

From: Harry Clayton
Sent: 31 March 2023 08:50
To: Isabella Marshall | Mabbett; Uxo
Cc: Sophie Douglas; Research
Subject: RE: PDSA - Carpenter's Solar Farm, Glossop

Good morning Izzi

Please find the PDSA below as requested. If you have any further queries, don't hesitate to contact us.

	
Pre-Desk Study Assessment	
Site:	Carpenter's Solar Farm, Glossop, Derbyshire
Client:	Mabbett
Contact:	Isabella Marshall
Date:	31 st March 2023
Pre-WWI Military Activity on or Affecting the Site	None identified.
WWI Military Activity on or Affecting the Site	None identified.
WWI Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ Transport infrastructure and public utilities. ■ Military camps and training areas.
WWI Bombing	None identified on the Site.
Interwar Military Activity on or Affecting the Site	None identified.
WWII Military Activity on or Affecting the Site	None identified.
WWII Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ Transport infrastructure and public utilities. ■ Military camps and training areas.
WWII Bombing Decoys (within 5km of Site)	1No. located approximately 4.4km south-southwest of the Site.
WWII Bombing	During WWII the Site was located in the Municipal Borough (MB) of Glossop, which officially recorded no High Explosive (HE) bombing. No readily available records have been found to indicate that the Site was bombed.
Post-WWII Military Activity on or Affecting the Site	None identified.
Recommendation	A detailed desk study, whilst always prudent, is not considered essential in this instance.

Further information

For information about Zetica's detailed UXO desk studies and other UXO services, please visit our website: www.zeticauxo.com.

Details and downloadable resources covering the most common sources of UXO hazard affecting sites in the UK can be found [here](#).

If you have any further queries, please don't hesitate to get in contact with us at uxo@zetica.com or 01993 886 682.

This summary is based on a cursory review of readily available records. Caution is advised if you plan to action work based on this summary.

It should be noted that where a potentially significant source of UXO hazard has been identified on the Site, the requirement for a detailed desk study and risk assessment has been confirmed and no further research will be undertaken at this stage. It is possible that further in-depth research as part of a detailed UXO desk study and risk assessment may identify other potential sources of UXO hazard on the Site.

Many thanks

Harry

Harry Clayton

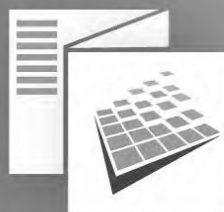
Risk Assessor

Zetica Limited

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ZETICA BROCHURE

Click here to view



From: Isabella Marshall | Mabbett

Sent: Wednesday, March 29, 2023 1:36 PM

To: Uxo <Uxo@zetica.com>

Cc: Sophie Douglas <douglas@mabbett.eu>

Subject: PDSA - Carpenter's Solar Farm, Glossop

Good afternoon,

Our client is proposing to submit an Application to develop a new solar farm on land located at NGR 401731E, 394818N.

Could Zetica provide a PDSA to establish if further detailed uxu risk assessments are warranted please? The proposed development area comprises Areas B and C as shown on the attached plan. Note that Area A will comprise a laydown area during construction and therefore does not need to be considered under the PDSA.

Kind regards

Izzi

Isabella Marshall BSc (Hons) FGS AIEMA MIEEnvSc
Project Manager and Senior Geo-environmental Engineer

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Appendix L: Coal Mining Risk Assessment

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03 May 2023

Our Ref: 312543/ASL/SB Rev 3.0

Dear Michael:

RE: CARPENTERS SOLAR FARM PLANNING SUPPORT

Site: Carpenters Solar Farm, Dinting Lodge Industrial Estate, Glossop SK13 6LE

We are pleased to enclose the following report for the proposed development work at Carpenters Ltd, Dinting Lodge Industrial Estate, Glossop, UK:

- MHB Consultants Ltd., Mining Risk Assessment, Carpenter Ltd Solar Farm, Doc. No.: 3365-MHB-MRA-001, MHB Project Ref.: 3365, 19 April 2023.

Yours sincerely,

MABBETT & ASSOCIATES LTD

BY:

Sophie Douglas, MSc
Graduate Geo-environmental Engineer

cc: IM, SB, MF-5.



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Mabbett Ltd

Carpenters Ltd Solar Farm

Mining Risk Assessment

Doc. No.: 3365-MHB-MRA-001

REMIT NO:	-	MHB PROJECT REF:	3365
ELR:	N/A	MILEAGE:	N/A
O.S. REF:	SK 01761 94857		



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Standard Disclaimer

This Mining Risk Assessment (MRA) has been prepared for Mabbett and relates to the titled project, or named part thereof, and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of MHB Consultants Ltd (MHB) being obtained. MHB accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purpose agrees and will be such use or reliance be taken to confirm his agreement to indemnify MHB for all loss or damage resulting therefrom. MHB accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to MHB at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future; consequently a re-assessment of the conclusions presented here would be required.

Document number: 3365-MHB-MRA-001

A02	19/04/2023	Updated following Comments from Mabbett	SK	JS	JS	
A01	14/04/2023	Issued for Comment	SK	JS	JS	
Revision	Date	Description	Originator	Checker	Approver	Client

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APPENDIX A CONSULTANTS COAL MINING REPORT

1 INTRODUCTION

1.1 General

MHB Consultants Ltd (MHB) have prepared this Mining Risk Assessment (MRA) for Mabbett Ltd for a proposed Solar Farm site at Carpenters Ltd in Dinting, Glossop. The location of the site can be seen in Figure 1.

The proposed development site has an area of approximately 16,500m² and is surrounded partly by the Carpenter Ltd building/car park, and partly by woodland and greenery. The Glossop Brook is within 50m to the south of the site. At present the site is greenfield with no development.

The site topography of the land rises from approx. 130mAOD at the south to approx. 140mAOD at the north.

1.2 Scope of Remit

The site is identified as being within a coal mining report area, based upon information held by the Coal Authority, and as such an MRA would be required for the project, this document. This assessment is part of the wider works to facilitate the design and construction of a proposed solar farm at the site.

1.3 Document Purpose

The purpose of this MRA is to collate the available geological, mining and historical data for the site in order to assess the potential for the proposed works to be affected by or to affect mining assets within the site boundary.

This report has been prepared in accordance with following documentation:

- The Coal Authority (CA) Coal Mining Risk Assessment guidance (Ref [1]).
- The Construction Industry Research (CIRIA) C758 - Abandoned mine workings manual, dated January 2017 (Ref [2]).

A geotechnical desk study including site history review has been completed for the project (3365-MHB-REP-001, Ref [3]). Where relevant information will be included herein, however, for a full discussion the Desk Study Report should be consulted.

1.4 Source of Information

This MRA has been prepared based on a review of the following information sources:

Reports and Other Documents

- The Coal Authority (CA) Consultants Coal Mining Report (Ref [4]), provided in Appendix A.

Recorded Plans / Drawings

Those drawings relevant to this report have been included within the text or appended as indicated:

- Sheet 86 - Glossop - Bedrock Map 1:50;000 Scale, dated 2012 (Ref [5]).
- Sheet 86 – Glossop - Solid and Drift Edition 1:50;000 Scale, dated 1980 (Ref [6])

Websites

- The Geoindex Onshore geological mapping offered by British Geological Survey (Ref [7]).
- The Coal Authority interactive maps (Ref [8]).

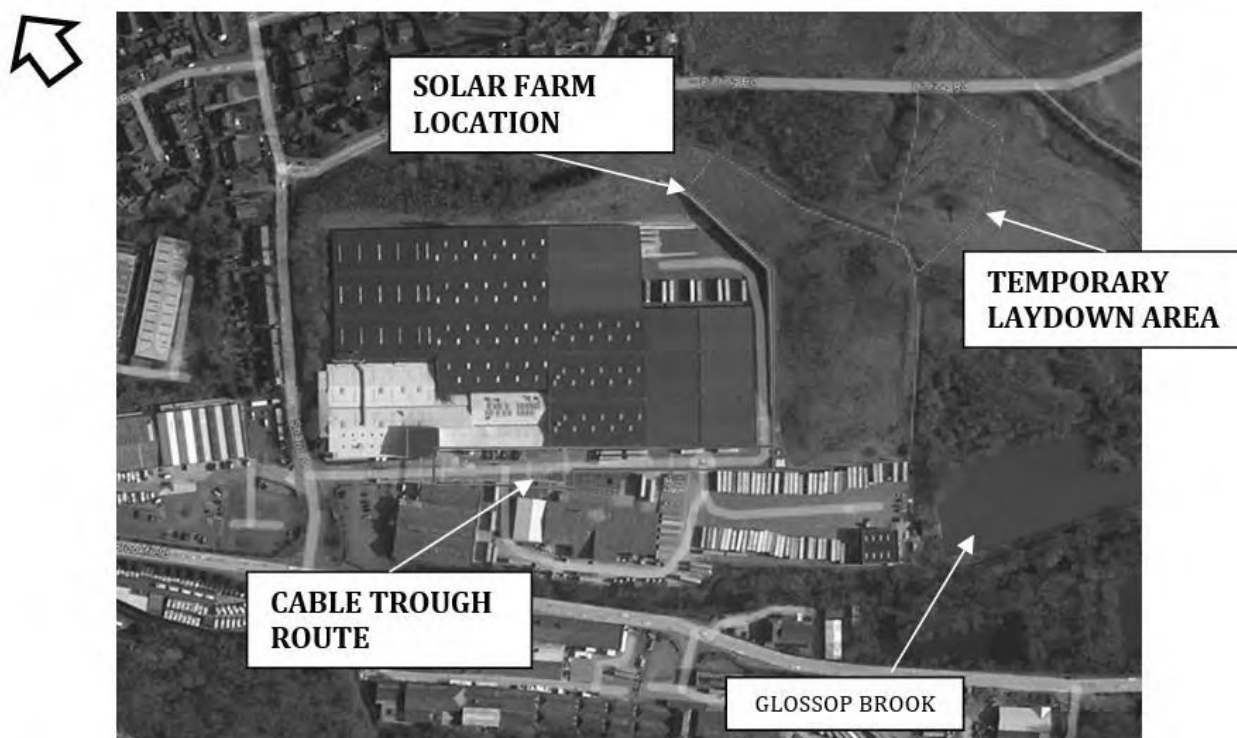


Figure 1 - Map of the area surrounding the site.

1.5 Site History Summary

An in-depth review of the site history has been provided in the Geotechnical Desk Study (Ref [3]) therefore this has not been repeated herein. Instead, a high-level overview is provided and through the desk study process, extraction of relevant mining related information presented.

Historical maps were accessed from the National Library of Scotland online map viewer (Ref [9]), as well as a Groundsure Report available for the site (Ref [10]). The maps available for the site covered a period from 1879 to 2023.

As presented in Figure 2, The area of the proposed site has not changed significantly since the first maps were available, the main developments have been to the surrounding land. The main points to note:

- The reservoir has been drained, infilled, and redeveloped into the Dinting Lodge Industrial Estate. This is the location of the current Carpenters Ltd building.
- The printworks building has been repurposed and is now occupied by multiple small businesses.
- Brookfield to the north-east of the site has been redeveloped into an industrial estate.

There are no historical maps illustrating any mining related features within the local vicinity of the site, however, the site is found to be within a reported coal mining area and this is further discussed in Section 3.3.



Figure 2 - OS 1:10,560 1879 Outline Map (Ref. [10]).

1.6 Hydrology and Hydrogeology

Please refer to the Carpenter Ltd Solar Farm Desk Study (3365-MHB-REP-001) for an in-depth review of the Hydrology and Hydrogeology risks associated with the site.

1.7 Planning and Regulations

The Coal Industry Act 1994 details that the coal reserves and mine infrastructure below the site are owned by the Coal Authority. As such, the entering of these reserves or disturbance of mine infrastructure requires written permission from the Coal Authority in advance.

Any ground investigation or construction works which are to affect a coal mining asset/seam would need consent from the Coal Authority. Only shallow ground investigations (less than 5.0m deep) are proposed at the site and there is no intention to complete any deeper ground investigations at the site which would affect any subsurface seams. Additionally, nor will the proposed works affect mining related assets/involve gas extraction. As such, no permits/permissions from The Coal Authority are currently deemed necessary.

Where mining hazards have been identified on a site and will have an impact on construction works, the following are to be noted:

- In compliance with Eurocode 7 Part 1, states that Ground Investigation Reports and Geotechnical Design Reports are required for the project.

Further actions with this regard, if necessary, are further discussed in Section 5.

2 GEOLOGY

2.1 Published Data

There has been no ground investigation undertaken at the site to this date. Geological maps and historic borehole records available from the BGS GeoIndex (Ref [11]) have been used to determine a preliminary ground model for the site. A summary of the geological conditions at the site is provided within this section which will help form later discussions on mining related risks to the site.

2.2 Superficial Geology

Referring to the BGS Geoindex Map Viewer (Ref [12]) the 1:50,000 Superficial Deposits map is presented in Figure 3 .The site is expected to be underlain by:

- Devensian Till (Glacial Till) which typically comprises unstratified, over-consolidated deposits.

The superficial deposits surrounding the site are varied:

- Alluvium deposits near Brookfield and Dinting Vale roads comprising clay and silt.
- River Terrace deposits are found to the West of the site which generally comprise of sand and gravel, locally with lenses of silt, clay, or peat.
- Areas north of the site are underlain by Glaciofluvial Deposits, comprising of sand and gravel from ice sheets or glaciers.

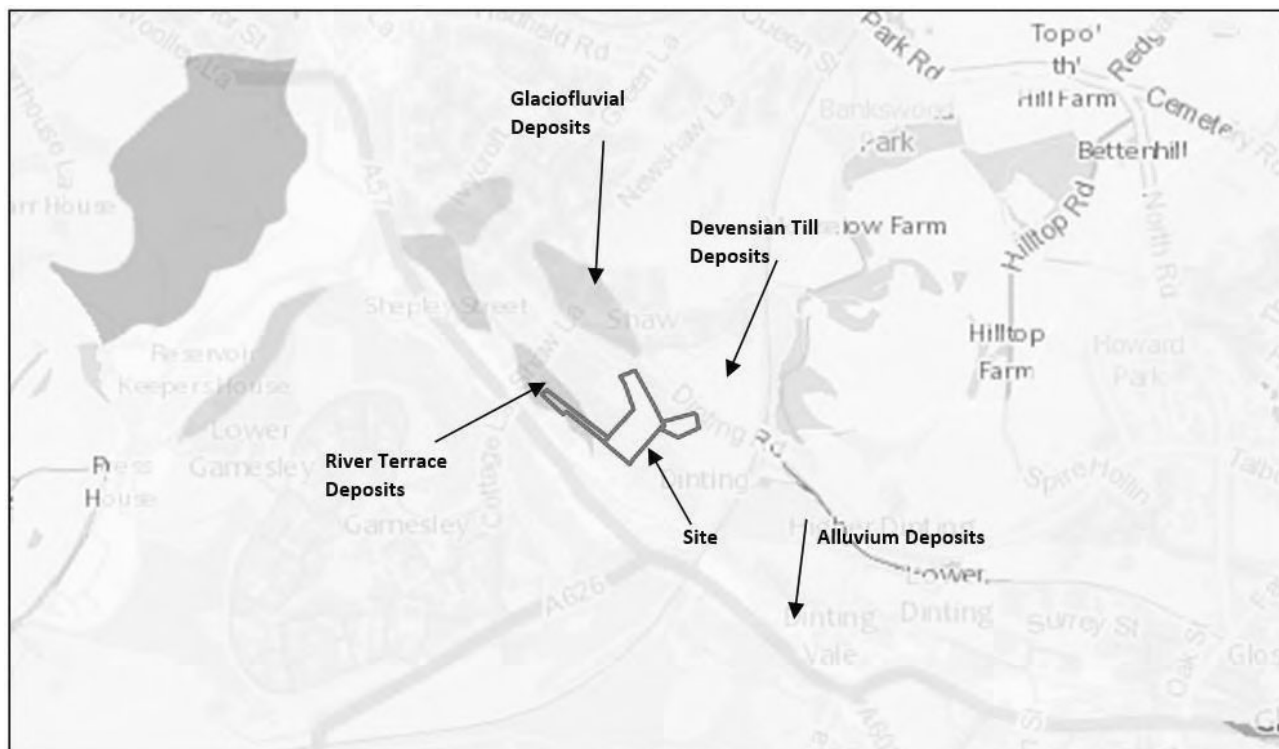


Figure 3 - Superficial material 1:50,000 scale (Extract from BGS GeoIndex)

2.3 Bedrock Geology

The site is document as being underlain by the Pennine Lower Coal Measure (PLCM) formation (part of the Pennine Coal Measures Group) which typically consists of mudstone, siltstone, and sandstone, and does contain some coal seams (further discussed in Section 3). However the location of the site is to the western extremes of the PLCM with the underlying Millstone Grit Group outcropping locally near by, as presented in Figure 4. The Millstone Grit Series outcrops comprising of a similar geological composition. Should be noted that due to the dip direction of the bedrock geology in this area the vertical profile of the bedrock geology is as follows:

- Pennine Lower Coal Measures Formation, overlying;
- Millstone Grit Series

The vertical profile and seams are further discussed in Section 3. To help with visualisation of the underlying strata at the location of the site, the generalised section presented in Figure 5 is useful, with multiple coal seams identified potentially beneath the site:

- Six Inch Coal (Millstone Grit Group);
- Sand Rock Coal (Millstone Grit Group);
- Holcombe Brook Coal (Millstone Grit Group);
- Simmondley Coal (Millstone Grit Group).

It is important to note that all coal seams are part of the Millstone Grit Group and has thicknesses less than 0.2 m, as such were likely not economical/practical to extract at depth.

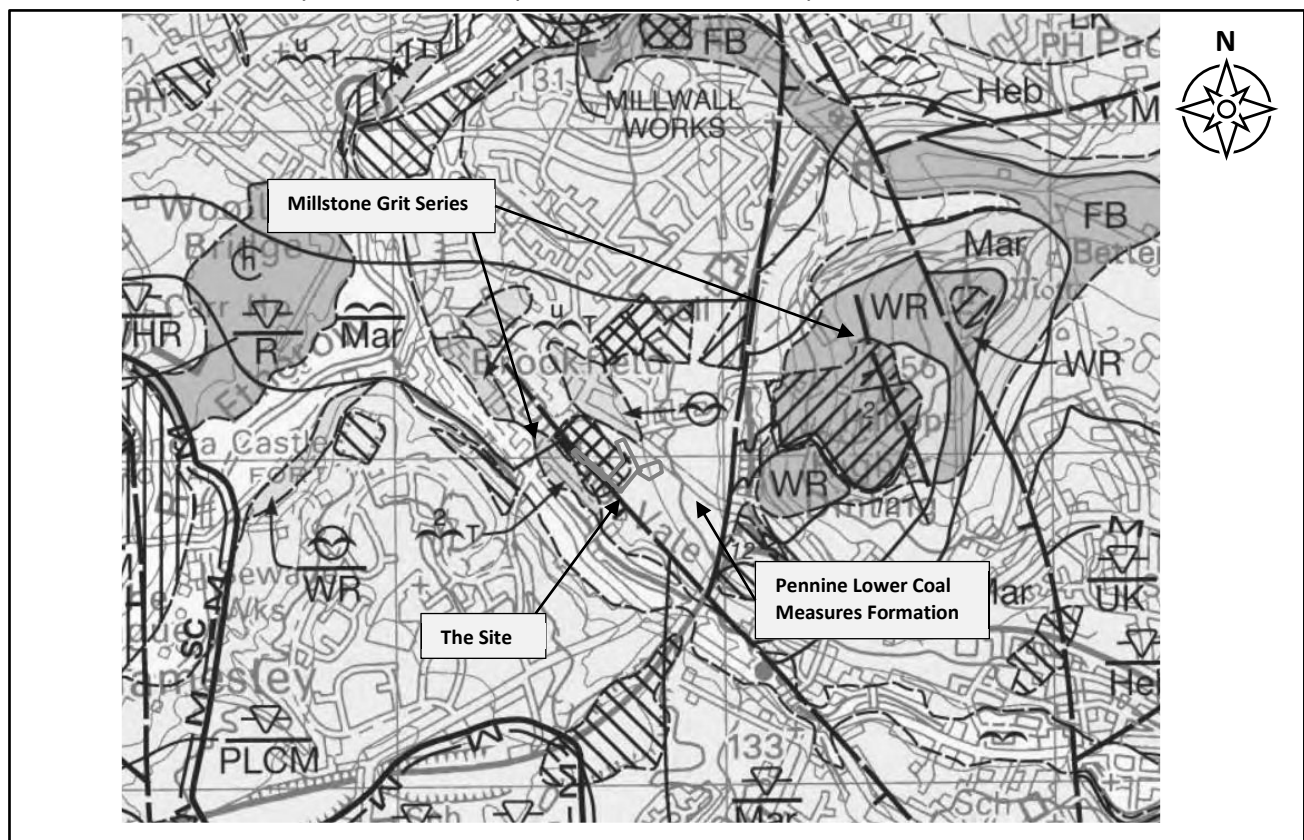
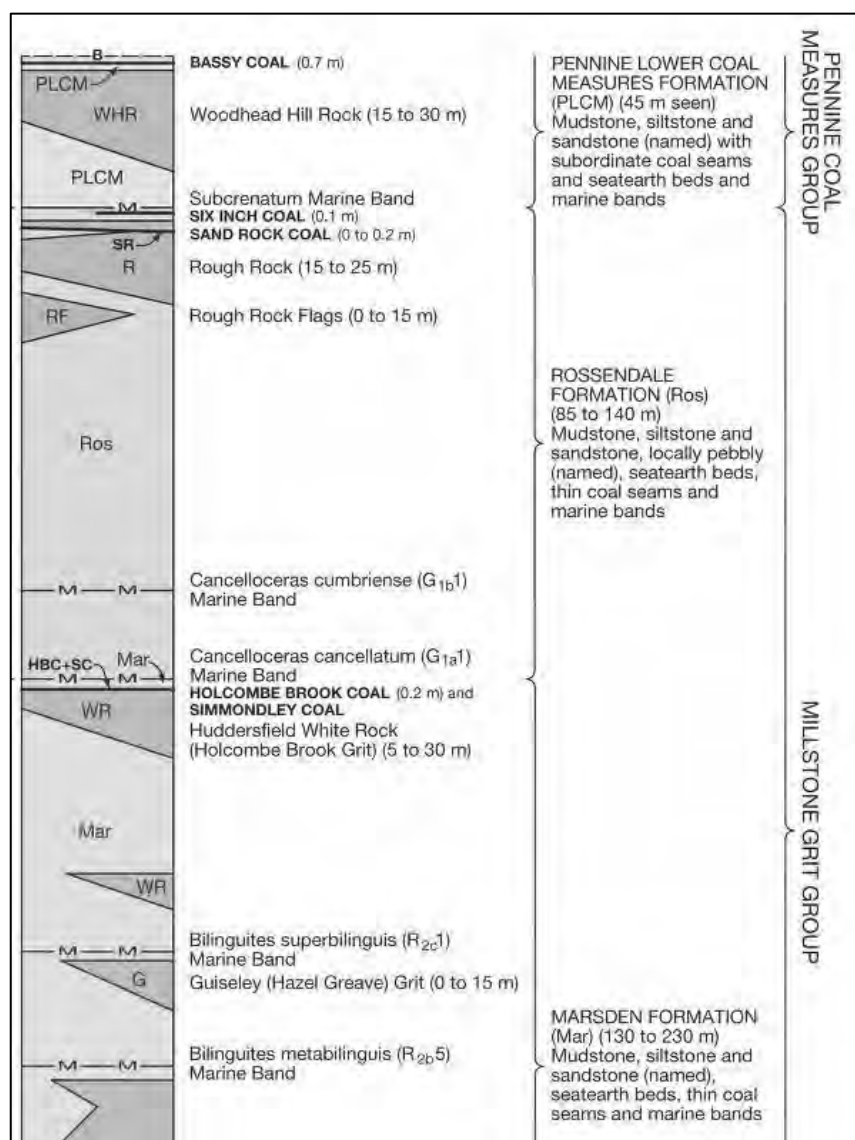


Figure 4 - Sheet 86 Glossop - Bedrock Map 1:50,000 Scale (Extract from BGS Geological Map).



Site is located around the same elevation as the Bassy Coal Seam.

Figure 5 - Generalized section west of sheet, Bedrock and Superficial Deposits- Sheet 86 Glossop – 1:50,000 Scale (Extract from BGS Geological Map).

2.4 Historical Boreholes

The BGS holds an archive of historical borehole logs throughout the UK. The database of borehole logs was searched for any records which would provide useful information on the geological profile underlying the site.

A series of historic boreholes from 1993 are present on the existing Dinting Lodge Industrial Estate, and Glossop Caravans' storage parking (presented in Figure 6).

Based upon these historic boreholes a summary of the encountered conditions appears to show:

- Made ground, variable in nature up to 3.4 m thick, overlying;
- Soft to firm slightly sandy silty Clay of at least 2.4m thickness- Boreholes Completed around 5.8mBGL.

No ground investigation information is available for the proposed site area or to depths within the bedrock geology.

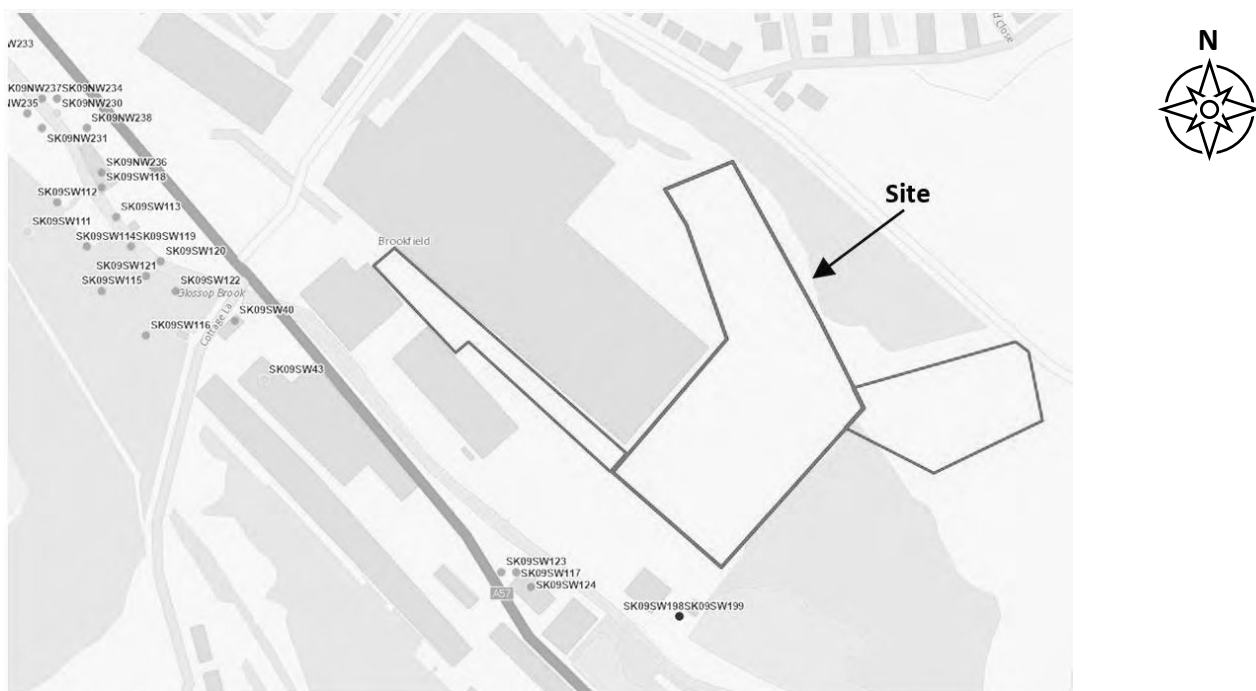


Figure 6 - BGS Historical Borehole Records, April 2023 (Ref [11]).

2.5 Recorded Faults and Fissures

There is a geological fault located within the site, as presented in Figure 7, having a south-east to north-west orientation, with the downthrow to the south-west.

It should be noted that there are no coal seam outcrops recorded locally at the site. The closest outcrop is approximately 0.5km south-east of the site, shown in Figure 8.

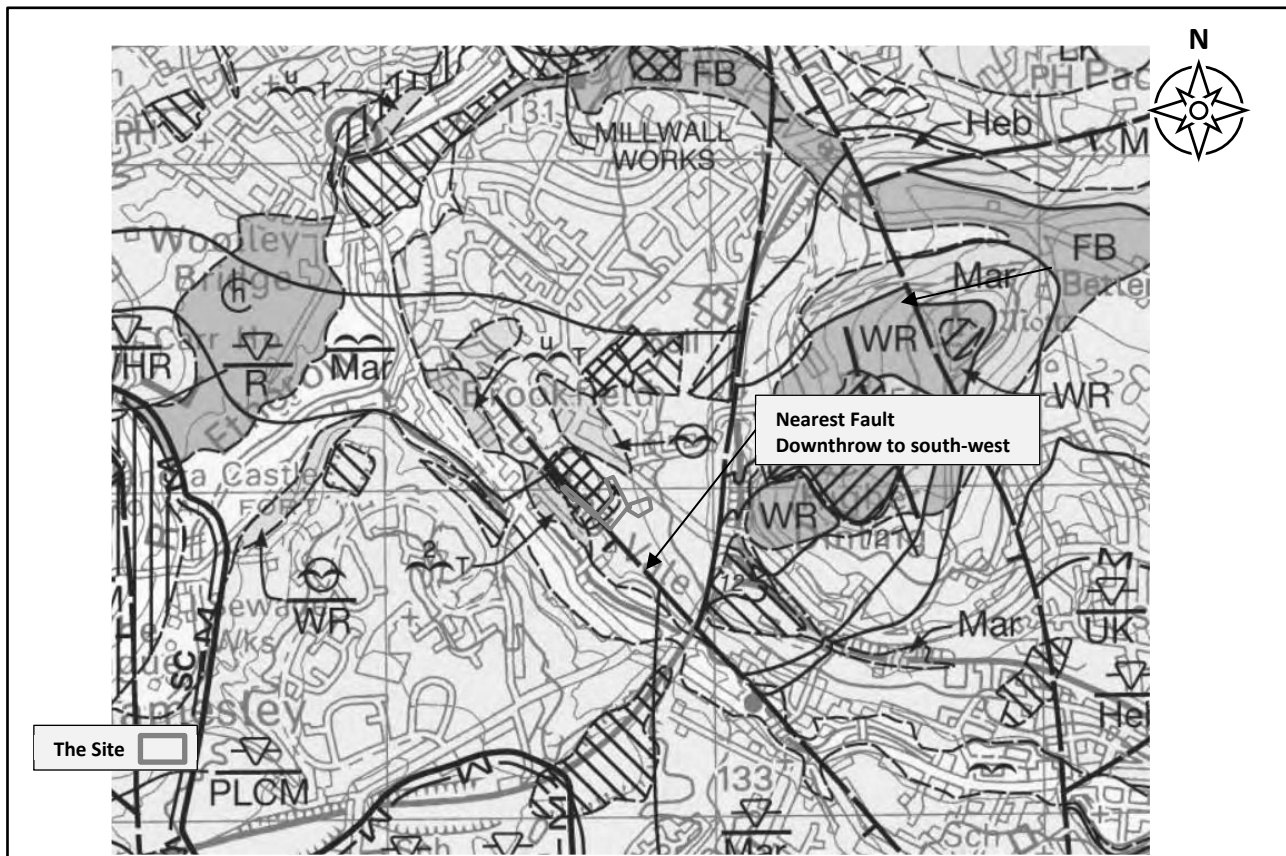


Figure 7 - Recorded faults

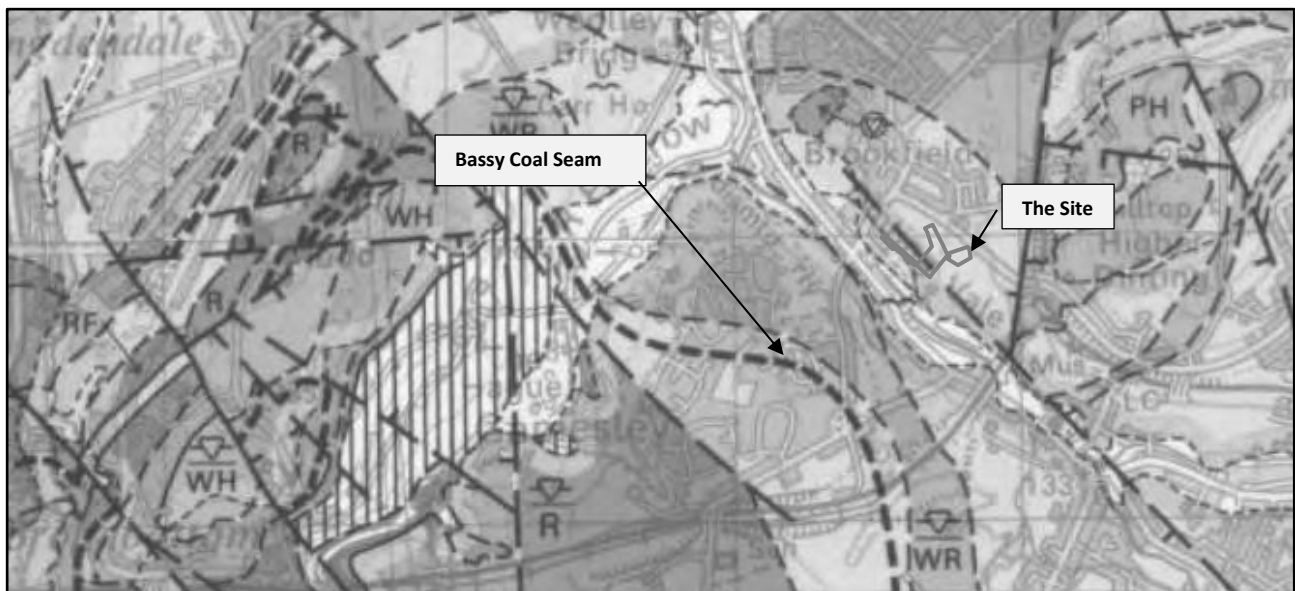


Figure 8 – Nearest Recorded Outcrop

3 IDENTIFICATION AND ASSESSMENT OF SITE-SPECIFIC MINING RISKS

3.1 General

The purpose of this section is to provide an overview of the documented mining related assets at and within the local vicinity of the site, which could potentially pose a risk to the proposed development. This section forms the factual basis to the specific mining risk assessment completed in Section 4.

It appears that subsurface coal mining did occur in the Glossop area, with the Bassy Coal Seam mined. Access to this seam and how the seam was worked is discussed further in Section 3.2 and 3.3 respectively.

Otherwise, there does not appear to be any recorded information available to suggest that there was much more in the way of coal mining, or mining for other minerals/materials within influencing distance of the site.

3.2 Recorded Mine Entries Within Influencing Distance of the Site

Information on mine entry locations at the site and surrounding area has been obtained from the following sources:

- Northern Mine Research Society Coal Mines – England (Ref [13]).
- The Coal Authority Consultants Report (Ref [4]).
- The Coal Authority Interactive Map (Ref [8]).

A summary of all the closest mine entry locations is presented in Figure 9, as extracted from the Coal Authority Interactive Map (Ref [13]). The closest entries to the site are a group approx. 1.6 km north-west of the site adjacent to Mottram-In-Longdendale Cemetery to the south of Carr House. There is limited information on the entry type. Given the distance to the site the mine entry locations are out with influencing distance of the site and do not need to be considered further.

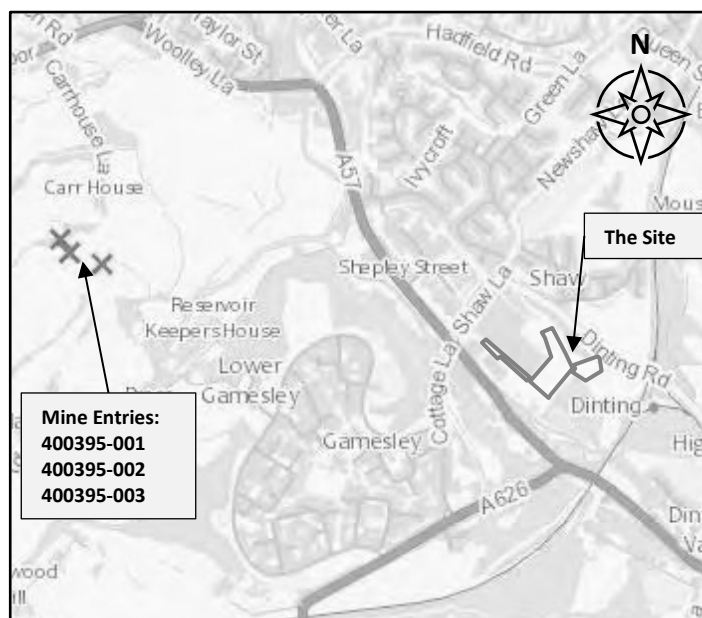


Figure 9 - Mine entrance locations and underground workings (Coal Authority).

3.3 Recorded Underground Mine Workings

The Coal Authority mining report for the site shows that there is no record of past underground mining within the site boundary or influencing distance of the site.

3.4 Unrecorded Underground Mine Workings

No information has been uncovered to suggest there were any other forms of underground workings present within influencing distance of the site.

No other minerals have been recorded at the location of the site which would have extracted.

3.5 Unrecorded Underground Mine Entries

No information found.

3.6 Working and Proposed Underground Mines

There are no ongoing or proposed underground mine workings beneath the site.

3.7 Assessment of Failure Modes

All identified mine entry locations are out with influencing distance of the site and therefore failure mode associated with these are considered negligible.

3.8 Non-Coal Workings

Based upon the Groundsure Enviro + Geo Insight report (Ref [10]), vein mineral mining works are recorded within the local area of the site. Through desk study research including review of archives, historic maps etc. there is no record of minerals having been worked at the site so the risk of encountering non-coal workings is considered low.

3.9 Mine Gas Emissions Risk

The risk of ground gas involves its ability to migrate into confined spaces and buildings and cause an explosive or asphyxiation risk dependant on composition and flow.

With reference to the Coal Mining Report (Ref [4]) no recorded mine gas locations have been identified within 500 m of the site location. The nearest mine shaft location to the north-west of the site (CA Ref. 400395-003, as presented in Figure 9) appears to be approx. 2.3km to the site boundary. Given the distance, and lack of documented issues with adjacent residential neighbours, mine gas from this shaft affecting the site is considered low risk.

3.10 Spontaneous Combustion Risks

No spoil heaps have been identified at the site or adjacent areas which are a primary source of spontaneous combustion.

No coal seam outcrops are identified within the local area of the site which would be affected by works which could also be a source of spontaneous combustion.

3.11 Underground Fire Risks

No underground fire risks have been identified at the site, therefore this is considered a low-risk hazard for the site.

3.12 Sensitivity of Proposed and Existing Infrastructure to Mining Risks, Including the Potential Consequences of a Failure

There are no features recorded beneath the site. However, the nature of the proposed works will not pose additional mining risks should there be unknown mining features.

3.13 Potential Impact of the Proposed Construction Project on the Mining Hazard(s)

No mining hazards have been identified within influencing distance of the site and as such does not need to be considered further.

3.14 Site Specific surface mining and tip risks

There are no activities associated with present day surface mining related to the site area or recorded within 500 m of the site.

4 MINING RISK ASSESSMENT MITIGATION STRATEGY

The purpose of this section is to discuss site specific mining hazards which may affect development of the site (including construction works) and the proposed mitigation measures. This is developed based upon the available information for the site (as presented in Section 3) and typical hazards in 'Abandoned Mine Workings Manual' (Ref [2]).

Presented in Table 1 is the mining risk assessment completed for the proposed works at the site.

This is a qualitative measure of the 'likelihood' of an identified hazard occurring at the site and the 'severity' of the consequence of said hazard. It is a subjective assessment at this stage in the project but allows attention to be drawn to critical areas and guidance for the next steps at the site. Refer to Table 2 for further description on the assessment criteria.

Table 1 - Mining Risk Assessment and Recommendations

Mining Hazard	Hazard Risk Level at Site			Risk Assessment	Residual Risk and Mitigation Recommendations		
	Likelihood	Severity	Risk Level		Likelihood	Severity	Risk Level
Mine Entry (Shafts)	Very Low	High	Very Low	- Recorded locations are not necessarily accurate. - Sudden appearance of void and a risk of falling from height for personnel/plant (shafts). - Collapse of mine entry locations. - Accumulation of mine gases which may be released.	Very Low	High	Very Low
	Discussed in Section 3.2. Mine Shaft recorded on The Coal Authority Database – CA Ref. 400395-001/002/003. The mine shafts are located approx. 1.6km north-west of site, outside site boundary.				Works do not interface with the mine shaft location or its likely depth of construction.		
Other Mine Entry (Adits)	Very Low	Medium-High	Very Low	- Recorded locations are not necessarily accurate. - Sudden appearance of void and a risk of falling from height for personnel/plant (shafts). - Collapse of longitudinal adits. - Accumulation of mine gases which may be released.	Very Low	Medium-High	Very Low
	No other mine entries have been identified other than the shaft mentioned above.				Contractor to be vigilant on site to new undulations/potential subsidence.		
Underground coal mining at shallow depths	Low	High	Very Low	- Bassy coal seams may have been mined shallow workings to south and west of site. - Mine entries 1.6km from site. - Outcrops 500m from site.	Low	High	Very Low
	No shallow coal mine workings are recorded within the vicinity of the work.				- Risk of shallow workings beneath the site affecting the proposed works is low. - Out with influencing distance of site.		
Underground non-coal mining workings	Low	High	Very Low	N/A	Low	High	Very Low
	No underground non-coal mine workings are recorded within the vicinity of the work.				N/A		
Mine gas emissions	Low	High	Very Low	- No mine gas recorded within 500 meters of the enquiry boundary. - No worked seams recorded beneath site.	Low	High	Very Low
	Mine gases can pose a hazard due to their flammable properties and/or an asphyxiation risk in confined areas.				- No other known pathways. Gas monitoring equipment may be a requirement from a Made Ground and contamination perspective but is not considered necessary from a mine gas risk. - No confined spaces are expected at this site. If this is not the case, site specific risk assessment to be completed.		
Spontaneous Combustion	Low	High	Very Low	No spoil heaps have been identified at the site or adjacent areas which are a primary source of spontaneous combustion, therefore risk is low.	Low	High	Very Low
	Combustion of coal seams beneath the site. Combustion of mining spoil heaps at ground level. Two primary triggers of spontaneous combustion in the form of: - Prevalent wind conditions increasing flow of oxygen to the worked area; and - Weather conditions – dry and hot.				Mitigation measures for it occurring may involve: The enforcement of a no smoking policy and the exclusion of other potential sources of ignition.		
Sensitivity of proposed and existing infrastructure to mining risks	Low	High	Very Low	No recorded coal workings beneath the site.	Low	High	Very Low
	Collapse of shaft could compromise the stability of proposed structures at ground level.				Contractor still to remain vigilant to any unusual observations at the site including undulations/subsidence.		

Mining Hazard	Hazard Risk Level at Site			Risk Assessment	Residual Risk and Mitigation Recommendations		
Likelihood		Severity	Risk Level		Likelihood	Severity	Risk Level
Faults	Low	High	Very Low	No proposed works which would increase likelihood of re-activating the fault.	Very Low	High	Very Low
	Reactivation of faults can cause ground displacement and foundation failure of assets constructed above these geological features. Geological fault identified in BGS maps within the site.				- No proposed mitigation measures to address. - GI to investigate site and assess if fault through site affects bedrock (if encountered).		

Table 2 - Mining Risk Assessment Qualitative Measure Description

Likelihood	Severity
Very Low	Very Low <i>Minor injury, minor environmental incident with no legislative breach</i>
Low	Low <i>Lost time injury, no legislative breach</i>
Medium	Medium <i>Reportable injury / dangerous occurrence, potential for lost time / complaints for legislative breach</i>
High	High <i>Major injury, minor legislative breach with potential for prosecution</i>
Very High	Very High <i>Fatality, potential for major environmental incident with high clean-up or prosecution costs</i>

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Mining Risk Assessment

For the proposed site, it was recommended that a Mining Risk Assessment be prepared by a consultant to review the risk of mining hazards to the site. This assessment is part of the wider works to facilitate the design and construction of the proposed solar farm development at the site.

As a result of this Mining Risk Assessment, it can be concluded that:

- There is one area of recorded mine entries 1.6km northwest of the site however they are not within influencing distance of the site and are considered low risk.
- The site is on the perimeter of the Pennine Lower Coal Measures outcrop with the Bassy Coal Seam outcropping to the south. This seam may have been worked locally via shallow methods but is not recorded as being worked beneath the site.
- The coal seams associated with the Millstone Grit Series beneath the site are not recorded to have been worked within the area.
- No other minerals/materials etc. are known to have been worked in the area.

It is recommended that Table 1 of this report is referred to which provides in-depth discussion and recommendations of mining related hazards at the site.

No ground investigations are proposed to investigate mining related hazards.

5.2 Conclusion

Although the site is within the Coal Mining Reporting Area (as identified by The Coal Authority) it is on the perimeter of the coal mining fields. As a result of this MRA there are no mining hazards identified which would restrict the proposed solar farm development at the site.

6 REFERENCES

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APPENDIX A CONSULTANTS COAL MINING REPORT



The Coal
Authority

Consultants Coal Mining Report

Land Off, Dinting Road, Glossop,
Sk13 7uu
Derbyshire

Date of enquiry: 12 April 2023
Date enquiry received: 12 April 2023
Issue date: 12 April 2023

Our reference: 51003349008001
Your reference: GS-3KF-642-8R9-46X



Consultants

Coal Mining Report

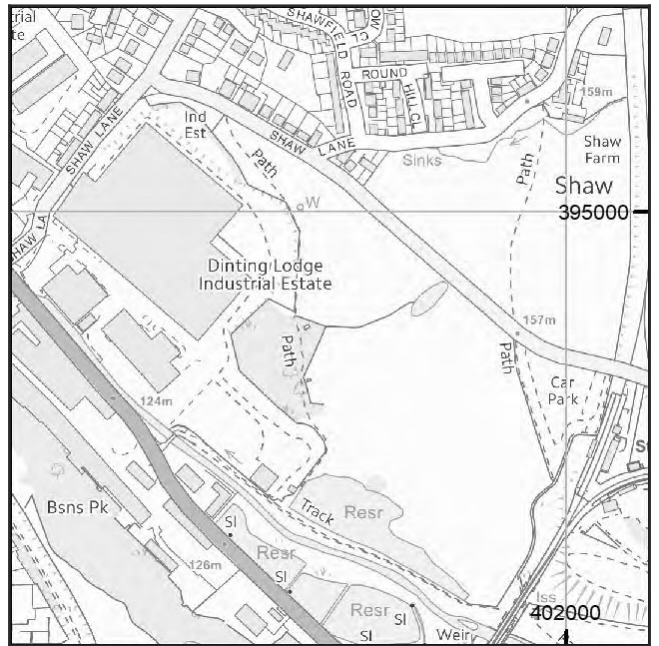
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

Land Off, Dinting Road, Glossop, Sk13 7uu
Derbyshire



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in /company/the-coal-authority

f /thecoalauthority

 /thecoalauthority

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

None.

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

No outcrops recorded.

Geological faults, fissures and breaklines

Please refer to the 'Summary of findings' map (on separate sheet) for details of any geological faults, fissures or breaklines either within or intersecting the enquiry boundary.

Fault under or close to the property recorded.

Opencast mines

None recorded 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

None recorded within 200 metres of the enquiry boundary.

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 not in an area where a notice to withdraw support has been given.

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

Based on the responses in this report, no further information has been highlighted.

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.

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 **call us on 0345 762 6848** or **email us at groundstability@coal.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.