



PROPOSED DEVELOPMENT

CANNON HALL FARM, CAWTHORNE, BARNSELEY, S75 4AT

CANNON HALL FARM LIMITED



**CANNON HALL
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SINCE 1989

**COAL MINING RISK ASSESSMENT AND INTRUSIVE
INVESTIGATION**

Our Ref: 26006/CMRA/001

MAY 2026



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EXECUTIVE SUMMARY

Site	The site is rectangular in shape and extends to an area of approximately 0.036 hectares. The site is located within the northern part of Cannon Hall Open Farm, situated off Bark House Lane, Cawthorne Bamsley approximately 7.5km north west of Barnsley town centre
NGR	SE 27140 08583
Investigations	A programme of two (2 No.) rotary boreholes have been drilled within the site in accordance with Coal Authority permit number 31506.
Ground Conditions	The two rotary boreholes undertaken have encountered minimal coal seams. RBH01 did not encounter any coal seams to a final depth of 30m below ground level, whereas RBH02 encountered coal at 11.1m, 16.2m and 19.5m depths. None of the coal seams encountered were broken or backfilled and were considered intact. No loss of water flush was recorded through the drilling process, indicating good quality unweathered mudstone bedrock, with no workings.
Ground Gas	No ground or mine gas has been recorded as part of the rotary open hole drilling works to a depth of 30m bgl. No further consideration regarding the risk from mine gas is required.
Coal Mining	Rotary open hole boreholes have proven the absence of shallow coal mine workings associated with the Blocking (Silkstone) seam below the site, to a maximum depth of 30m. Whilst the Mining Remediation Authority highlight the site as Development High Risk, the Coal Mining Risk Assessment and the subsequent intrusive investigation have proven a lack of workings, and therefore REFA Consulting Engineers consider the site to be VERY LOW RISK from coal mine workings and their associated issues of ground instability and mine gas.
Further Works	If any unusual or suspicious strata or ground conditions are encountered during the subsequent site stripping preparation work, it will be necessary for these areas to be brought to the attention of the appropriate authorities so that all necessary inspection, sampling and testing may be undertaken to determine whether these materials present a hazard to human health. It is incumbent upon the site contractors to advise a responsible authority of any unusual findings within the site which may then be further investigated.

This brief summary should not be assumed to represent a complete account of all the potential geo-environmental issues that may exist at the site. As such it is strongly recommended that the report be read in its entirety.

COAL MINING RISK ASSESSMENT AND INTRUSIVE INVESTIGATION

CANNON HALL FARM, CAWTHORNE

1.0 INTRODUCTION

1.1 Instructions

1.1.1 We are instructed by Mr Steve Barker of Prism Planning, on behalf of the client, Cannon Hall Farm Estates, Cannon Hall Farm, Cawthorne to undertake a coal mining risk assessment and subsequent intrusive investigation to satisfy a planning condition relating to coal mining risk.

1.2 Object

1.2.1 The object of these investigations are as follows:

- To determine the likely presence of shallow (probable unrecorded) coal mine workings beneath the area of proposed development.

1.3 Scope

1.3.1 The investigations considered within this report have comprised of the following elements:

- An initial coal mining risk assessment including the review of a Mining Remediation Authority Consultants Coal Mining report, abandoned mine plans, geological memoirs and various scale British Geological Survey geological maps;
- Undertake ground investigation works by rotary open boreholes to 30m depth;
- Determine the potential presence of ground gases associated with former coal mine workings (if present);
- Identify, if any, shallow worked coal seams are present beneath the site.

1.4 Development Proposals

1.4.1 The site has been proposed to be developed in a commercial manner, with an extension to the current mammal house situated on Cannon Hall Open Farm to create a new mixed-use barn at first floor level above the existing silage clamps, part-educational use (Class F1) and part leisure use (Class E).

1.5 Services

1.5.1 A full utility information pack was acquired as part of these investigation works. No on site buried services were identified. Each borehole has been scanned utilising a cable avoidance tool (CAT) and proceeded by hand dug inspection pits to 0.4m below ground level (bgl) where bedrock mudstone was encountered.

2.0 THE SITE

2.1 Location

2.1.1 The site is rectangular in shape and extends to an area of approximately 0.036 hectares. The site is located within the northern part of Cannon Hall Open Farm, situated off Bark House Lane, Cawthorne, Barnsley approximately 7.5km north west of Barnsley town centre with the approximate centre of the site is situated at approximate National Grid Reference SE 27140 08583. The site location is shown in figure 1 below. The proposed development area is shown in orange on the plan.

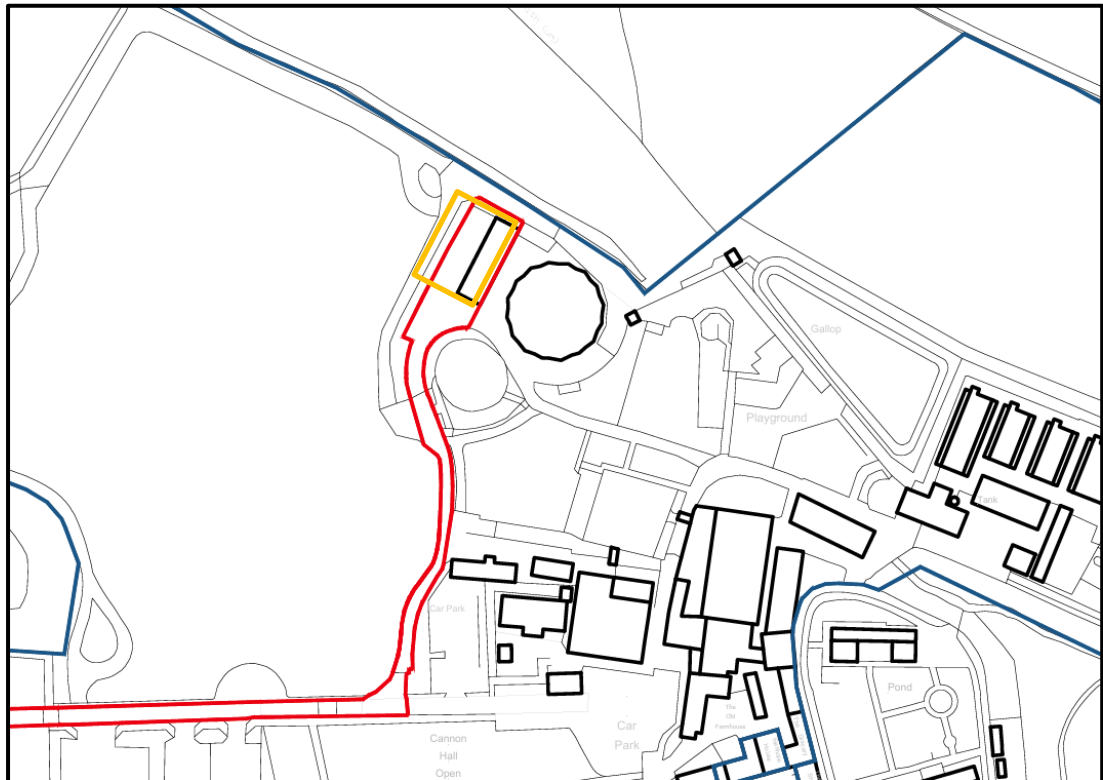


Figure 1 Site Location

2.2 Boundaries

2.2.1 The site is bound to the west and north by agricultural fields and by Cannon Hall Open Farm to the east and south. Immediately east is the current Mammal House, which the new development will be extending off.

2.3 Access

2.3.1 The site can currently be accessed directly from Bark House Lane.

3.0 COAL MINING RISK ASSESSMENT

3.1 General

3.1.1 As part of this report, a Coal Mining Risk Assessment (CMRA) has been included due to the risk from shallow coal mine workings beneath the site.

3.2 Geological Assessment

3.2.1 The 1:50,000 scale geological map indicates that no recorded superficial deposits exist within the boundary of the proposed development.

3.2.2 The site is shown to be underlain by the Pennine Lower Coal Measures Formation sandstone, with a fault situated south of the site, trending northwest-southeast. The Pennine Lower Coal Measures Formation, comprising interbedded grey mudstone, siltstone and sandstone, with coal seams.

3.2.3 The 1:50,000 scale map (Sheet 85 Barnsley) indicates the site is situated within the eastern limb of a anticlinal fold structure spanning across the Pennines, with strata dipping towards the north-east/east.

3.2.4 The 1:10,560 geological sheet (SE20NE, dated 1932) indicates the presence of the circular outcrop of the New Hards (Middleton Main) coal seam through the boundary of the site. Figure 2 shows an extract from BGS geological sheet SE20NE, indicating the site boundary. Assessment of the geological sheets shows the local strata to dip northeast/east within the area, however exact dip angles are not recorded. This therefore would indicate that the New Hards coal seam, and the Wheatley Lime (situated approximately 160m stratigraphically below the New Hards seam) would underlie the site at shallow depth.

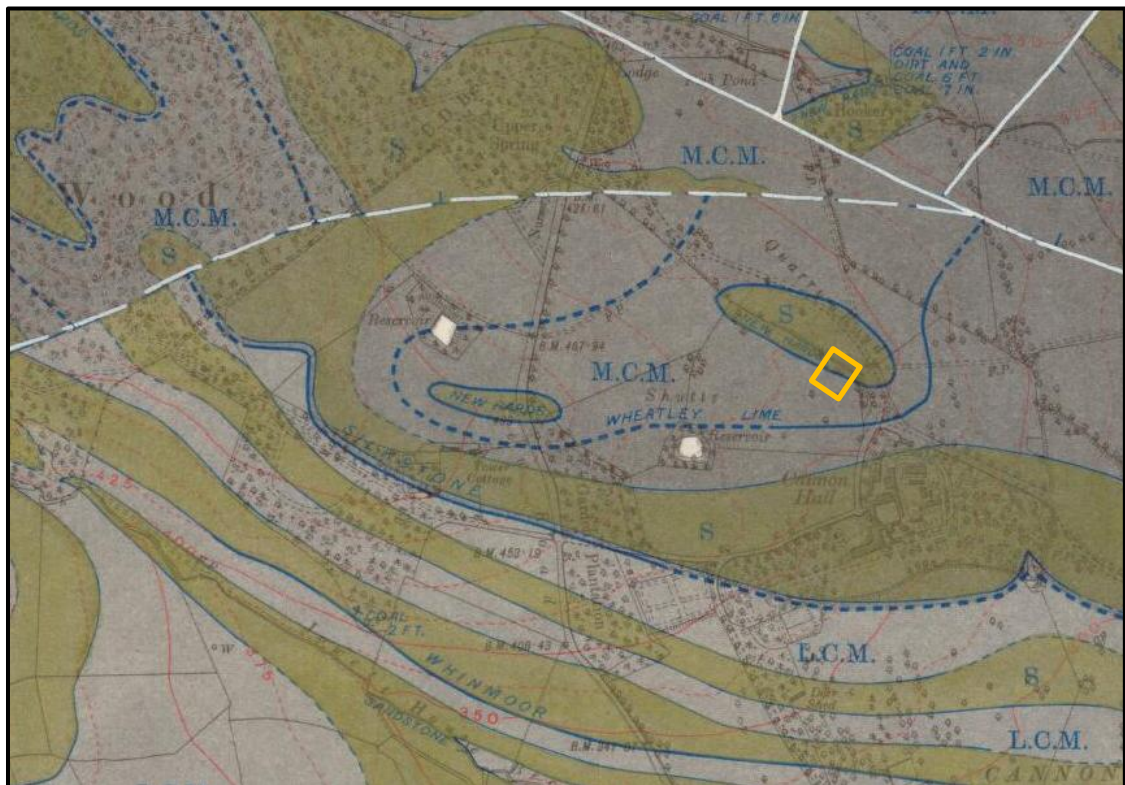


Figure 2 Extract from BGS geological map SE20NE (Contains British Geological Survey materials © UKRI [1932])

- 3.2.5 However, more recent geological mapping shows a different interpretation of the local geology, as presented in Figure 3. Figure 3 shows an extract from the SE20NE map dated 2003. This newer version of the geological map shows the outcrop of the Blocking (Silkstone) seam to the south of the site, with a fault that trends northeast-southwest situated 30m south from the site.
- 3.2.6 The newest version of the geological mapping has been used to further assess the geological structure beneath the proposed development site.

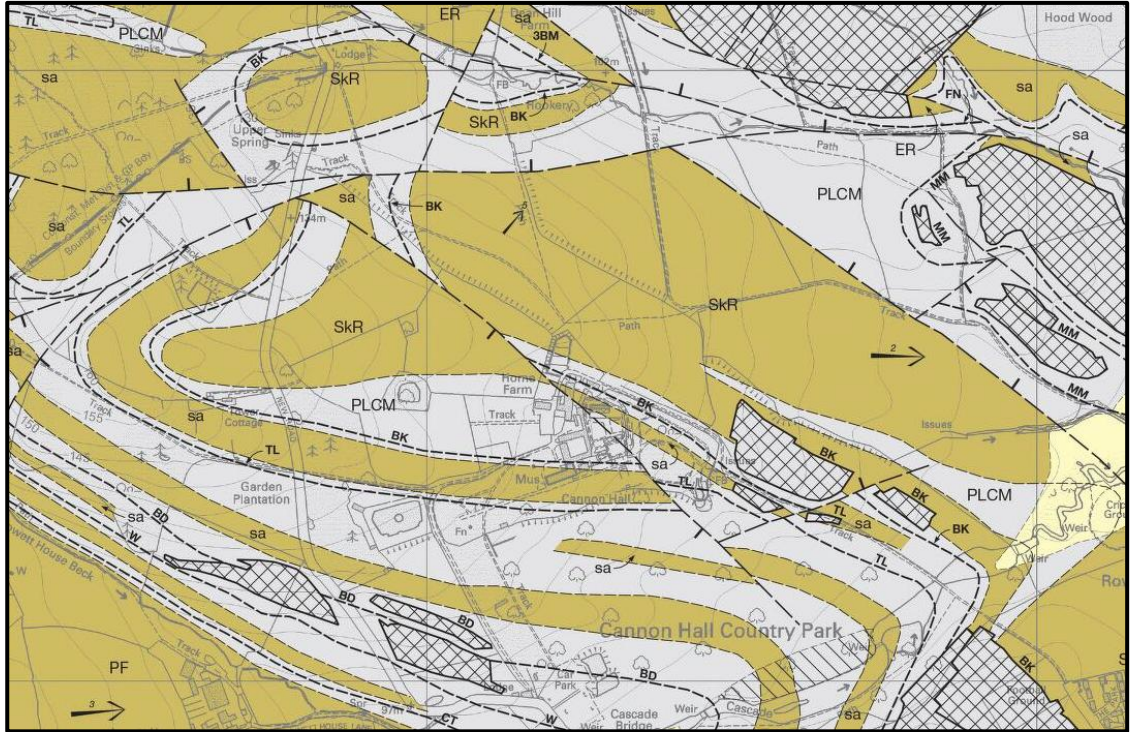
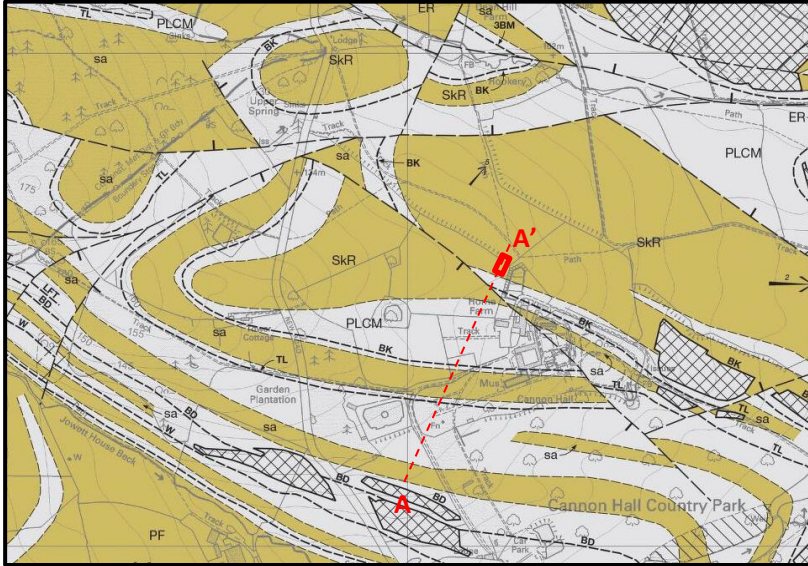
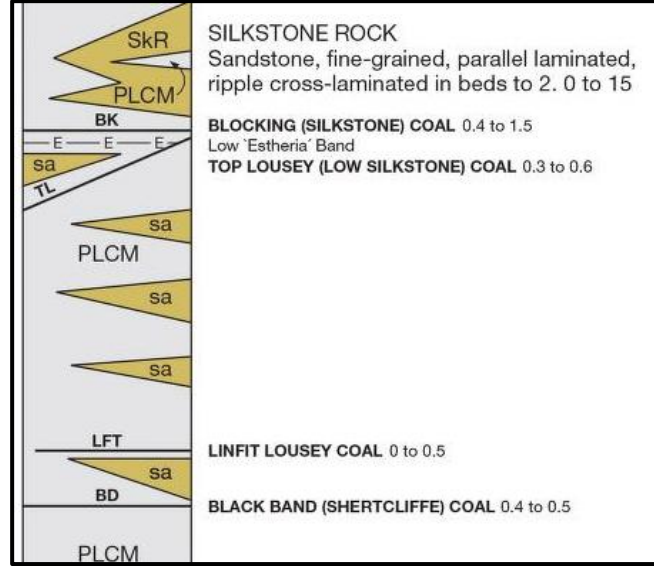


Figure 3 Extract from BGS geological map SE20NE (Contains British Geological Survey materials © UKRI [2003])

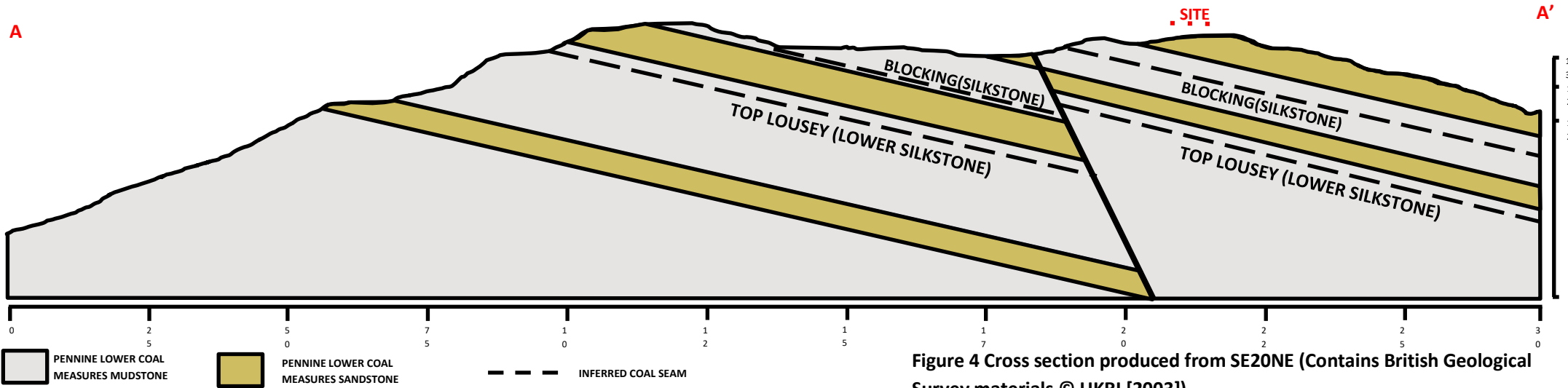
- 3.2.7 Based upon the newest version of the BGS Sheet SE20NE, the Blocking (Silkstone) coal seam is anticipated to underlie the site at shallow depth, based upon its conjectured outcrop and dip angle/ direction.
- 3.2.8 Figure 4 shows the interpreted geological cross section of the site using information adapted from the SE20NE.



Map extract from BGS 1:10,000 geological map sheet SE20NE
(Contains British Geological Survey materials © UKRI [2003])



Stratigraphical column from BGS 1:10,000 geological map sheet SE20NE
(Contains British Geological Survey materials © UKRI [2003])



3.3 Mining Remediation Authority Consultants Coal Mining Report

- 3.3.1 The MRA CCM report does not record any past recorded underground mining beneath the site.
- 3.3.2 The report however states that there is a risk from probable unrecorded shallow workings beneath the site.
- 3.3.3 No spine roadways are recorded at depth beneath the site.
- 3.3.4 No mine entries have been recorded within 100m of the site boundary.
- 3.3.5 No faults, fissures or breaklines have been recorded.
- 3.3.6 Several areas of opencast coal mining are presented with the Summary of Findings map provided by the Mining Remediation Authority. One area is situated 400m southeast shows opencast workings off the edge of the Cannon Hall Country Park, likely associated with the Blacking (Silkstone) coal seam. Another area of opencast is situated 375m south, likely associated with the Black Band (Shertcliffe) coal seam, worked from surface. Both these features would indicate shallow depth to bedrock with minimal superficial deposits within the area.
- 3.3.7 There are no Mining Remediation managed tips within 500m of the site boundary.
- 3.3.8 No site investigations or remediated sites have been recorded within 50m of the site boundary.
- 3.3.9 The Mining Remediation Authority has not received a damage notice or claim for the site or any property within 50m of the site boundary since 31 October 1994.
- 3.3.10 No instances of mine gas have been recorded within 500m.
- 3.3.11 No future underground mining has been identified.

3.4 Mine Gas Risk Assessment

3.4.1 Due to the presence of recorded, probable unrecorded and mine entries within the site and surrounding area, a mine gas risk assessment has been undertaken in line with guidance given by CL:AIRE (2021) Good practice for risk assessment for coal mine gas emissions. Table 1 presents an adaption of the Decision Support Tool as detailed in the CL:AIRE document.

Table 1 Conclusions of Risk Zone based on Decision Support Tool for Mine Gas Risk Assessment flow chart (CL:AIRE, 2021)		
Decision Point	Answer based on desktop research completed (Yes/No)	Output
Is the site within TMRA defined Coal Mining Reporting Area?	1. YES – TMRA Interactive Map Viewer identifies site as within CMRA.	CONTINUE TO NEXT STEP – see notes 1 and 2 following flow chart detailing Preliminary Information Requirements (Note 1) and the Decision Process (Note 2).
Are all of these statements? 1. Mine entries >50m from the site boundary? 2. Workings >150m depth? 3. No faults or other potential pathways connecting surface to deeper unflooded workings? 4. Outside area of past or probable shallow workings on TMRA viewer?	1. YES – TMRA Consultants Coal Mining Report has not identified mine entries on site and <20m of the boundary 2. YES – TMRA Consultants Coal Mining Report has not identified coal mine workings <150m depth. 3. YES – TMRA Consultants Coal Mining Report does not record any faults, breaklines or fissures. 4. NO – TMRA Consultants Coal Mining Report indicates that the site is within an area of past probable shallow workings.	CONTINUE TO NEXT STEP
Are all of these statements true? 1. Workings between 30m and 150m but permanently flooded or covered by 10m+ of low permeability superficial deposits*? 2. Mine entries >50m from the site boundary? (*low permeability superficial deposits of sufficient thickness – less than 1×10^{-6} m/s hydraulic conductivity)	1. NO – Potential unrecorded workings present beneath the site associated with the Blocking (Silkstone) seam 2. NO – TMRA Consultants Coal Mining Report has not identified mine entries that lie <50m beyond the site or on site.	CONTINUE TO NEXT STEP
Are all of these statements true? 1. Mine entries on site or <20m from site boundary? 2. Workings below site <30m depth and unflooded or variable water level (not permanently flooded)? 3. Faults or other pathways connecting surface with deeper unflooded workings? 4. Within area of past or probable shallow workings on TMRA Viewer?	1. NO – TMRA Consultants Coal Mining Report has not identified mine entries <20m from the site. 2. NO – Probable unrecorded workings are recorded within the Mining Remediation Authority report. Shallow groundwater levels are unknown. 3. NO – No faults, breaklines or fissures are shown on site. 4. YES – TMRA Consultants Coal Mining Report indicates the site to be situated within an area of past or probable unrecorded workings at shallow depth.	MODERATE RISK ZONE

4.0 **SITE WORKS**

4.1 **Intrusive Works**

4.1.1 The potential presence of shallow coal mine workings present within this site have been investigated utilising a series of two (2 No.) rotary open hole boreholes which were supervised by an REFA engineer between the 20th April and 22nd April 2026.

4.2 **Locations**

4.2.1 The locations of the boreholes were chosen by REFA in conjunction with the coal mine risk assessment information. The locations were chosen in an effort to identify the representative ground conditions and shallow geology present beneath the proposed development area.

4.2.2 The locations of the exploratory hole positions are indicated upon the appended Exploratory Hole Location Plan 26006/01. These locations are shown in relation to site features present at the time of the investigations.

4.3 **Records**

4.3.1 During the investigation’s details of the strata types, water entries, ground conditions and levels have been maintained by the site engineer. This information has been collated into a series of rotary open borehole logs which are appended to this report for reference.

4.4 **Targeting**

4.4.1 The investigation locations were undertaken to identify the shallow bedrock geology present over the whole development area, though it is acknowledged that ground conditions may vary between investigation locations.

4.4.2 The investigation locations have been spread over the development area of the site in accordance with the recommendations laid down in BS10175: 2011 “Investigation of Potentially Contaminated Sites” and CIRIA C758D Abandoned mine workings manual. The initial ground investigation strategy is detailed within table 2 below.

Table 2 - Initial Ground Investigation Strategy		
Exploratory Hole No.	Target	Purpose
RBH01 – RBH02	Shallow, potential unrecorded, work coal seams	To determine the presence of coal mine workings including: <ol style="list-style-type: none"> 1. Thickness of any coal seams and if they have been worked 2. Depth at which coal is encountered at.

5.0 INTRUSIVE MINING INVESTIGATIONS

5.1 General

- 5.1.1 The initial coal mine risk assessment has indicated that probably unrecorded coal mine workings may be present beneath the site at shallow depth.
- 5.1.2 A programme of two (2 No.) rotary boreholes have been drilled within the site in accordance with Coal Authority permit number 31506.

5.2 Rotary Boreholes

- 5.2.1 A total of two (2 No.) rotary open hole boreholes have been drilled within the site area in an effort to identify the shallow geology below the site. A summary of the mining investigation findings are shown in table 3.

Table 3 – Summary of Mining Investigation					
Position ID	Depth to Rock Head (m)	Depth to Top of Seam (m)	Evidence of Workings (Depth) (m)	Remarks	Sufficient Rock Cover above Seams/Workings
RBH01	0.4	n/a	NO	N/A	N/A
RBH02	0.4	11.1 – 11.5	NO	Intact	YES
		16.2 – 16.5	NO	Intact	YES
		19.5 – 19.8	NO	Intact	YES

- 5.2.2 The two rotary boreholes undertaken have encountered minimal coal seams. RBH01 did not encounter any coal seams to a final depth of 30m below ground level, whereas RBH02 encountered coal at 11.1m, 16.2m and 19.5m depths. None of the coal seams encountered were broken or backfilled and were considered intact. No loss of water flush was recorded through the drilling process, indicating good quality unweathered mudstone bedrock, with no workings.

6.0 DISCUSSIONS

6.1 Shallow Coal Mine Workings

- 6.1.1 Following review of all information to date presented within the Coal Mining Risk Assessment and the intrusive coal mining investigation, it is considered that shallow underground workings associated with the Blocking (Silkstone) seam are not present beneath the site. Whilst the Mining Remediation Authority use older geological map information beneath the site, regardless of geological interpretation, no workings were found within any of the coal seam encountered during the rotary drilling works. The geological information gained may suggest that neither the 1932 nor the 2003 geological map sheet record the exact geology of the site, and potentially indicate the presence of another minor geological fault between RBH01 and RBH02.
- 6.1.2 No voids or backfilled workings were encountered, therefore no installations were utilised as part of the backfill of the boreholes, as gas monitoring is not required.
- 6.1.3 Throughout drilling, no levels of mine gas (CO₂, CH₄, CO and H₂S) were recorded.

6.1.4 Therefore, REFA consider that the site does not require any further remedial treatment or consideration towards the issue of coal mining.

7.0 CONCLUSIONS & RECOMMENDATIONS

7.1 General

7.1.1 No further consideration to the issues relating to coal mining are required for the proposed development.

7.2 Further Work

7.2.1 If any unusual or suspicious strata or ground conditions are encountered during the subsequent site stripping preparation work, it will be necessary for these areas to be brought to the attention of the appropriate authorities so that all necessary inspection, sampling and testing may be undertaken to determine whether these materials present a hazard to human health. It is incumbent upon the site contractors to advise a responsible authority of any unusual findings within the site which may then be further investigated.

8.0 NOTES

8.1 All reports are for advisory purposes only and all design decisions are the ultimate responsibility of others.

8.2 Unless stated otherwise the investigation has been undertaken in general accordance with the recommendations given in BS 5930: 2015+A1:2020 "A Code of Practice for site Investigations" and the laboratory testing has been carried out in accordance with BS 1377-2: 2022 "Methods of Test for Civil Engineering Purposes".

8.3 Soil and rock descriptions are generally based on the scales of strength and relative density within BS 5930 although it should be noted that in certain circumstances descriptions are based on site records or a qualitative assessment without the benefit of in-situ or laboratory test results.

8.4 The assessment of ground conditions given in this report is based on the results of the fieldwork and laboratory testing carried out and there may be other conditions at the site not encountered by these works, which have not been taken into account.

8.5 The scope of the investigation and information provided may not necessarily reflect all the geotechnical and environmental aspects related to the site, and the omission of certain items does not mean that the site is unaffected by such problems.

8.6 It should be noted that groundwater levels can vary and may at times be significantly different to those recorded during the investigation and attention is drawn to BS 5930 which indicates that measurements may be necessary over an extended period of time to investigate changes in groundwater pressures due to seasonal, tidal and other causes.

8.7 Any recommendations on construction methods within this report are for initial guidance only and all design proposals remain the responsibility of the appropriate contractor/consultant.

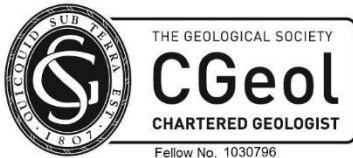
8.8 Further assessment, investigation, construction activities or time may reveal conditions that were not found during the period of investigation and, therefore, could not have been taken into account in the preparation of the report and where such information might impact upon the stated opinion R. E. Fry & Associates Ltd request the opportunity to review such information and modify the report if necessary.

- 8.9** Where information has been obtained from sources other than the direct findings of the investigation, R. E. Fry & Associates Ltd cannot and does not guarantee the authenticity or reliability of this information.
- 8.10** Where opinions expressed in this report are based on current available guidelines and legislation, no liability can be accepted by R. E. Fry & Associates Ltd for the effects of any future changes to such guidelines and legislation.
- 8.11** This report has been prepared on the instructions and to the requirements of the named client and any unauthorised party using this information for any purpose does so at his own risk and any duty of care to that party is excluded.

Signed for and on behalf of
REFA Geotechnical, Civil & Structural Engineers



Chris Pilkington BSc (Hons.) CGeol FGS
Principal Geoenvironmental Engineer



APPENDIX A



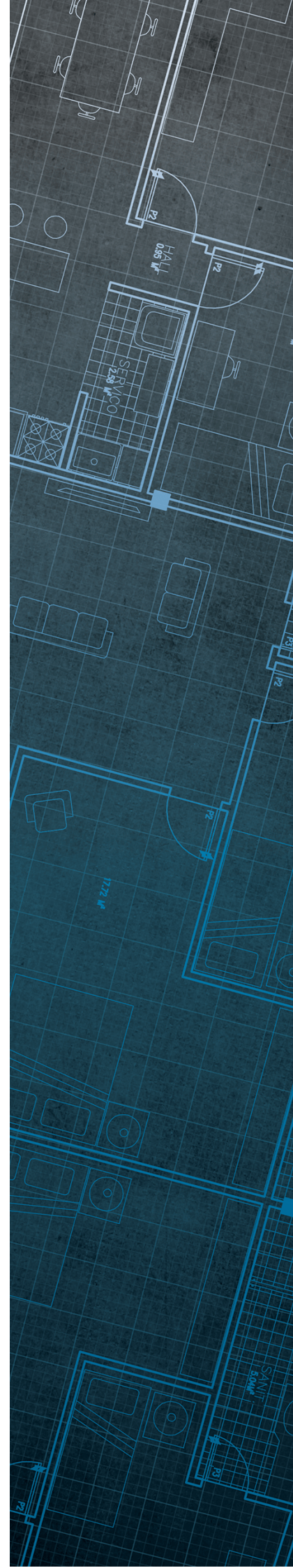
The Coal
Authority

Consultants Coal Mining Report

Cannon Hall Open Farm, Bark
House Lane, Cawthorne, Barnsley,
S75 4at
South Yorkshire

Date of enquiry: 31 March 2026
Date enquiry received: 31 March 2026
Issue date: 31 March 2026

Our reference: 51003561795001
Your reference: GS-15M-7AM-AL1-DS3



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

GROUNDSURE LIMITED

Enquiry address

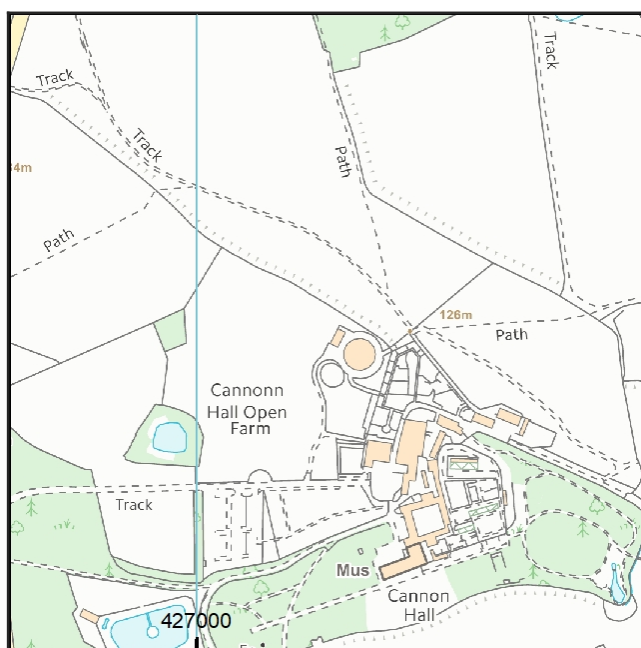
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Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

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.

Abandoned mine plan catalogue numbers

None available.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
MIDDLETON MAIN	Coal	Yes	Within	N/A	289

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.

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

None recorded within 50 metres of the enquiry boundary.

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.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

Status	Licence type	Distance (m)	Direction
Past	Underground	198.9	North-East

See Section 4 for further information.

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 in an area where a notice to withdraw support was given in 1954.

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.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

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 specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Coal mining licensing

The report has highlighted that the site is close to a Coal Authority license area for coal mining operations. Please contact us if you require further information.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please email us at reports@miningremediation.gov.uk.

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 **email us at reports@miningremediation.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.

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. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

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

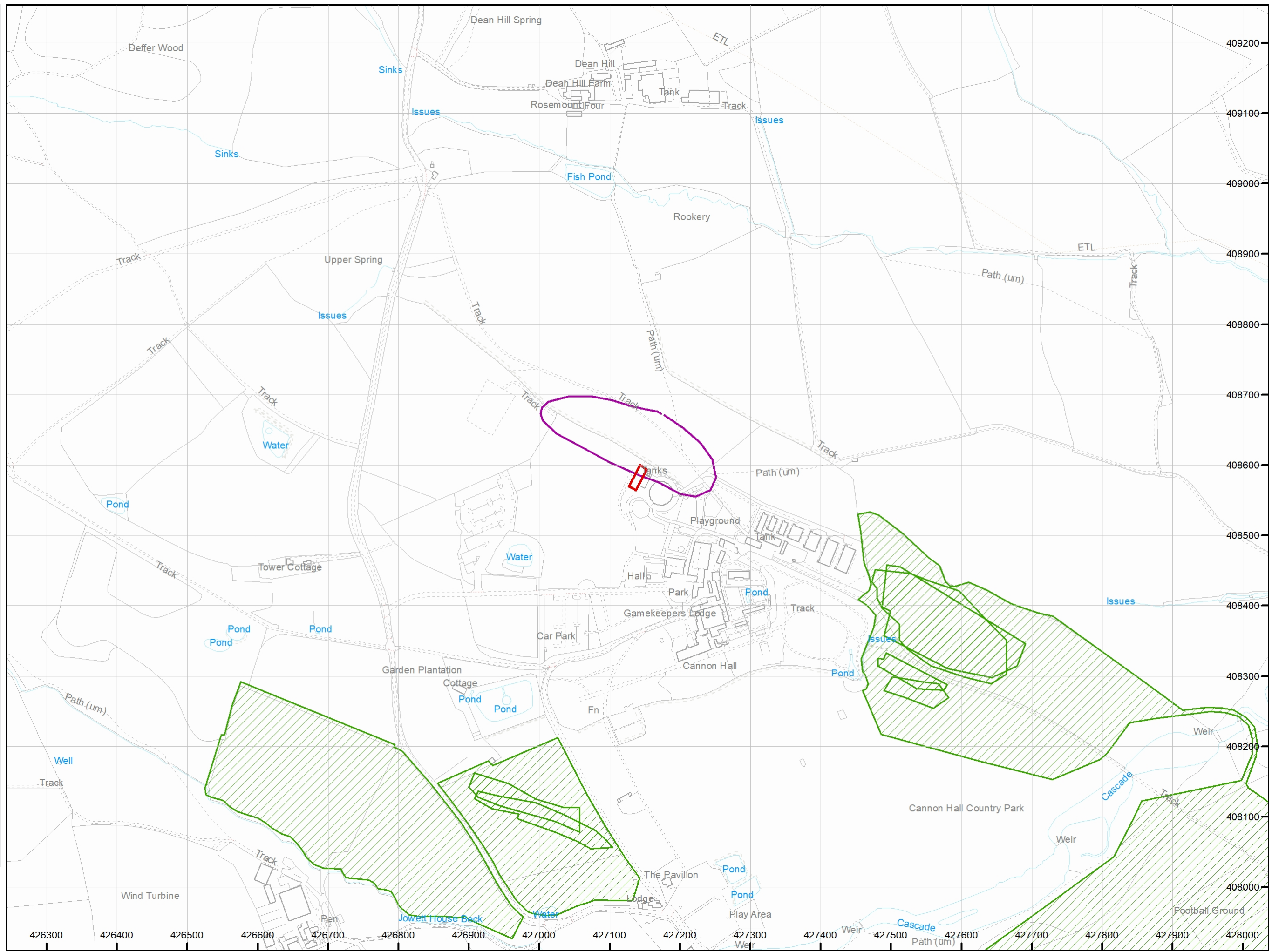
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

APPENDIX B

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

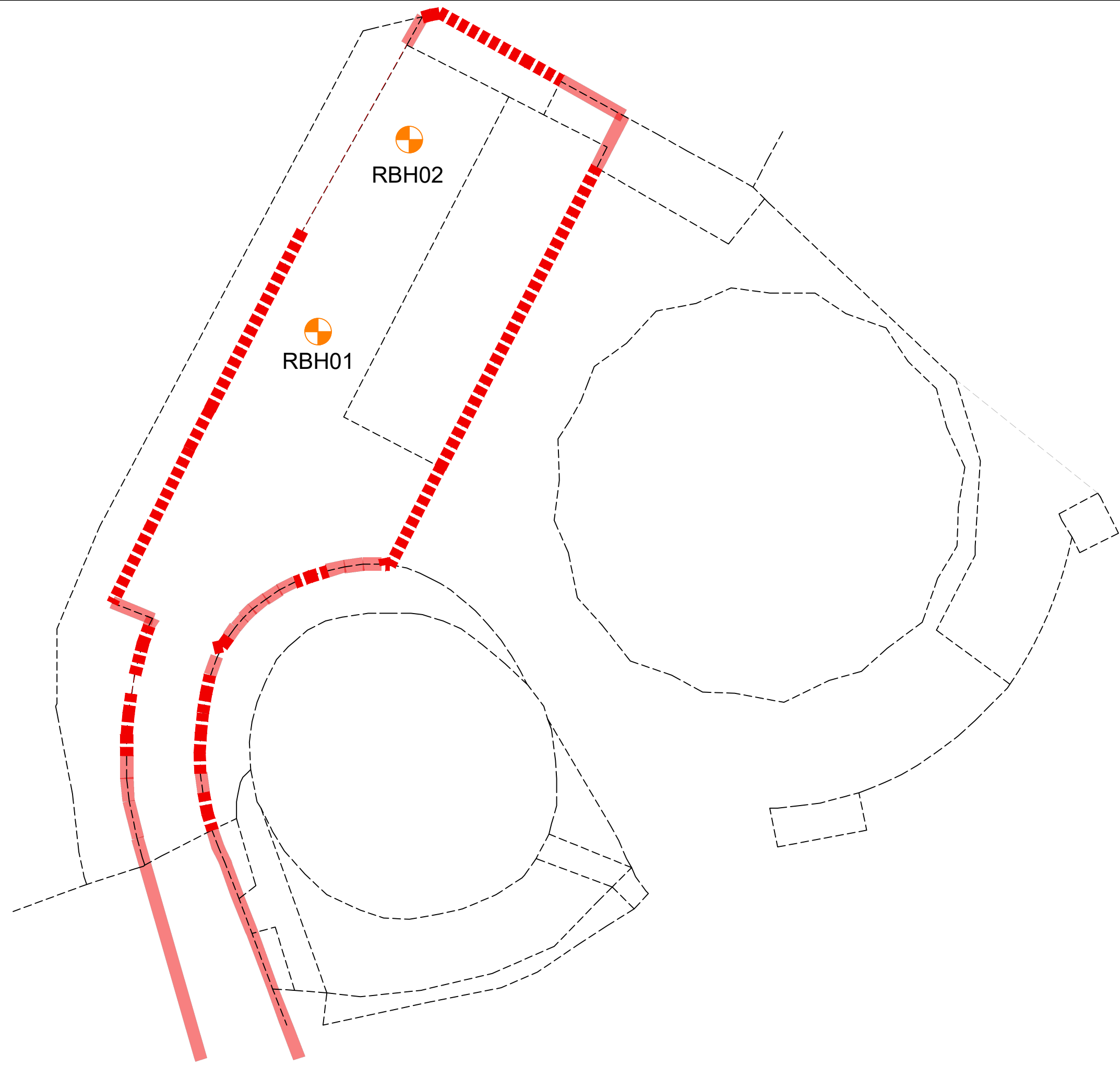
Key

- Approximate position of the enquiry boundary shown 
- Outcrop (Proven) 
- Unlicensed opencast site 




How to contact us
 0345 762 6848 (UK)
 +44 (0)1623 637 000 (International)
reports@miningremediation.gov.uk

APPENDIX C



KEY

	Rotary Open Hole Borehole

INFO

Rev	Description	By	Date

REFA
 Geotechnical, Civil & Structural Engineers
 45 - 46 Bridgeman Terrace, Wigan, WN1 1TT
 T: 01942 826 020 E: info@refa.co.uk
 www.refa.co.uk

Client

Cannon Hall Farm

Cannon Hall Education Barn

Drawing

Exploratory Hole Location Plan

Sheet Size	Scale at Sheet Size	Date	Drawn By	Checked By
A3	nts	25/03/2026	AB	
Project Number		Drawing Number		Current Revision
26006		26006/01		*

APPENDIX D



ROTARY BOREHOLE RECORD

Borehole Number

RBH01

Project Name: Cannon Hall Farm		Client: Cannon Hall Farm		Date: 20/04/2026 - 21/04/2026	
Location: Cawthorne		Logged by: AB		Co-ords: E427135.91 N408575.46	
Project No. : 26006		Crew Name: Ace Drilling Services Ltd		Drilling Equipment: Beretta T46-4	
Log Status FINAL	Hole Type RO	Level 126.46m AoD	Approved By CP	Scale 1:50	Page Number Sheet 1 of 3

Well	Water Strikes	Type / FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
			TCR	SCR	RQD						
							0.25 0.40	126.21 126.06		CONCRETE (Drillers Description)	
										HARDCORE (Drillers Description)	
										Weathered MUDSTONE (Drillers Description)	1
							2.40	124.06		Grey MUDSTONE (Drillers Description)	2
							3.50	122.96		Dark grey MUDSTONE (Drillers Description)	3
							4.30	122.16		Grey MUDSTONE (Drillers Description)	4
											5
											6
											7
											8
											9
											10

Remarks:	Drilling Flush Details					Chiselling				
	Top	Base	Type	Rtn Min %	Rtn Max %	Remarks	Depth Top	Depth Base	Duration	Remarks

Robert E Fry & Associates Ltd
45 Bridgeman Terrace, Wigan, WN1 1TT
www.refa.co.uk 01942826020 info@refa.co.uk
Company Number: 02436911



ROTARY BOREHOLE RECORD

Borehole Number

RBH01

Project Name: Cannon Hall Farm		Client: Cannon Hall Farm		Date: 20/04/2026 - 21/04/2026	
Location: Cawthorne		Logged by: AB		Co-ords: E427135.91 N408575.46	
Project No. : 26006		Crew Name: Ace Drilling Services Ltd		Drilling Equipment: Beretta T46-4	
Log Status FINAL	Hole Type RO	Level 126.46m AoD	Approved By CP	Scale 1:50	Page Number Sheet 3 of 3

Well	Water Strikes	Type / FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
			TCR	SCR	RQD						
										Grey MUDSTONE (Drillers Description)	
											21
											22
											23
											24
											25
											26
											27
											28
											29
							30.00	96.46		End of Borehole at 30.00m	30

Remarks:	Drilling Flush Details					Chiselling				
	Top	Base	Type	Rtn Min %	Rtn Max %	Remarks	Depth Top	Depth Base	Duration	Remarks

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Company Number: 02436911



ROTARY BOREHOLE RECORD

Borehole Number

RBH02

Project Name: Cannon Hall Farm		Client: Cannon Hall Farm		Date: 21/04/2026 - 22/04/2026	
Location: Cawthorne		Logged by: AB		Co-ords: E427141.94 N408587.10	
Project No. : 26006		Crew Name: Ace Drilling Services Ltd		Drilling Equipment: Beretta T46-4	
Log Status FINAL	Hole Type RO	Level 126.44m AoD	Approved By CP	Scale 1:50	Page Number Sheet 1 of 3

Well	Water Strikes	Type / FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
			TCR	SCR	RQD						
							0.25 0.40	126.19 126.04		CONCRETE (Drillers Description)	
										HARDCORE (Drillers Description)	
										Weathered MUDSTONE (Drillers Description)	1
							2.40	124.04		Grey Mudstone (Drillers Description)	2
							3.70	122.74		Dark grey MUDSTONE (Drillers Description)	3
							4.60	121.84		Grey MUDSTONE (Drillers Description)	4
											5
											6
											7
											8
											9
											10

Remarks:	Drilling Flush Details					Chiselling				
	Top	Base	Type	Rtn Min %	Rtn Max %	Remarks	Depth Top	Depth Base	Duration	Remarks

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Company Number: 02436911



ROTARY BOREHOLE RECORD

Borehole Number
RBH02

Project Name: Cannon Hall Farm		Client: Cannon Hall Farm		Date: 21/04/2026 - 22/04/2026	
Location: Cawthorne		Logged by: AB		Co-ords: E427141.94 N408587.10	
Project No. : 26006		Crew Name: Ace Drilling Services Ltd		Drilling Equipment: Beretta T46-4	
Log Status FINAL	Hole Type RO	Level 126.44m AoD	Approved By CP	Scale 1:50	Page Number Sheet 2 of 3

Well	Water Strikes	Type / FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
			TCR	SCR	RQD						
										Grey MUDSTONE (Drillers Description)	
							11.10	115.34		Coal (Drillers Description)	11
							11.50	114.94		Grey MUDSTONE (Drillers Description)	
											12
											13
											14
											15
							16.20	110.24		Coal (Drillers Description)	16
							16.50	109.94		Fire CLAY (Drillers Description)	
							16.80	109.64		Grey MUDSTONE (Drillers Description)	17
											18
							19.50	106.94		Coal (Drillers Description)	
							19.80	106.64		Grey MUDSTONE (Drillers Description)	20

Remarks:	Drilling Flush Details					Chiselling				
	Top	Base	Type	Rtn Min %	Rtn Max %	Remarks	Depth Top	Depth Base	Duration	Remarks

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Company Number: 02436911



ROTARY BOREHOLE RECORD

Borehole Number

RBH02

Project Name: Cannon Hall Farm		Client: Cannon Hall Farm		Date: 21/04/2026 - 22/04/2026	
Location: Cawthorne		Logged by: AB		Co-ords: E427141.94 N408587.10	
Project No. : 26006		Crew Name: Ace Drilling Services Ltd		Drilling Equipment: Beretta T46-4	
Log Status FINAL	Hole Type RO	Level 126.44m AoD	Approved By CP	Scale 1:50	Page Number Sheet 3 of 3

Well	Water Strikes	Type / FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
			TCR	SCR	RQD						
										Grey MUDSTONE (Drillers Description)	
											21
											22
											23
											24
											25
											26
											27
											28
											29
							30.00	96.44		End of Borehole at 30.00m	30

Remarks:	Drilling Flush Details					Chiselling				
	Top	Base	Type	Rtn Min %	Rtn Max %	Remarks	Depth Top	Depth Base	Duration	Remarks

Robert E Fry & Associates Ltd
45 Bridgeman Terrace, Wigan, WN1 1TT
www.refa.co.uk 01942826020 info@refa.co.uk
Company Number: 02436911

APPENDIX E



Mining
Remediation
Authority

Permit to enter or disturb Mining Remediation Authority interests

Permit number: 31506

Site Location:

Cannon Hall Farm, Bark House Lane, Cawthorne, Barnsley, S75 4AT

Name and Address of Permit Holder:

Cannon Hall Farm, Cawthorne, South Yorkshire, S75 4AT

This certificate hereby grants the above named Permit Holder a Permit to carry out:

Ground investigation by two boreholes to 35m to determine presence of shallow mine workings 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 ONLY – a **spontaneously combustible** seam present.
- 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:

Jodie Dawson

Permit Granted Date:

20.04.26

Permit Expiry Date:

19.04.27

For and on behalf of the Mining Remediation Authority

Nominated Representative: Jodie Dawson Permitting Manager.

Mining Remediation Authority, Permitting Office, 200 Lichfield Lane, Mansfield,

Notts, NG18 4RG. Tel: 01623 637450;

E-Mail: LicensingAndPermissions@MiningRemediation.gov.uk



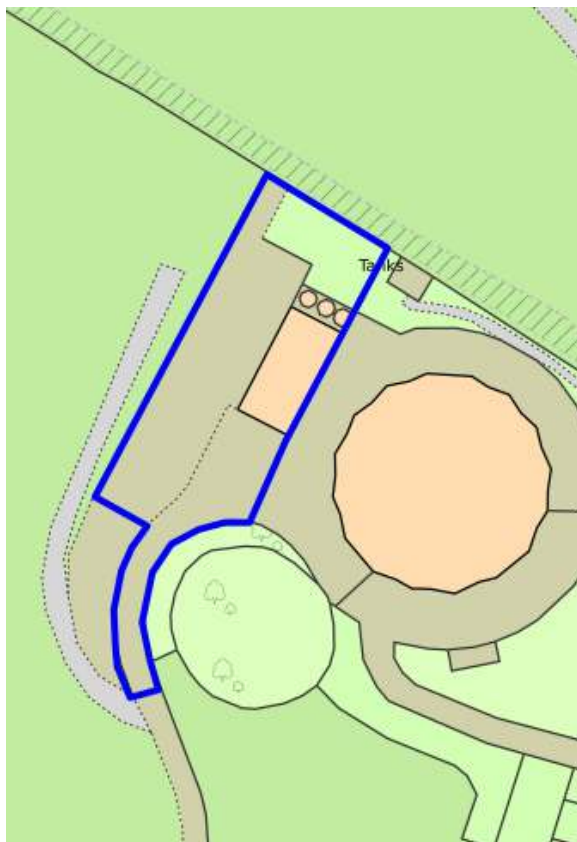


Mining
Remediation
Authority

Granted Permit Boundary

Permit number: 31506

Permit boundary:



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