

Coal Mining Risk Assessment

for

Proposed Development Site

on

Plot 4A Elwyn Drive

Merthyr Tydfil

CF47 0NW

July 2020

Chris Meredith Designs

Coal Mining Risk Assessment

Proposed Outline Planning Application for Plot 4A, Elwyn Drive, Twynyrodyn, Merthyr Tydfil, CF47 0AN

Existing Site Description

The proposed new development site which is the subject of an outline planning application to Merthyr Tydfil CBC is a small, roughly rectangular shaped, generally level, parcel of undeveloped land occupying approximately 150m² adjacent to No4 Elwyn Drive which is served by a small cul-de-sac off Elwyn Drive. Elwyn Drive is part of a small modern residential housing estate constructed to the west of Twynyrodyn Road and Gilfach Cynon Road and to the north of Merthyr Tydfil town center. It sits amongst a large number of older streets and terrace style properties many of which are shown on historic maps of the area dating back to the late 1800's.

The Twynyrodyn area of Merthyr Tydfil grew up in the late 18th century around the old railway line which originally followed the route of the existing main road and linked the low lying parts of Merthyr, and the iron and steel manufacturing industry located there, to the Dowlais Railway Line. The railway ran along the heads of the valley and serviced these industries, carrying coal to the iron and steel works and iron to Cardiff and beyond. The area immediately surrounding the site to the south and west was formally occupied by a mixture of agricultural land, a brickworks and cemetery

Historic maps show the site has been mainly agricultural land since the late 1700's with little industrial activity or coal mining close by. The small Garw Pit was located to the north (1883 to 1985) and there are numerous small coal levels and quarries that supplied stone for the new housing in the area. In recent times the massive Ffros-y-Fan open cast site has developed north of the town. Whilst Merthyr Tydfil grew to be the center of iron and steel production in the mid 1800's and Dowlais Iron Works the largest in the world at that time, most of the coal mining activity took place in the valley below Twynyrodyn and to the south of Merthyr Tydfil.

Coal Authority Report

A Non-Residential Consultants Coal Mining Report was ordered from the Coal Authority for the development site (Ref: 51002288328001) and historic maps and mining records for the area were checked. The Coal Authorities report indicates that there was no past underground coal mining in the area of the site, however, the Garw Vein coal seam (workable – see Garw Pit) outcrops outside the site some 19.7m to the west. The site is located on the edge of the High Risk Development area as shown on the Coal Authority Interactive Map and where, given the extent of opencast mining in the area, there is probably unrecorded shallow mine workings. There are no recorded mine entries within 100m of the site. The site is not in the likely zone of influence of any present underground workings and it does not lie within or is within 500m of the boundary of an open cast site or Coal Authority managed tip. The Coal Authority is currently not determining a licence for the removal of coal using underground or open cast surface methods near the site or within 200m.

Cont'd

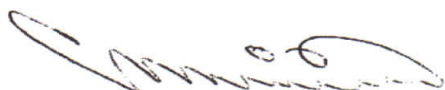
The Coal Authority has not received a damage notice or claim for the site, or any property within 50m of the site boundary, since 31st October 1994. There are no current Stop Notices in place and the Coal Authority is not aware of any request to carry out preventative works under Section 33 of the Coal Mining Subsidence Act 1991. No notices have been given, under Section 46 of the same act, stating the land is at risk of subsidence. The Authority has no record of a mine gas requiring action within 500m of the site boundary. The site is not in an area where a notice to withdraw support has been given or in an area where a notice under Section 41 of the Coal Industry Act 1994 has been served. There are no geological faults, fissures or break lines recorded in the immediate area of the site which have been, or could be affected, by mining or have caused damage to properties. There is no current Stop Notices in place for the site or requests to carry out remedial or repair works.

Based on a combination of a review of historic maps, the long history of agricultural activity around the site, the presence of the old terraces close by since the 1800's together with the contents of the Coal Authority Non-Residential Consultants Coal Mining Report, which does not record any underground mining activity, this Coal Mining Risk Assessment quantified the risk to any new development on this site from coal mining as LOW.

However, the possible risk of some unrecorded shallow working or superficial deposits on the land means that it would be prudent if the site is the subject of a basic check of the surface geology down to the proposed foundation formation level when construction work commences. Subsequent foundation design would be based on the ground conditions encountered during this work.

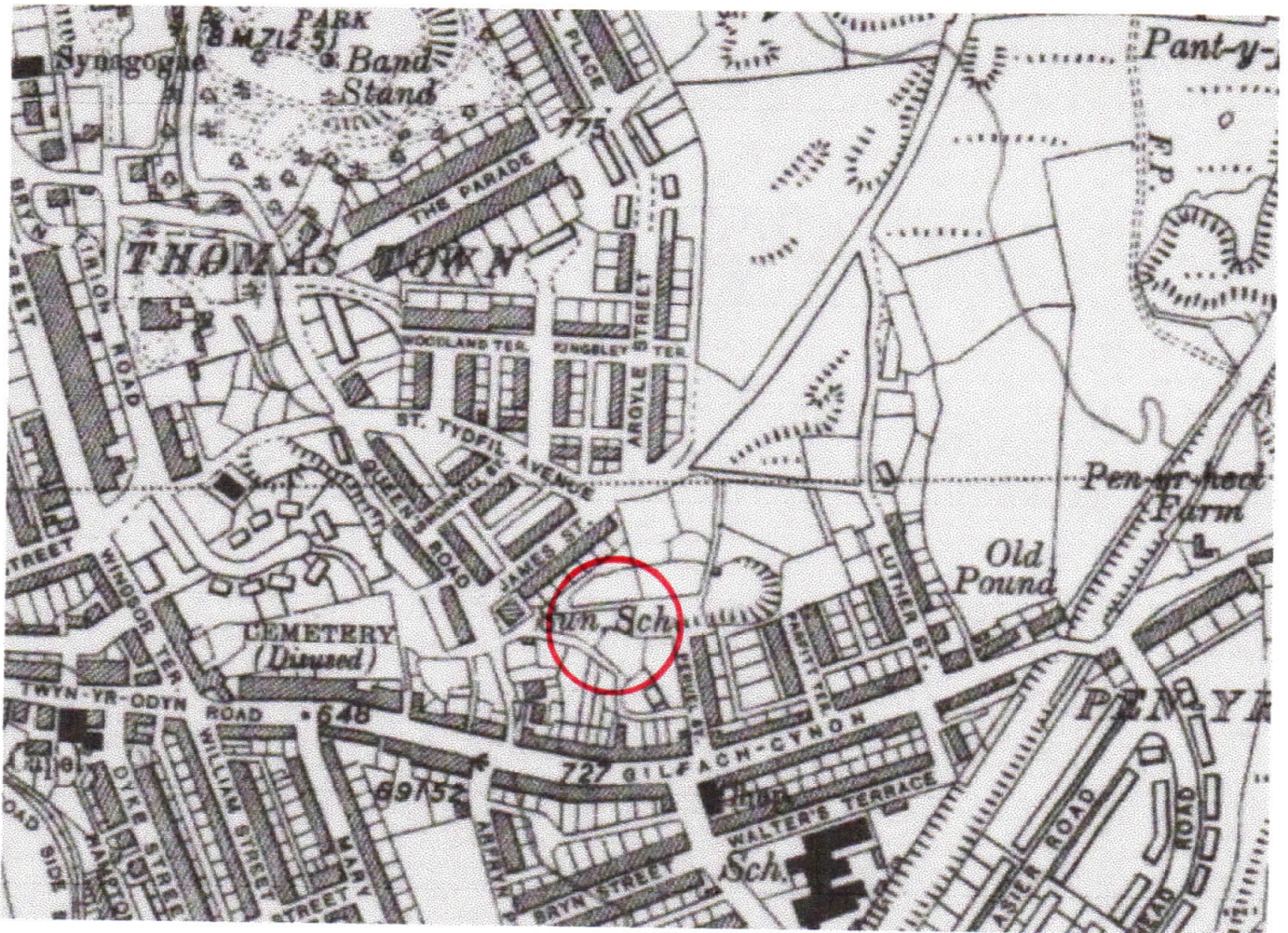
In conclusion the development of the site should not, in terms of the risk from the coal mining legacy, be an obstacle or an over-riding issue to any outline planning consent as the risk is considered LOW. Any planning consent should include an advisory condition requiring that a basic physical foundation formation check is carried out during the excavation for the new building to determine the nature of the shallow geology and ground characteristics. The findings of this basic investigation work should, if necessary, be assessed by a qualified geologist or engineer and a suitable foundation solution incorporated into the design for the new dwellings.

Yours Faithfully



Chris Meredith
BSc (Hons) C. Eng MICE ACIOB

10th July 2020



1951



1901



The Coal
Authority

Consultants Coal Mining Report

Plot 4a
Elwyn Drive
Twynyrodyn
Merthyr Tydfil
CF47 0AN

Date of enquiry:	4 July 2020
Date enquiry received:	4 July 2020
Issue date:	4 July 2020
Our reference:	51002288328001
Your reference:	4A Elwyn



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

C Meredith

Enquiry address

Plot 4a
Elwyn Drive
Twynyrodyn
Merthyr Tydfil
CF47 0AN

How to contact us

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

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

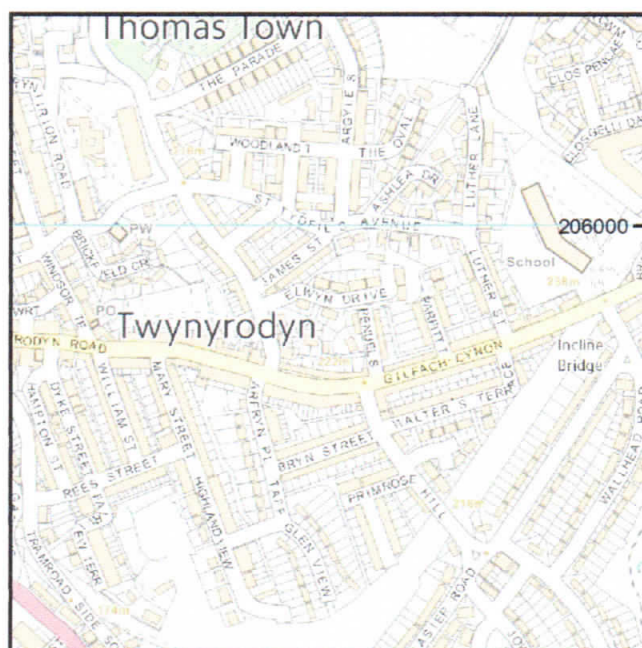
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



Reproduced by permission of
Ordnance Survey on behalf of
HMSO. © Crown copyright and
database right 2018. All rights
reserved.

Ordnance Survey Licence number: 100020315

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
GARW VEIN	Coal	Yes	19.7	West	171

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

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.

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.

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.

This page left intentionally blank

VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	04 July 2020
Issued to	C MEREDITH 8 BEECH GROVE VICTORIA EBBW VALE BLAENAU GWENT NP23 8WQ
Property search for	PLOT 4A ELWYN DRIVE TWYNYRODYN MERTHYR TYDFIL CF47 0AN
Reference number	51002288328001
Date of issue	04 July 2020
Cost	£112.13
VAT @ 20%	£22.43
Total received	£134.56
VAT registration	598 5850 68