
My Ref: SI 00480

FOR THE ATTENTION OF PAUL JOHNSON

Dear Paul,

COAL MINING RISK INTERPRETATION REPORT – FOLLOWING THE SITE INVESTIGATION FOR PROPOSED RESIDENTIAL DEVELOPMENT AT 11a ROYDHOUSE, SHELLEY, HUDDERSFIELD HD8 8LR

I am pleased to supply the following report for the above project and trust that this satisfies your requirements. Please do not hesitate to contact myself at any time for further clarification or advice.

Yours Sincerely,

M Lyons

M. Lyons
Consultant Mining Engineer
BSci CSci MIMMM

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1. Introduction

Planning permission has been granted for new residential development at the above location, subject to the mining legacy risks been fully realised and mitigated from on site, if necessary. Cape Site Services has now undertaken this work via an intrusive site investigation of 2 boreholes, the location of which are outlined on plan no. 00480/B – as attached and illustrated in appendix 5.2. The site is centred at OS NGR: 421548E / 412424N.

2. Scope of the Report

The mining legacy risks to the development are as follows:

- Instability from shallow underground coal workings
- Uncharted Mine Entries

As such, these risks need to be properly determined to ensure sound stability for the development. A borehole investigation consisting of 2 boreholes was deemed a reasonable level of investigation in the outset regarding potential void migration given the scale and nature of development combined with the available geological and mining information. A watching brief would also be implemented for any signs of mine entries.

It should be noted that this investigation is focused mainly on determining stability from potential shallow historic coal workings and will only provide limited information regarding the risks of uncharted mine entries.

3. Site Investigation

3.1 Methodology

Prior to the intrusive site investigation, a search for utilities was undertaken both via online data providers and physically on site using a Cable Avoidance Tool (CAT). Boreholes were marked out with tape measure from boundary lines as illustrated on plan no. 00480/B outlined in appendix 5.2.

An investigation utilising a tracked Beretta Rotary Drill Rig equipped with 2m long 75mm diameter drill rods was deemed appropriate in this instance along with water flush techniques to analyse returns and minimise any risks associated with mine gas emissions and spontaneous combustion. Gas monitoring equipment would be employed during works for risks associated with Methane, Carbon Monoxide, Oxygen, Carbon Dioxide and Hydrogen Sulphide. Prior agreement had been secured for these works from the Coal Authority -permit ref: 32213 – as attached for reference in appendix 5.4.

Considering the available mining and geological detail, boreholes were decided to be taken to a maximum of 30m deep in order to check the nature of the ‘Wheatley Lime’ coal seam; in order to establish any historic unrecorded mining void instability risks to the proposals.

The works were to be supervised by the Drilling Engineers Mr. S. Fish and Mr I. Wiles, and overseen by the Consultant Mining Engineer Mr. M. Lyons.

3.2 Interpretation of Findings

Both boreholes proved similar sections of strata, with brown silty sandstone bedrock at 0.4m/0.5m deep beneath grass & topsoil. Mudstones were then encountered beneath circa 3m of sandstone, with an in-tact coal seam proved of circa 0.8m thickness @: 14.1m deep in BH1; & 14.3m deep in BH2. Borehole no. 1 continued through grey mudstones to full depth of 30m with no other coal seam encountered. Given the findings borehole no. 2 was terminated in firm ground beneath the coal seam, which appears consistent with being the 'Wheatley Lime' seam.

No signs of underground shallow workings or unstable ground were encountered and no fugitive gases were detected at any point during the drilling operations. Water flush was maintained throughout drilling.

4. CONCLUSIONS AND RECOMMENDATIONS

1) In line with current guidelines (CIRIA C758D Abandoned mine workings manual,) what is believed to be the Wheatley Lime coal seam has been proved to be of a section and depth that will not affect stability (from a void migration aspect) be it worked or otherwise - with more than 10 times the seam thickness of competent rock cover above; and no shallow coal mining was encountered at the two areas investigated. As such it is considered that the site will be stable from the shallow mining aspect and no further associated considerations are necessary. As such usual foundations can be considered adequate, suitably designed for the given structure and nature of near surface strata.

2) No signs of any mine entries were observed during the investigation; however slight risks are always present within the exposed coalfield for discovering such features. Watching briefs would be prudent during future ground works for any associated signs - grey circular areas of fill material within natural bedrock/clay would be an indication of an old mine shaft for example. The Mining Remediation Authority should be notified where any such feature is encountered or suspected.

3) No fugitive gases were encountered during this investigation and given the findings the risks of such are considered low.

Note: should there be any uncertainty of actual conditions during future ground works Lyons CMC or indeed the Coal Authority themselves can be further consulted for on site assessment if necessary.

This report and future development proposals should be submitted to the regulators for their approval prior to any works taking place.

I trust that this satisfies your requirements, however please do not hesitate to contact myself at any time for further clarification or advice.

Yours Sincerely,

M Lyons

M. Lyons
Consultant Mining Engineer
BSc CSci MIMMM

Enc.

THIS SITE INVESTIGATION INTERPRETATIVE REPORT IS BASED ON AND LIMITED TO THE INFORMATION IN MY RECORD AT THE TIME THE ENQUIRY IS ANSWERED. It is based on my professional opinion in line with the guidelines set out in CIRIA C758D - "Abandoned Mine Working Manual." The opinion may be overruled by Government Authorities based on other information not in my record. Further site investigations may be undertaken which would supersede the factual findings of this investigation. Copyright in this report belongs to M.A.Lyons. All rights are reserved and unauthorised use is prohibited. Copyright is not transferred to external parties by possession of this report, however, those for whom the report is compiled have the right to use it. If any unauthorised third party comes into possession of this report, they rely upon it entirely at their own risk and the author does not owe them any Duty of Care or Skill.

5 Appendix

5.1 References

5.1.1 CIRIA C758D ‘Abandoned mine workings manual’.

5.1.2 British Standards Institution: BS 5930:2015 ‘Code of practice for ground investigations’ BSI 2015.

5.1.3 British Standards Institution: BS EN ISO 14688-1: 2002 + A1 2013 ‘Geotechnical Investigation and Testing - Identification and Classification of Soil - Part 1 - Identification and Description. BSI 2013.

5.1.4 British Standards Institution: BS EN ISO 14689-1: 2003 ‘Geotechnical Investigation and Testing – Identification and Classification of Rock – Part 1 – Identification and Description. BSI 2003. Incorporating Corrigendum No. 1 February 2007.

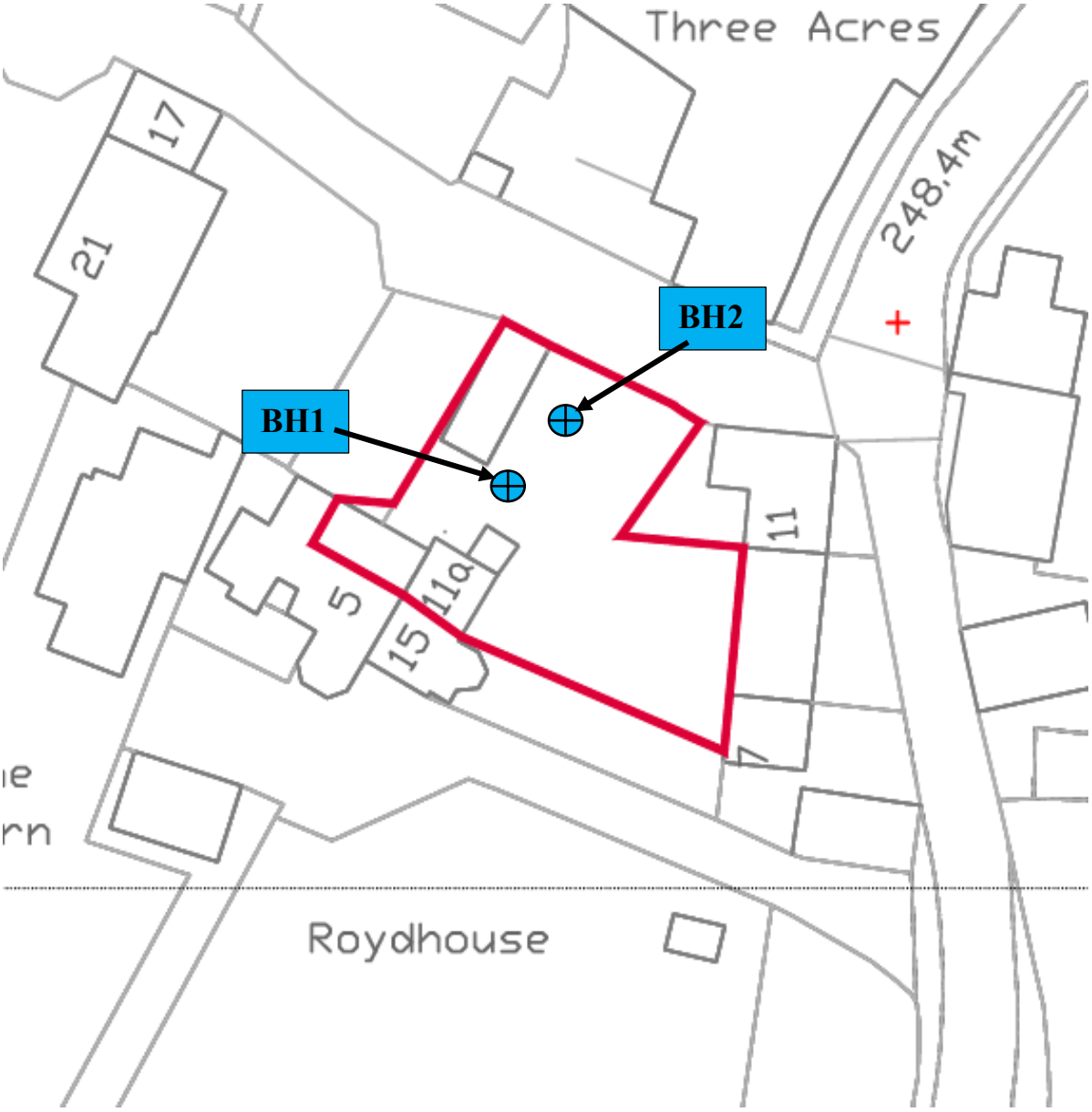
5.1.5 British Standards Institution: BS 10175 ‘The Investigation of Potentially Contaminated Sites. Codes of Practice’. BSI 2011+A1 2013.

5.1.6 British Standards Institution: BS EN ISO 22476-3: 2005 + A1 2011 ‘Geological Investigating and Testing. Field Testing. Standard Penetration Test’.

5.1.7 British Stardard 1377:1990 Parts 1-9 ‘Methods of Test for Soils for Civil Engineering Purposes’.

5.2 Borehole Location Plan No. 00480/B

LAND AT 11a ROYDHOUSE, SHELLEY, HUDDERSFIELD HD8 8LR
Site Investigation
Borehole Location Plan
(NTS)



5.3 Drilling log sheets

Client: Lyons CMC	**Site: Land At 11A Roydhouse, Shelley, Huddersfield. HD8 8LR**	**Cape Site Services unit 2, rear of Castle Buildings Carlton Road, Barnsley, S71 3HX**
Date: 14/10/2026	**Method:** water flush	**Permit No:** 32213
Driller: Ian Wiles	**Driller Assistant: Richard Hawkins, Simon Fish**	
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Measurements In Meters

BH No:	FROM	TO	THICKNESS	DESCRIPTION
BH1				
	0	0.5	0.5	Grass topsoil
	0.5	3.4	2.9	Sandstone brown silty
	3.4	4.4	1	Mudstone dark grey
	4.4	7.5	3.1	Mudstone grey
	7.5	8	0.5	Shale black
	8	14.1	6.1	Mudstone grey
	14.1	14.9	0.8	Coal
	14.9	30	15.1	Mudstone grey
BH 2				
	0	0.4	0.4	Grass topsoil
	0.4	3.5	3.1	Sandstone brown silty
	3.5	4.5	1	Mudstone dark grey
	4.5	7.6	3.1	Mudstone grey
	7.6	8.2	0.6	Shale black
	8.2	14.3	6.1	Mudstone grey
	14.3	15.1	0.8	Coal
	15.1	16	0.9	Mudstone grey

5.4 Coal Authority Permit

Mining Remediation Authority

Permit to enter or disturb Mining Remediation Authority interests

Permit number: 32213

Site Location:
Land At, 11A Roydhouse, Shelley, Huddersfield, , HD8 8LR

Name and Address of Permit Holder:
Paul Johnson, 11A Roydhouse, Shelley, Huddersfield, , HD8 8LR

This certificate hereby grants the above named Permit Holder a Permit to carry out:
Ground investigation by three boreholes to 30m
within the Mining Remediation Authority's interests at the identified site location above as shown on the Granted Permit Boundary (overleaf) for the period of **12 months** from the granted date shown below. *The granting of this Permit does not constitute advice given by the Mining Remediation Authority in relation to the proposed operations. It is the Permit Holder's responsibility to obtain appropriate health, safety, environmental, technical and legal advice.*

Conditions:

- Manned entry (i.e., into mine entries/workings) is **strictly prohibited**.
- Water flush
- Gas Monitoring (i.e., CO, CH4, CO2, O2, H2S) at borehole and rig
- Operators undertaking the work must be in possession of this certificate and the Permit boundary plan at the time of works
- Appropriate borehole sealing without delay and to withstand site level changes

Signed: Helen Day **Permit Granted Date:** 6 October 2026

Permit Expiry Date: 5 October 2027

For and on behalf of the Mining Remediation Authority
Nominated Representative: Helen Day Permitting Manager.
Mining Remediation Authority, Permitting Office, 200 Lichfield Lane, Mansfield, Notts, NG18 4RG. Tel: 01623 637450;
E-Mail: LicensingAndPermissions@MiningRemediation.gov.uk



Appendix 5.5 Informative(s):

1) The relatively recently revised CIRIA document titled 'Abandoned Mine Workings Manual', which replaced Special Publication 32 (1984), indicates that the use of empirical or 'rule of thumb' guides, as the design basis for treatment depth, has been successfully observed for many years for a wide range of abandoned mine workings and overlying rock/soil strata scenarios. As such, the guidance indicates that further design/ground stabilisation consideretions will be required if there is less than 10 times the aggregate measured height of mine workings as competent rock cover above the workings.

2) For information, should the grouting of any mine workings be required, a 10:1 PFA/cement mix or similar would need to be injected into the workings and any other disturbed strata above it under pressure on an OS coordinated treatment grid approved by the Coal Authority (and Building Control/third-party Warranty provider as required). Specific proposals to treat any mine workings would need to be submitted in the form of a standalone 'Specification', with a separate permit to treat being obtained from the Coal Authority. The method of consolidation is dependent on the nature of the bedrock strata and the underground mining conditions encountered, although fissile strata, such as shales and mudstone deposits, do permit mining voids to migrate upwards to quite high levels. All grouting works would need to be supervised by a competent engineer, with a final validation report being produced to confirm what works were undertaken and whether they were successful or not.

3) Ground gas monitoring can be undertaken to confirm or discount the presence of an elevated gassing regime within the underlying soils. Elevated concentrations of mine gases (e.g. CO2, CH4) may be present within the coal seams, voids in or above any shallow mine workings, areas of made ground/opencast backfill, and in any permeable bedrock strata (and any organic rich surficial soils). The period of monitoring to be undertaken should be broadly completed in accordance with current guidance [BS8485]. Piezometers would need to be installed (during drilling works for example) to facilitate this.