

ARP Geotechnical Ltd 5 & 6 Northwest Business Park, Servia Hill, Leeds, LS6 2QH
c 0113 245 8498 m leeds@arpgeotechnical.co.uk w www.arpconsultingengineers.co.uk

Mr S Warsop
1/2 Greenland Cottages
High Hoyland Lane
High Hoyland
Barnsley
S75 4AZ

BY EMAIL

Our Ref: WSP/02/L1/JPJR

23rd May 2025

Dear Steven

Bank End Lane, High Hoyland
Coal Mining Risk Assessment

In accordance with our commission, we are pleased to provide an assessment of the stability of the site with regard to coal mining. Details are provided below.

The Site

The site, which is centred on Ordnance Survey Grid Reference 427129, 409912, is located off Bank End Lane in High Hoyland, approximately 1.3km southeast of Clayton West and 8km northwest of the centre of Barnsley. A site location plan and site plan are attached. The site has overall dimensions of approximately 75m (northwest – southeast) by 45m (east – west). It is proposed to construct residential dwellings with private gardens on the site.

Geology

The 1:10,000 scale Geological Map (Sheet SE20NE, Cawthorne) and the latest British Geological Survey (BGS) electronic data at 1:50,000 scale, which is public sector information licensed under the Open Government License v3.0, have been used to assess the geology of the local area. The geological setting of the site is shown on the Oblique View Geological Map, which is attached.

The maps show the solid strata below the site to comprise sandstone of the Pennine Lower Coal Measures Formation, with no drift cover. There is an area of made ground approximately 200m long by 50m wide to the southwest of the site, and this is shown to encroach onto the southwestern margins of the site by around 6m maximum. The historical Ordnance Survey map of 1851 shows this to be a sandstone quarry.

A fault is indicated approximately 65m to the southeast of the site, trending northeast - southwest, with the downthrow to the southeast. It is unlikely that the development will be/has been adversely affected by this fault.



According to the geological map, the general dip of strata in an adjacent fault block is 5 degrees to the southeast. The topography in the general area slopes down to the southeast, as the site sits on the southern slope of a northwest – southeast trending ridge.

A coal seam, the Flockton Thick Coal, is conjectured to outcrop approximately 150m to the south of the site (at approximately 175m AOD), but curves around to the west and then northeastward, becoming a northeast-southwest trending outcrop approximately 210m northwest of the site (at approximately 220m AOD). The outcrop pattern is consistent with a gently southeast-dipping seam in combination with the ridge topography. The seam is indicated to be between 1.0m and 1.4m thick in the locality.

Along the strike direction from the site, the seam lies at around 184mAOD. The site lies at an elevation of between 201mAOD and 187mAOD. This would place the seam at a depth of between 3m and 17m below the site.

Approximately 20m below the Flockton Thick coal seam is the Flockton Thin coal seam, which is shown to be between zero and 0.7m thickness in the locality. At such a depth, the Flockton Thin Coal is not of concern for ground stability at this site. The Flockton Thin Coal is conjectured to outcrop at approximately 450m to the southwest of the site, trending north to south.

Details of the relevant seams beneath the site are listed below, in order of increasing depth.

Seam	Approximate Estimated Depth Beneath the Site	Seam Thickness	Coal Seam Potentially Within Influencing Distance of Surface?*
Flockton Thick Coal	3m to 17m	1.0m to 1.4m	YES
Flockton Thin Coal	23m to 37m	0m to 0.7m	NO

* Including cumulative impacts on overlying seams and based on a requirement for there to be overlying rock cover of at least 10x the extracted thickness, as measured from the top of the original seam roof. Less than this indicates the seam is within influencing depth of the surface.

Coal Authority Consultants Coal Mining Report

A Coal Authority “Consultants Coal Mining Report” was obtained by ARP Geotechnical Ltd from the Mining Remediation Authority, and a copy is attached to this letter. It should be noted that “The Coal Authority” has recently been renamed as “The Mining Remediation Authority”, although the Consultants Reports are still branded as from “The Coal Authority”.

The Report states that there is recorded past underground mining in one seam of coal (The Whinmoor Coal) at a depth of 191m, last worked in 2012. There are several seams in the geological section above the Whinmoor Coal, but no reference is made to recorded workings in any other seams. Given the depth of the recorded workings, and the elapsed time, any associated ground movement should by now have ceased.

The report states there are probable unrecorded shallow (defined as being at a depth of 30m or less) workings beneath the site. This is likely to be as a result of the presence of the Flockton Thick within 30m of the surface, that may have been worked before mine abandonment plans became a statutory requirement.



There is recorded to be an underground mining licence 6m to the southwest. No further information was provided within the Consultants Coal Mining Report. An enquiry was made to the Mining Remediation Authority and the Authority confirmed that there were two licences 6m southwest of the site, both of which expired pre-1994. Given this information, there is concluded to be no adverse impact from the expired licences. In addition, ARP would comment that, as the coalfields in the region are no longer being worked, any future workings are highly unlikely.

There are no recorded mine entries within 100m of the site.

The site is unaffected by any past, present, or future proposed, opencast coal mining. The nearest opencast mining feature is approximately 225m to the southeast, relating to an unlicensed opencast site.

Assessment of Coal Mining Instability

It is a generally accepted rule of thumb that, unless there is at least 10 times the seam thickness of rock cover above any underground workings (as measured from the top of the original seam/extraction roof), they have the potential to adversely affect ground stability on the site. It is anticipated, therefore, that the Flockton Thick coal seam poses a risk to ground stability on the site. The workings would probably take the form of pillar and stall workings, but may also be present as crop workings or bell pits, depending on the depth below ground level of the seam.

Deeper seams are present below the site, but these seams are anticipated to be sufficiently deep to prevent any adverse ground stability effects on the site.

Conclusion

In the light of the above, a rock drilling investigation will need to be carried out to check for any evidence of workings in the Flockton Thick coal seam, and determine the depth and extraction thickness. Such borehole investigations are usually carried out following grant of planning permission, but before commencement of development. The planning permission will usually include a condition relating to the investigation and possible future treatment of mine workings.

The presence of mine workings is not a significant obstacle to development, and there are economical engineering solutions available. ARP provides advice on, and designs, such treatment solutions on a regular basis.

We trust the above information is sufficient for your purposes, but if you have any queries, please do not hesitate to contact us, at your convenience.

Yours sincerely

A handwritten signature in black ink, appearing to be 'J Race'.

J Race

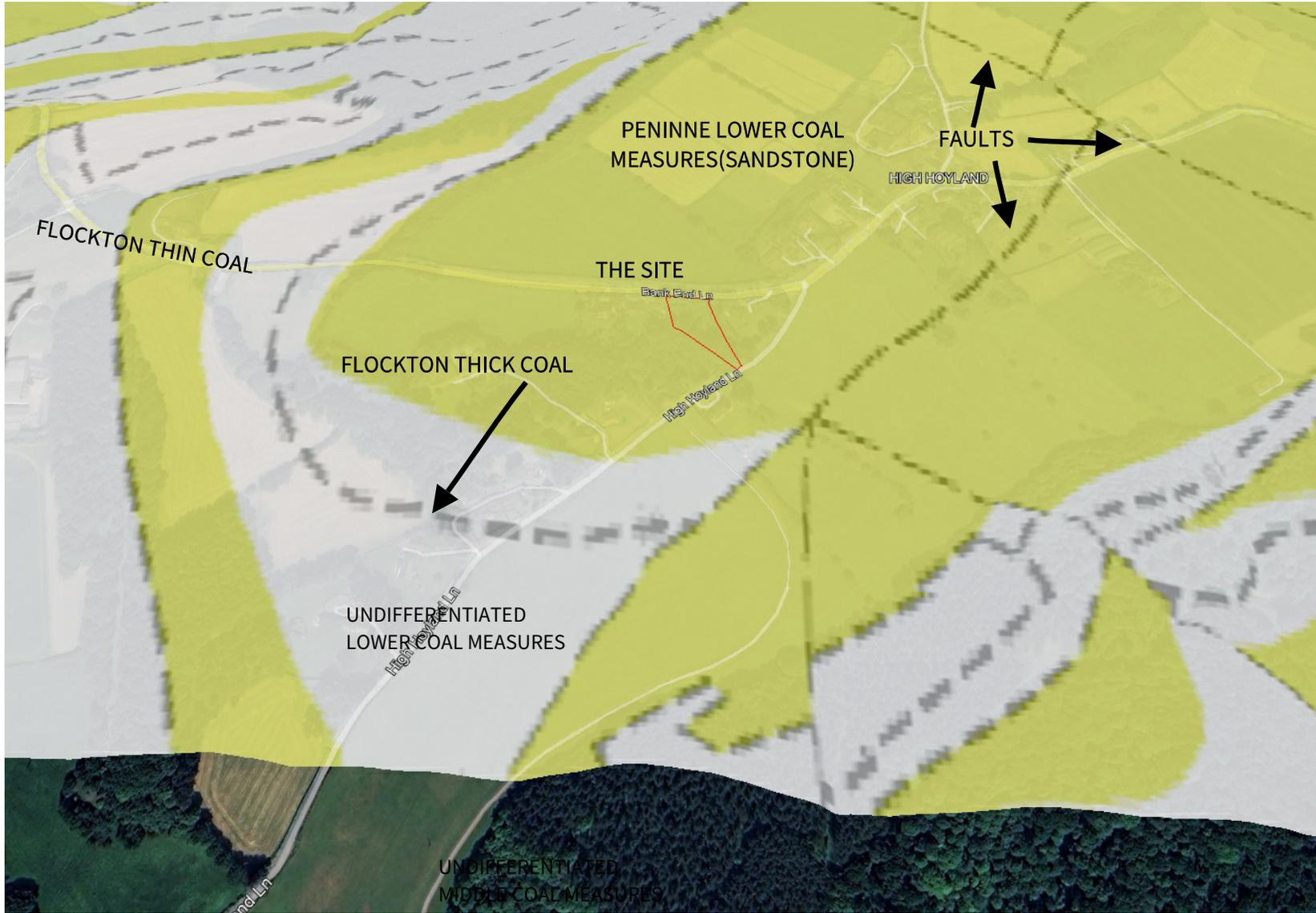
Encs



0m 1000m

Approximate Scale

 ARP GEOTECHNICAL LTD CHARTERED CONSULTING ENGINEERS <small>Northwest House, 5-6 Northwest Business Park, Senvia Hill, Leeds LS6 2QH Telephone: 0113 245 8498 Fax: 0113 244 3864 E-Mail: leeds@arpassociates.co.uk</small>	
Project	
BALK END LANE HIGH HOYLAND	
Client	
MR S WARSOP	
Title	
SITE LOCATION PLAN	
Date	
MAY 2025	
Drawn	Scale
JR	AS SHOWN
Job No.	
WSP/02	



ARP
 ARP GEOTECHNICAL LTD
 CHARTERED CONSULTING ENGINEERS
 Northwest House, 5-6 Northwest Business Park, Searby Hill, Leeds LS6 2QH
 Telephone: 0113 245 8498 Fax: 0113 244 3864 E-Mail: leeds@arpassociates.co.uk

Project
**BALK END LANE,
 HIGH HOYLAND**

Client
MR S WARSOP

Title
**OBLIQUE VIEW
 GEOLOGICAL MAP**

Date
MAY 2025

Drawn
JP

Scale
NTS

Job No.
WSP/02



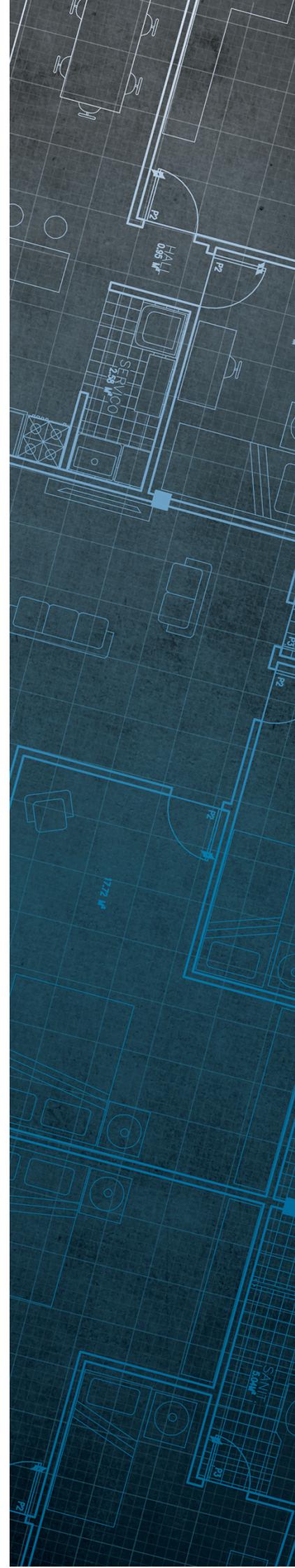
The Coal
Authority

Consultants Coal Mining Report

Land Adjacent To Norfield House
Bank End Lane
High Hoyland
Barnsley
South Yorkshire
S75 4BE

Date of enquiry: 19 May 2025
Date enquiry received: 19 May 2025
Issue date: 19 May 2025

Our reference: 51003499242001
Your reference: WSP/02



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

ARP GEOTECHNICAL LTD

Enquiry address

Land Adjacent To Norfield House
Bank End Lane
High Hoyland
Barnsley
South Yorkshire
S75 4BE

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

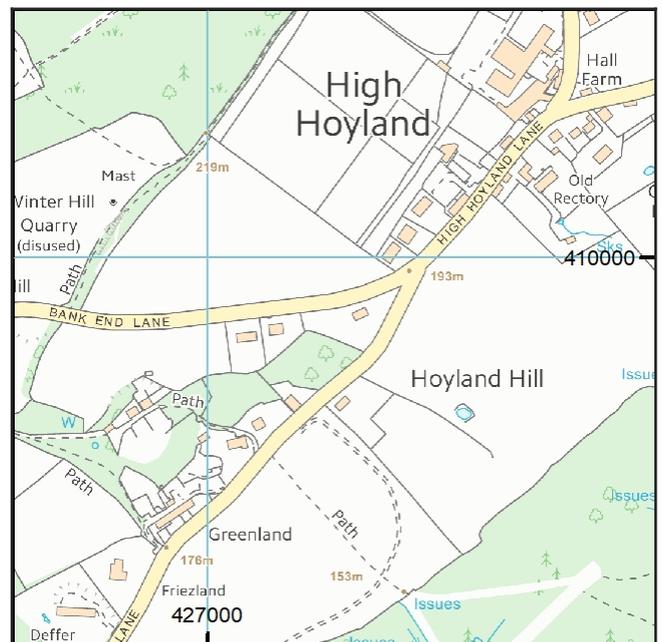
www.groundstability.com

 @coalauthority

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Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
HAY ROYDS	WHINMOOR	Coal	A0RG	191	West			160	2012

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

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

SCC22	BE50	BE32
M726	18203	

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

No outcrops recorded.

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	6.0	South-West

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 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

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.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

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

