

# Coal Mining Risk Assessment

Client: Lidl Great Britain Ltd

Stagecoach Depot,  
Penmaen Road, Blackwood

Report No: 1271.02.01

July 2024





## **Executive Summary**

Remada Ltd was commissioned by Lidl Great Britain Ltd (hereafter 'the client') to undertake a Coal Mining Risk Assessment (CMRA) for a proposed store at Penmaen Road, Blackwood, South Wales NP12 2DY. The objectives of this assessment have been to obtain information relating to the potential legacy of historical coal mining beneath the site and to produce an assessment of those risks in relation to the proposed site development.

## **Site Setting**

The site occupies an approximately rectangular plot in the north-eastern area of the Penmaen Industrial Estate, situated to the west of Penmaen Road and south of the B4254 road. At the time of writing, the site comprises a Stagecoach bus depot, with associated bus stabling and servicing facilities.

## **Site History**

The earliest available historical mapping of 1879 shows the site to be divided into two fields, which extended off-site to the north, south and west. Except for the removal of one of two footpaths bisecting the site, the site remained unchanged until after the mapping of 1938. By 1953, the northern and central areas of the site were redeveloped, with a large 'Furniture Factory' occupying these areas. By 1971, the existing electricity sub-station had been installed in the northwest corner of the site. Between 1975 and 1986, the site was occupied by a 'Council Depot', with the southern area of the site being redeveloped from a heathland to hardstanding around this time.

## **Published Geology**

Geological maps indicate the site to be underlain by superficial Devensian Till, designated as a Secondary Undifferentiated Aquifer. The bedrock of the Grovesend Formation (a Secondary A Aquifer) typically comprising mudstones and siltstone with well-developed coals and 'Pennant' sandstone.

The 1:50,000 series BGS map sheet 249 (Newport) dated 1986 indicates that the site is bisected by a WNW-ESE orientated fault in the northern area, which downthrows towards the south. The BGS mapping also shows a NE-SW orientated fault joining this WNW-ESE fault on-site, downthrowing towards the north-west. However, the Envirocheck report obtained for the study site indicates this to be present immediately to the north of the site and joining the WNW-ESE fault adjacent to the north-western corner.

## **Consultants Mining Report**

The shallowest worked coal underlying the site is indicated to be the 0.76m thick Mynyddisllwyn seam, located 90m beneath the site, but at 46m depth to the north of WNW-ESE orientated fault. A further succession of worked coal seams is indicated by the Coal Authority, but these are indicated to be present at depths >600m beneath the study site within the Middle and Lower Coal Measures.

The Coal Authority have recorded five claims for alleged subsidence damage within 50m of the site boundary. This includes a claim for damage to the Gossard International building on Penmaen Road (NP12 2DX) which was settled by repairs to the value of £13,426.58 in 1995.

## **Recommendations**

### Coal Seams

The Coal Authority Consultants Mining Report records the shallowest worked coal seam to be the Mynyddisllwyn Top Leaf located 90m under the site, dipping at 4.8 degrees towards the north with an extraction thickness of 0.76m. However, due to the presence of faulting, this coal seam reduces to just 49m depth towards the north-east of the site. Conversely, the mining abandonment plan for this Mynyddisllwyn seam provided by the Coal Authority (Figure 4) does not indicate any workings beneath the study site.

A worked seam of 0.76m thickness would conservatively require a protective thickness of rockhead of circa 10m above to mitigate surface movement. However, the Coal Authority have recorded five claims for alleged subsidence damage within 50m of the site boundary.



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Therefore, it is recommended that an intrusive investigation is undertaken to establish the depth to rockhead underlying the site, with particular focus on potential changes due to faulting beneath the site.




Mine Entries

There are no mine entries located within the site boundary or within the vicinity of the site.



## Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
1.1	OBJECTIVES .....	4
1.2	PREVIOUS REPORTS .....	4
1.3	LIMITATIONS .....	4
<b>2</b>	<b>DESK STUDY .....</b>	<b>5</b>
2.1	DESCRIPTION OF SITE .....	5
2.2	SITE SETTING .....	5
2.3	PROPOSED SITE USE .....	6
<b>3</b>	<b>INFORMATION REVIEW .....</b>	<b>7</b>
3.1	HISTORICAL MAPS .....	7
3.2	PUBLISHED GEOLOGICAL INFORMATION.....	7
3.3	MINING.....	9
3.4	COAL AUTHORITY CONSULTANTS MINING REPORT.....	9
3.5	MINE ABANDONMENT PLANS.....	11
3.6	PLANNING PORTAL.....	11
<b>4</b>	<b>ASSESSMENT OF SITE-SPECIFIC COAL MINING RISKS.....</b>	<b>12</b>
<b>5</b>	<b>GEOTECHNICAL ASSESSMENT &amp; RECOMMENDATIONS.....</b>	<b>14</b>
5.1	SUMMARY OF SITE HISTORY .....	14
5.2	SUMMARY OF PUBLISHED GEOLOGY .....	14
5.3	SUMMARY OF COAL AUTHORITY REPORTS AND ABANDONMENT PLANS .....	14
5.4	RECOMMENDATIONS .....	14
	<b>REFERENCES &amp; GUIDANCE .....</b>	<b>16</b>
	<b>STUDY LIMITATIONS .....</b>	<b>17</b>
<b>FIGURES</b>		
Figure 1	Site Location Plan	
Figure 2	Existing Site Layout	
Figure 3	Indicative Proposed Site Layout	
Figure 4	Approximate Overlay of Mynyddislwyn Coal Workings and 1886 Historic Mapping	
<b>APPENDICES</b>		
Appendix A	Coal Authority Consultants Coal Mining Report	

Issue No	Date	Prepared By	Technical Review	Authorised
01	09.07.2024	S Taylor 	P Dickinson 	G Jones 



## 1 INTRODUCTION

Remada Ltd was commissioned by Lidl Great Britain Ltd (hereafter 'the client') to undertake a Coal Mining Risk Assessment (CMRA) for a proposed store at Penmaen Road, Blackwood, South Wales NP12 2DY, at the location indicated in **Figure 1**.

### 1.1 Objectives

The objectives of this assessment have been to obtain information relating to the potential legacy of historical coal mining beneath the site and to produce an assessment of those risks in relation to the proposed site development.

### 1.2 Previous Reports

The following reports have been prepared by Remada for the site:

- Phase 1 Site Investigation & Preliminary Risk Assessment, for Stagecoach Depot, Penmaen Road, Blackwood, Remada Ltd report ref: 1271.01.01, issued in June 2024.

### 1.3 Limitations

The comments given in this report and the opinions expressed are based on the information reviewed, which Remada believes are reliable. Nevertheless, Remada cannot and does not guarantee the authenticity or reliability of the information it has obtained from these sources, and used in the production of this assessment. There may be conditions pertaining to the site that have not been disclosed by this assessment and therefore could not be taken into account.



## 2 DESK STUDY

### 2.1 Description of Site

**Site Description** The site occupies an approximately rectangular plot in the north-eastern area of the Penmaen Industrial Estate, situated to the west of Penmaen Road and south of the B4254 road, as indicated in **Figure 2**. At the time of writing, the site comprises a Stagecoach bus depot, with associated bus stabling and servicing facilities.

The site is formed of two distinct areas. The northern half of the site is dominated by the main bus depot building, featuring a tri-pitched roof with associated flat roofed offices along the northern and western fringes. A separate, pitched roof building is present adjacent to the western boundary, whilst a flat-roofed electricity sub-station of brick construction is present in the north-western corner. The majority of the southern half of the site is asphalt-surfaced and used for the stabling of Stagecoach's local bus fleet. A small, rectangular patch of concrete is present adjacent to the southern boundary of the site although this appears to be flush with the surrounding surfacing.

The site boundary to the north is marked by the B4252 roadway, whilst vegetation marks most of the eastern and south-eastern boundaries. Palisade fencing appears to form the south-western boundary, although the site is open to south.

The client-supplied Topographic & Buried Utilities Survey records several utility services present on-site including surface water drainage along the southern margins, electricity cables in the south-west and interceptors on the southern boundary.

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**Area of Site** Circa 8600m<sup>2</sup>.

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**Site Elevation** The site gently slopes downwards from north to south, with the topographic elevation varying between approximately 144m AOD (metres above ordnance datum) on the northern boundary and 140m AOD in the south-western corner.

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**National Grid Co-ordinates** 318080, (E), 196440 (N)

### 2.2 Site Setting

The site is situated in a mixed industrial and residential area.

**North:** The B4254 roadway forms the northern boundary, with predominantly residential properties beyond.

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**East:** Penmaen Road to the east, beyond which are a pond and B4251.

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**South:** Residential properties bound the site to the south-east, fronting onto Penmaen Road.



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**West:** Several industrial units associated with Penmaen Industrial Estate, with the Sirhowy River beyond.

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### 2.3 Proposed Site Use

It is understood that the proposed site use for the majority of the site will be a Lidl retail store with associated car park and soft landscaping. A proposed indicative site layout plan is presented as **Figure 3**, with the site being accessed from a new entrance off B4254 to the north. The proposed store footprint is indicated to be in the western and south-western areas of the site, with the remaining areas being a combination of car parking, HGV access and soft landscaping. The electricity sub-station remains present in the north-western corner of the site.



### 3 INFORMATION REVIEW

#### 3.1 Historical Maps

The historical maps within Remada's Phase 1 Site Investigation & Preliminary Risk Assessment, reference 1271.01.01 have been reviewed dated from 1879 for evidence of coal mining activities at surface and at depth.

##### 3.1.1 On-site History

Historical mapping dating back to 1879 shows no evidence of coal mining on-site.

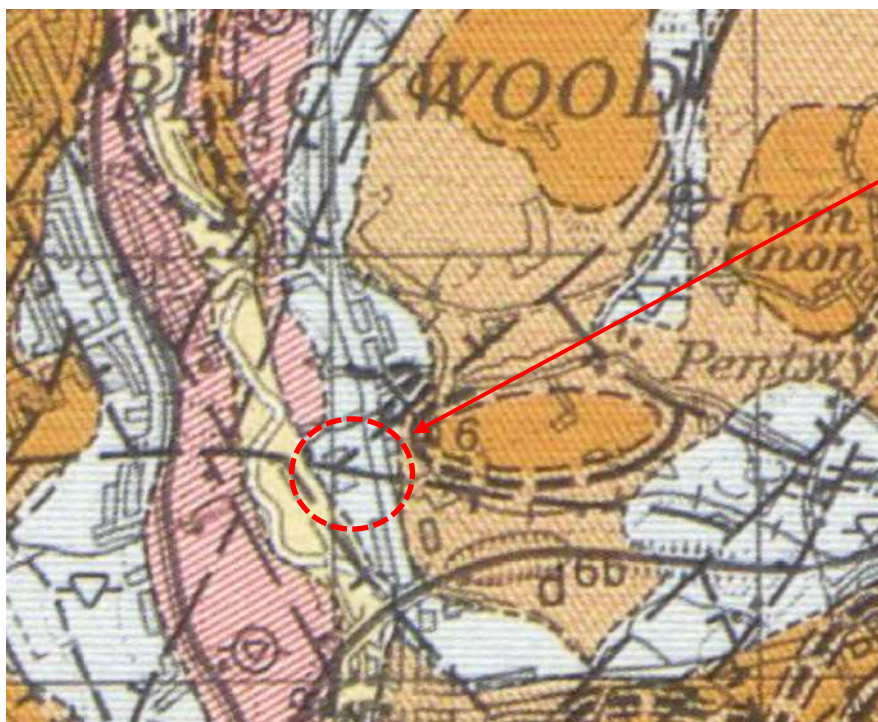
##### 3.1.2 Off-site History

From the historical mapping several shafts including trial shafts and air shafts as well as spoil heaps, collieries, and coal levels were identified in the proximity of the site. From the time of the earliest available mapping in 1879, an air shaft was evident c.150m northwest of the site with a large spoil heap leading from the shaft to c.70m west of the site. Large collieries (Tir Philkins and Lower Plas) were identified to the northeast and southwest of the site, respectively. Through the late nineteenth century through the early twentieth century, roughly fourteen pits, shafts, and collieries were identified within c.1km of the site, most of which were mapped as 'old' or 'disused' by the second world war. There is evidence of quarries for landfilling as a disused tip is mapped c.300m northeast of the site in 1971.

#### 3.2 Published Geological Information

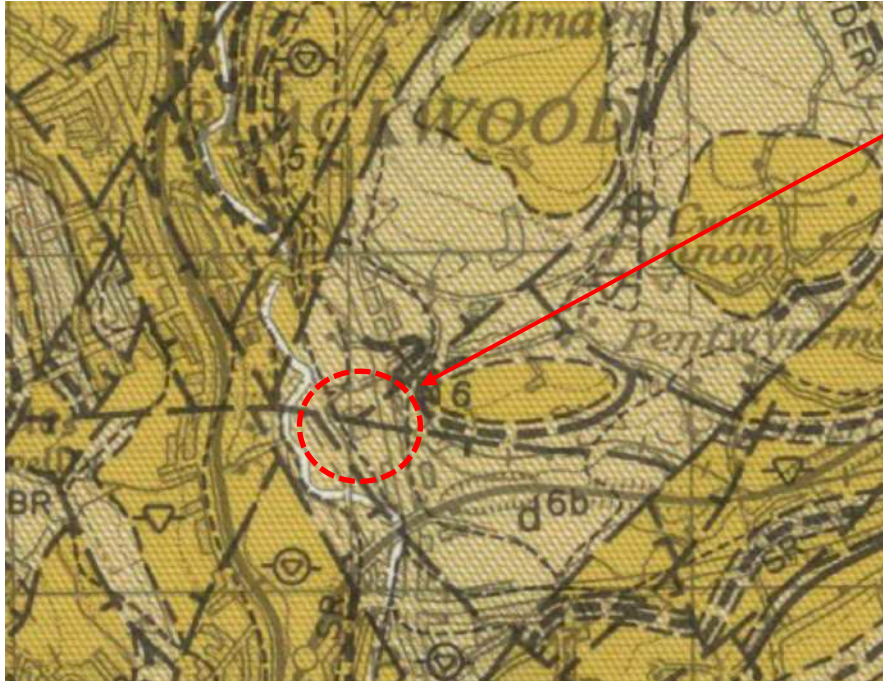
The following publications of the British Geological Survey (BGS) have been examined in respect of strata underlying the site:

- BGS GeoIndex (on-line mapping).
- BGS Map Sheet 249 Newport Solid & Drift, Scale 1:50,000, 1997.



Extract of BGS Sheet 249 – Newport, 1997 (Solid & Drift)





Study Site

Extract of BGS Sheet 249 – Newport, 1986 (Solid)

### 3.2.1 Made Ground and Superficial Geology

The BGS records indicate that there is no Made Ground beneath the site. The on-site superficial geology is mapped as Devensian Till, which typically comprise 'sand and gravel with rare clay interbeds'.

### 3.2.2 Bedrock Geology

The bedrock underlying the superficial deposits is formed of the Grovesend Formation. The BGS describes the stratum as typically comprising 'predominantly argillaceous, comprising mudstones and siltstones, with well-developed coals; minor lithic ("Pennant") sandstones; locally developed red mudstones in the type area.'

The 1:50,000 series BGS map sheet 249 (Newport) dated 1986 indicates that the site is bisected by a WNW-ESE orientated fault in the northern area, which downthrows towards the south. The BGS mapping also shows a NE-SW orientated fault joining this WNW-ESE fault on-site, downthrowing towards the north-west. However, the Envirocheck report obtained for the study site indicates this to be present immediately to the north of the site and joining the WNW-ESE fault adjacent to the north-western corner, as shown in the extract below:



Extract from Envirocheck Report showing faulting on and around the site



The BGS Sheet Memoir 249 (Newport) records that the Grovesend Formation attains a maximum thickness of circa 135m in the Blackwood area and extends from the base of the Mynyddislwyn seam to the high coal measures known in the district. The Memoir records that:

*The Mynyddislwyn has been exploited extensively. In the southern outcrops the seam is a single coal, 30 to 55 in thick, but in the northern outcrops it consists of two distinct coals, the Lower and Upper Mynyddislwyn. The former varies from 19 to 36 in, and in some areas contains several dirt partings. Because it is thinner and of poorer quality than the upper coal, workings are only on a small scale. The mudstone and seatearth between the two coals vary from less than 12 inches in the west to over 30 ft in the south-east. The Upper Mynyddislwyn is usually 3 to 4.5 ft of clean coal and is virtually worked out. The immediate roof is usually mudstone, though sandstone occurs in some areas.*

### 3.2.3 Historical BGS Borehole Records

There are no historic BGS borehole records within a relevant distance to the study site

### 3.3 Mining

The site is located within an area which may be affected by coal mining activity. A review of the Coal Authority website indicated that the site is located directly adjacent to, but not within a development high risk area and there is one mine entry within 500m of site.

### 3.4 Coal Authority Consultants Mining Report

A Coal Authority Consultants Coal Mining Report was obtained for the site (ref: 51003430039001), which is presented in **Appendix A** and records the following:

#### *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
unnamed	MYNYDDISL WYN TOP LEAF	Coal	446D	49	North-East	4.8	North	76	1876
unnamed	MYNYDDISL WYN TOP LEAF	Coal	446E	90	Beneath Property	4.8	North	76	1873
OAKDALE	UPPER SIX FEET	Coal	54	624	North-East			199	1985
OAKDALE	UPPER SIX FEET	Coal	52	626	North-East			221	1983
BRITAINNIA	LOWER 7FT BOTTOM LEAF	Coal	45AP	630	West	5.4	North	150	1980
unnamed	LOWER NINE FOOT	Coal	45SZ	643	North-East	2.6	North-West	152	1976
unnamed	LOWER NINE FOOT	Coal	45T0	643	East	2.4	North-East	152	1973
OAKDALE	FIVE FOOT GELLIDEG	Coal	420J	661	West	3.2	North	210	1988
OAKDALE	FIVE FOOT GELLIDEG	Coal	420W	678	Beneath Property	3.3	North-East	248	1989
unnamed	LOWER 7FT BOTTOM LEAF	Coal	45A0	683	North	3.5	East	150	1970



*Probable Unrecorded Shallow Mining*

None

*Spine Roadways at Shallow Depth*

No spine roadway recorded at shallow depth.

*Mine Entries (refer to plan within Coal Authority Report)*

None recorded within 100 metres of the enquiry boundary.

*Abandoned mine plan catalogue numbers*

SWR3072	SWR1820	SW1761
SWR1755	SWA3786	SWR1838
PO0	SWR1825	SW1757

In addition, the Coal Authority Consultants Coal Mining Report states that their records show more plans that could affect the enquiry boundary.

*Outcrops*

No outcrops recorded

*Geological faults, fissures and breaklines*

Fault under or close to the property recorded.

*Opencast Mines*

None recorded within 500m of the enquiry boundary.

*Coal Authority Managed Tips*

None recorded within 500m of the enquiry boundary.

*Mine Gas*

None recorded within 500 metres of the enquiry boundary.

*Coal Mining Subsidence*

A damage notice or claim for alleged subsidence damage was made in June 1995 for GOSSARD INTERNATIONAL BUILDING PENMAEN ROAD, PONTLLANFRAITH, BLACKWOOD, GWENT, NP12 2DX. The claim was settled by repairs to the value of £13,426.58.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

There are a further 4 claim(s) within 50 metres of the property boundary that do not match the property address. These are shown on the enquiry boundary plot.

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.



### 3.5 Mine Abandonment Plans

Remada commissioned the Coal Authority (CA) to perform a search of their mining records for plans relevant to the study site on 17<sup>th</sup> June 2024. The following abandonment plans were subsequently forwarded to Remada:

- CA Drawing ref: 1183\_999999: Tir Filkins Colliery – 2 chains to 1 inch scale map of the Mynyddysllwyn (sic) Vein of Coal
- CA Drawing ref: SWA3789\_311896: Six Feet Seam for Oakdale Colliery.
- CA Drawing ref: SWA2899\_311696: Seven Feet Seam for Britannia Colliery.
- CA Drawing ref: SWA2881\_3111896: Black Vein (Nine Feet) for Celynen North Colliery.
- CA Drawing ref: SWA3786\_311896: Five Feet / Gellideg Seam for Oakdale Colliery.

The mapping for the Mynyddysllwyn Coal Seam indicates that whilst the coal has been worked within the vicinity of the site; the site itself is devoid of recorded workings. The position of these off-site workings is shown on **Figure 4**.

The provided abandonment plans for the Six Feet, Seven Feet, Black Vein (Nine Feet) and Five Feet / Gellideg coal seams do not record these coals intercepting with the site boundary.

### 3.6 Planning Portal

A review of the Caerphilly County Council's Planning Portal was undertaken and revealed that while there were records of planning applications within the vicinity of the site, there was no information provided regarding ground conditions.



#### 4 ASSESSMENT OF SITE-SPECIFIC COAL MINING RISKS

From a review of information sources above, the range of coal mining related hazards relevant to the proposed surface development of the site can be summarized as follows:

Coal Mining Hazard	Potential for Coal Mining Hazard to impact proposed development of the site
Deep underground coal mining >30m depth (past, present and currently proposed)	<p><b>Moderate risk identified.</b></p> <p>Based upon information from the Coal Authority report and published BGS mapping, there are known seams which have been worked at a depth of &gt;30m beneath the site. The shallowest is indicated to be the 0.76m thick Mynyddisllwyn coal seam, located 90m beneath the site, but at 46m depth to the north of WNW-ESE orientated fault on-site.</p> <p>BGS mapping indicates that the Mynyddisllwyn coal seam is underlain by a possible unconformity within the Pennant (Upper Coal Measures) sandstone bedrock in this area, of which the Grovesend Formation forms part.</p> <p>A further succession of worked coal seams is indicated by the Coal Authority, but these are indicated to be present at depths &gt;600m below the study site within the Middle and Lower Coal Measures. These include the Upper Six Feet, Lower Seven Feet, Lower Nine Feet and Five Foot / Gellideg coal seams.</p>
Recorded shallow underground coal mining <30m depth	<p><b>Negligible risk identified.</b></p> <p>The Coal Authority has not identified any known mine workings beneath the site at depths of &lt;30m bgl.</p>
Unrecorded shallow underground coal mining <30m depth	<p><b>Moderate risk identified.</b></p> <p>The Coal Authority records the risk from probable unrecorded shallow mining as 'none'.</p> <p>However, the Coal Authority have recorded five claims for alleged subsidence damage within 50m of the site. This includes a claim for damage to the Gossard International building on Penmaen Road (NP12 2DX) which was settled by repairs to the value of £13,426.58 in 1995.</p>
Recorded mine entries (shafts and adits)	<p><b>Negligible risk identified.</b></p> <p>There are no recorded mine entries on or within 20m of the site boundary.</p>
Coal mining induced or reactivated fault/lines of weaknesses (fissures etc.)	<p><b>Moderate risk identified.</b></p> <p>The site is bisected by a WNW-ESE orientated fault in the northern area, which downthrows towards the south. The BGS mapping also shows a NE-SW orientated fault joining this WNW-ESE fault on-site, downthrowing towards the north-west, although the position of this joint migrates to off-site on the Envirocheck mapping.</p>



Mines gas emissions	<b>Negligible risk identified.</b> With respect to mine gas, the Coal Authority states "none recorded within 500m of the enquiry boundary".
Recorded surface mining (opencast workings)	<b>Negligible risk identified.</b> With respect to opencast workings, the Coal Authority states 'none recorded within 500 metres of the enquiry boundary'.





## 5 GEOTECHNICAL ASSESSMENT & RECOMMENDATIONS

### 5.1 Summary of Site History

The earliest available historical mapping of 1879 shows the site to be divided into two fields, which extended off-site to the north, south and west. Except for the removal of one of two footpaths bisecting the site, the site remained unchanged until after the mapping of 1938. By 1953, the northern and central areas of the site were redeveloped, with a large 'Furniture Factory' occupying these areas. By 1971, the existing electricity sub-station had been installed in the northwest corner of the site. Between 1975 and 1986, the site was occupied by a 'Council Depot', with the southern area of the site being redeveloped from a heathland to hardstanding around this time.

### 5.2 Summary of Published Geology

Geological maps indicate the site to be underlain by superficial Devensian Till, designated as a Secondary Undifferentiated Aquifer. The bedrock of the Grovesend Formation (a Secondary A Aquifer) typically comprising mudstones and siltstone with well-developed coals and 'Pennant' sandstone.

The 1:50,000 series BGS map sheet 249 (Newport) dated 1986 indicates that the site is bisected by a WNW-ESE orientated fault in the northern area, which downthrows towards the south. The BGS mapping also shows a NE-SW orientated fault joining this WNW-ESE fault on-site, downthrowing towards the north-west. However, the Envirocheck report obtained for the study site indicates this to be present immediately to the north of the site and joining the WNW-ESE fault adjacent to the north-western corner.

### 5.3 Summary of Coal Authority Reports and Abandonment Plans

The shallowest worked coal underlying the site is indicated to be the 0.76m thick Mynyddisllwyn seam, located 90m beneath the site, but at 46m depth to the north of WNW-ESE orientated fault. A further succession of worked coal seams is indicated by the Coal Authority, but these are indicated to be present at depths >600m beneath the study site within the Middle and Lower Coal Measures.

The Coal Authority have recorded five claims for alleged subsidence damage within 50m of the site boundary. This includes a claim for damage to the Gossard International building on Penmaen Road (NP12 2DX) which was settled by repairs to the value of £13,426.58 in 1995.

### 5.4 Recommendations

#### 5.4.1 Coal Seams

If coal is worked at 'shallow depth' (i.e. generally less than 30m bgl), established practice in the UK is to use a 'safe depth' principle to define a depth below rock-head beyond which the 'crown hole' collapse of the workings in that seam will not impact the surface development. This is based on the assumption that an upward migrating collapse void will eventually choke itself. The established rule is to use a safe depth of 10 times the seam thickness (or combined thickness if more than one seam is present) in rock (i.e. excluding depth of made ground & clays, etc.) to the top of the seam. It is this 'safe depth' principle which is used to establish the depth of investigation and treatment of shallow mine workings.

The Coal Authority Consultants Mining Report records the shallowest worked coal seam to be the Mynyddisllwyn Top Leaf located 90m under the site, dipping at 4.8 degrees towards the north with an extraction thickness of 0.76m. However, due to the presence of faulting, this coal seam reduces to just 49m depth towards the north-east of the site. Conversely, the mining abandonment plan for this Mynyddisllwyn seam provided by the Coal Authority (**Figure 4**) does not indicate any workings beneath the study site.



A worked seam of 0.76m thickness would conservatively require a protective thickness of rockhead of circa 10m above to mitigate surface movement. However, the Coal Authority have recorded five claims for alleged subsidence damage within 50m of the site boundary.

Therefore, it is recommended that an intrusive investigation is undertaken to establish the depth to rockhead underlying the site, with particular focus on potential changes due to faulting beneath the site.

#### **5.4.2 Shafts**

There are no mine entries located within the site boundary or within the vicinity of the site.



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## REFERENCES & GUIDANCE

*BS 5930:2015+A1:2020, Code of practice for ground investigations.*

*CIRIA C758D Abandoned Mine Workings Manual, 2019*

*Manual of Contract Documents for Highways Works Volume 1 Specification for Highways Works Series 1000*



## STUDY LIMITATIONS

**IMPORTANT.** This section should be read before reliance is placed on any of the information, opinions, advice, recommendations or conclusions contained in this report.

1. This report has been prepared by Remada, Ltd with all reasonable skill, care and diligence within the terms of the Appointment and with the resources and manpower agreed with (the 'Client'). Remada does not accept responsibility for any matters outside the agreed scope.

2. This report has been prepared for the sole benefit of the Client unless agreed otherwise in writing.

3. Unless stated otherwise, no consultations with authorities or funders or other interested third parties have been carried out. Remada is unable to give categorical assurance that the findings will be accepted by these third parties as such bodies may have published, more stringent objectives. Further work may be required by these parties.

4. All work carried out in preparing this report has used, and is based on, Remada's professional knowledge and understanding of current relevant legislation. Changes in legislation or regulatory guidance may cause the opinion or advice contained in this report to become inappropriate or incorrect. In giving opinions and advice pending changes in legislation, of which Remada is aware, have been considered. Following delivery of the report Remada has no obligation to advise the Client or any other party of such changes or their repercussions.

5. This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report.

6. Whilst this report and the opinions made are to the best of Remada's belief, Remada cannot guarantee the accuracy or completeness of any information provided by third parties.

7. This report has been prepared based on the information reasonably available during the project programme. All information relevant to the scope may not have received.

8. This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of changes in the condition of the site since the time of the investigation.

9. The content of this report represents the professional opinion of experienced environmental consultants. Remada does not provide specialist legal or other professional advice. The advice of other professionals may be required.

10. Where intrusive investigation techniques have been employed they have been designed to provide a reasonable level of assurance on the conditions. Given the discrete nature of sampling, no investigation technique is capable of identifying all conditions present in all areas. In some cases the investigation is further limited by site operations, underground obstructions and above ground structures. Unless otherwise stated, areas beyond the boundary of the site have not been investigated.

11. If below ground intrusive investigations have been conducted as part of the scope, service tracing for safe location of exploratory holes has been carried out. The location of underground services shown on any drawing in this report has been determined by visual observations and electromagnetic techniques. No guarantee can be given that all services have been identified. Additional services, structures or other below ground obstructions, not indicated on the drawing, may be present on site.

12. Unless otherwise stated the report provides no comment on the nature of building materials, operational integrity of the facility or on any regulatory compliance issues.

13. Unless otherwise stated, samples from the site (soil, groundwater, building fabric or other samples) have NOT been analysed or assessed for waste classification purposes.



## FIGURES

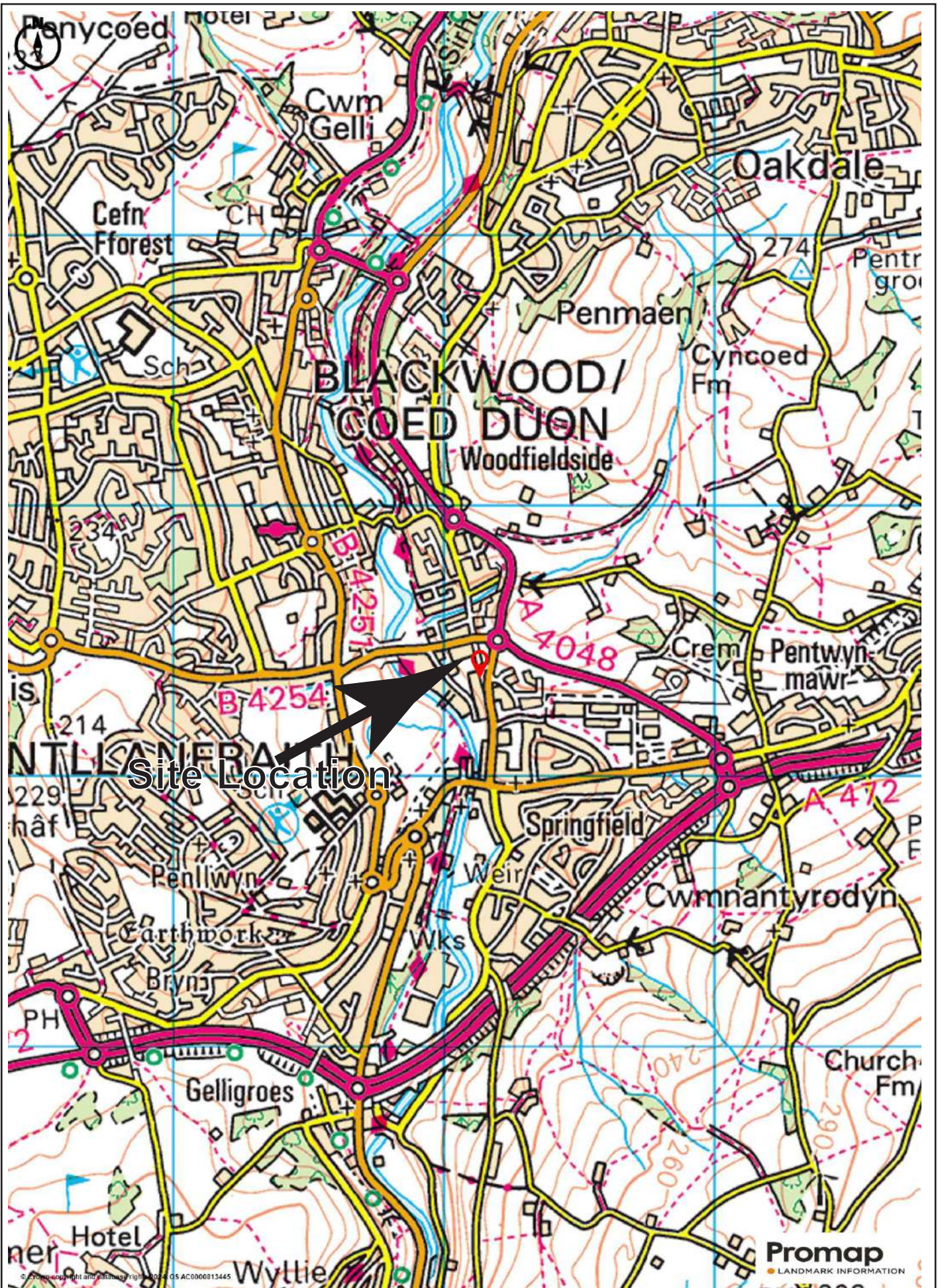
Figure 1 - Site Location Plan

Figure 2 - Existing Site Layout



Figure 3 - Indicative Proposed Site Layout

Figure 4 - Approximate Overlay of Mynyddisllwyn  
Coal Workings and 1886 Historic Mapping





Site Location

Notes	Revision	Approved	Date	Project Title Stagecoach Depot, Penmaen Road, Blackwood	Scale as shown	Drawn JR	Size A4
				Drawing Title Figure 1: Site Location Plan	Date 06.06.24	Job No. 1271.01	Figure No. 01
				Client Lidl Great Britain Ltd	 		





Getmapping plc 2017.



Legend

Notes

Revision	Approved	Date

Project Title  
Stagecoach Depot, Penmaen Road, Blackwood

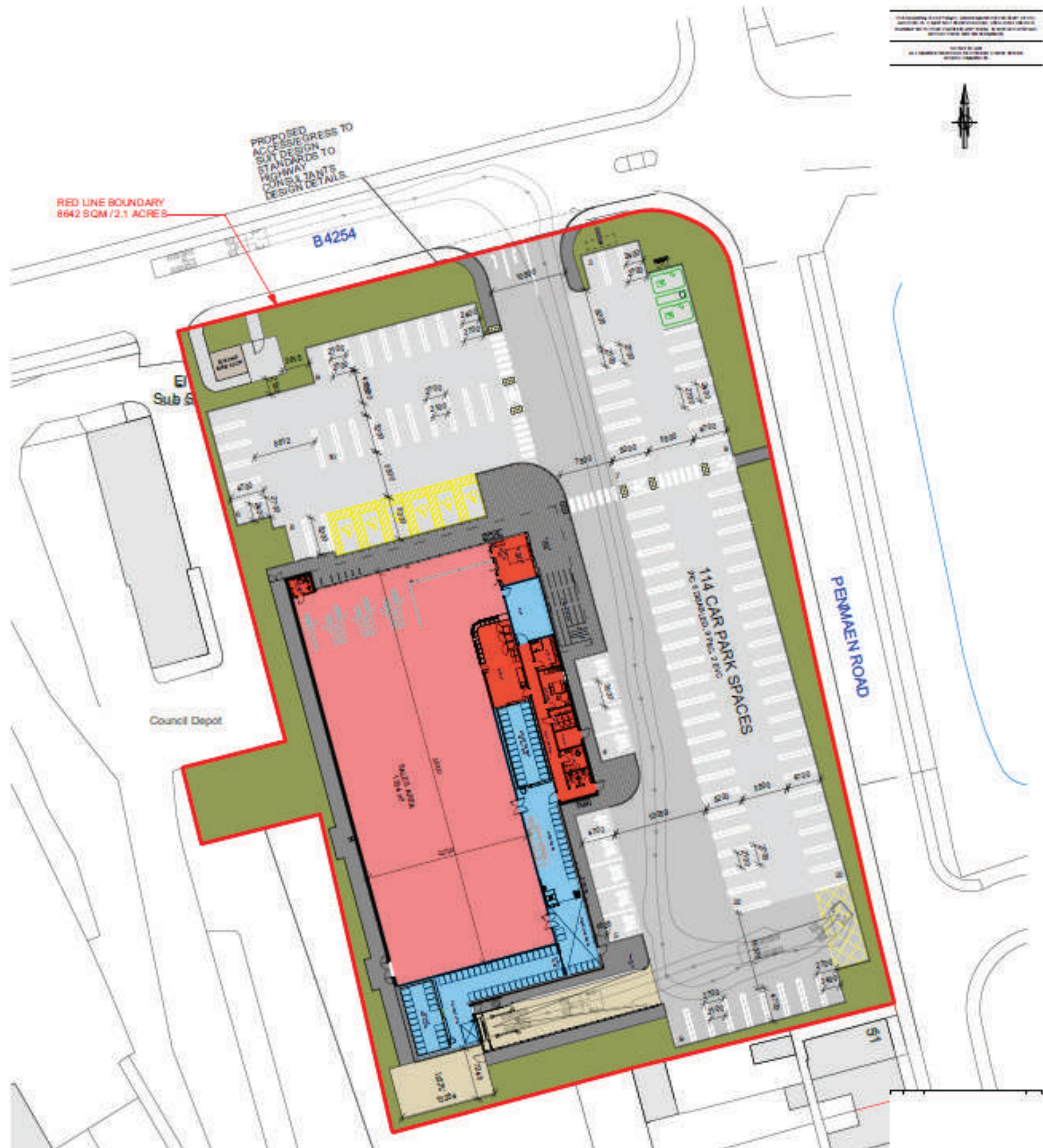
Drawing Title  
Figure 2: Site Plan as Existing

Client  
Lidl Great Britain Ltd 

Scale as shown	Drawn	Size
	JR	A4
Date	Job No.	Figure No.
06.06.24	1271.01	02







THIS DRAWING IS A PRELIMINARY DESIGN AND SHOULD NOT BE USED FOR CONSTRUCTION OR AS A BASIS FOR ANY OTHER DESIGN OR CONTRACT. ALL DIMENSIONS AND LOCATIONS ARE SUBJECT TO SURVEY AND FIELD VERIFICATION. ANY DISCREPANCIES BETWEEN THIS DRAWING AND THE FIELD SURVEY SHALL BE RESOLVED IN FAVOR OF THE FIELD SURVEY. REMADA GEO CONSULTANTS LTD. 06/06/24



Legend

Notes  
 Proposed site layout plan reproduced from HTC Architects Ltd 'Proposed Site Plan - Option 11', drawing ref: F422, Revision A dated February 2024.

The proposed site layout plan presented here is indicative only and may be subject to change following publication of Remada's Phase 1 report.

Revision	Approved	Date

Project Title  
 Stagecoach Depot, Penmaen Road, Blackwood

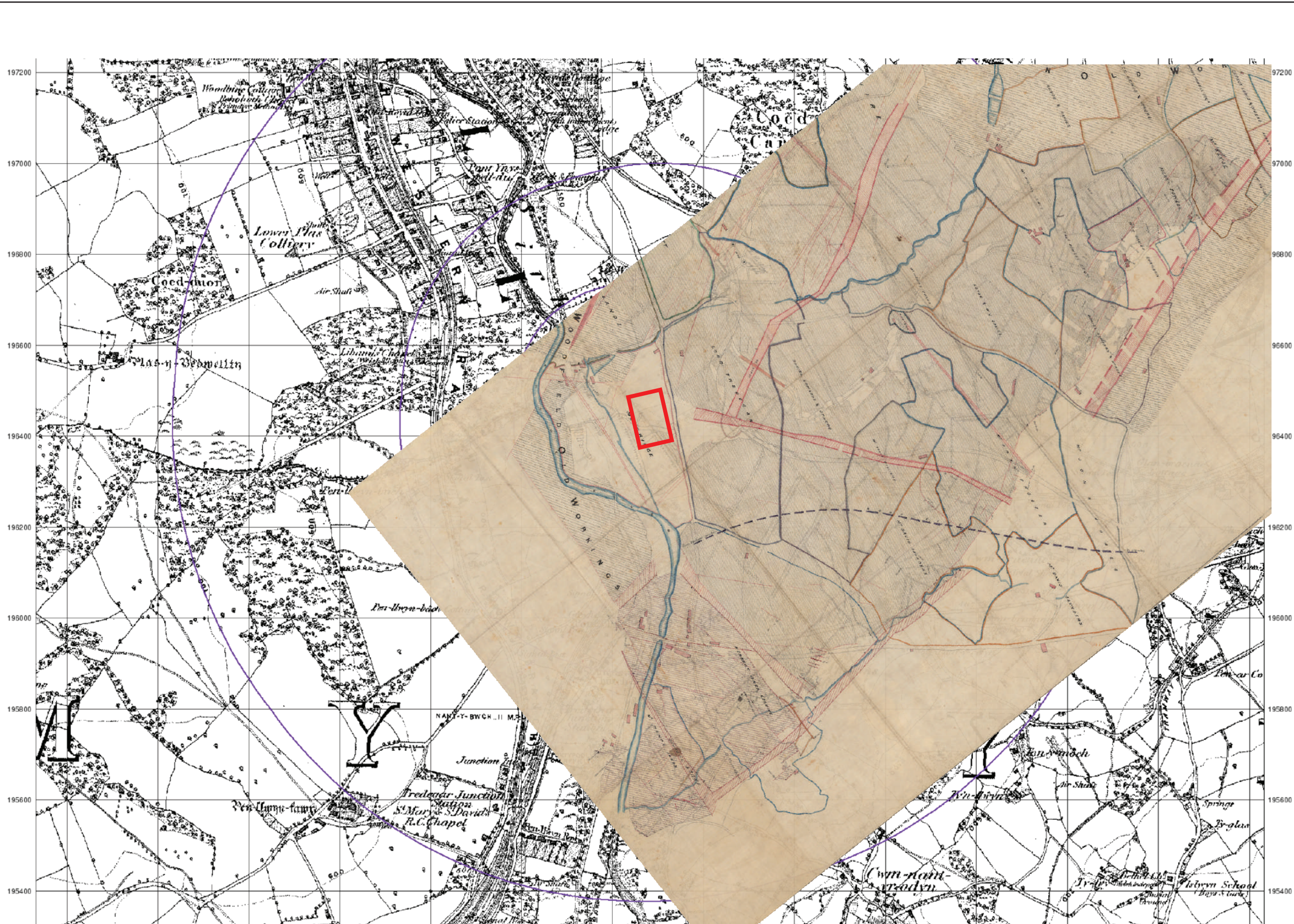
Drawing Title  
 Figure 3: Proposed Indicative Site Layout

Client  
 Lidl Great Britain Ltd 


Scale as shown	Drawn	Size
	JR	A4
Date	Job No.	Figure No.
06.06.24	1271.01	03







Legend

 Site Boundary (indicative only)

Notes

Mynyddislwyn Coal Workings reproduced from Coal Authority Abandonment Plan ref: 1183\_999999: Tir Filkins Colliery – 2 chains to 1 inch scale map of the Mynyddislwyn Vein of Coal.

Revision	Approved	Date

Project Title  
Lidl Blackwood

Drawing Title  
Overlay of Mynyddislwyn Coal Workings onto 1886 Historic Mapping

Client  
Lidl Great Britain Ltd 

Scale	Drawn	Size
as shown	PD	A4
Date	Job No.	Figure No.
09.07.24	1271.02	04







# APPENDIX A

## Coal Authority Consultants Coal Mining Report

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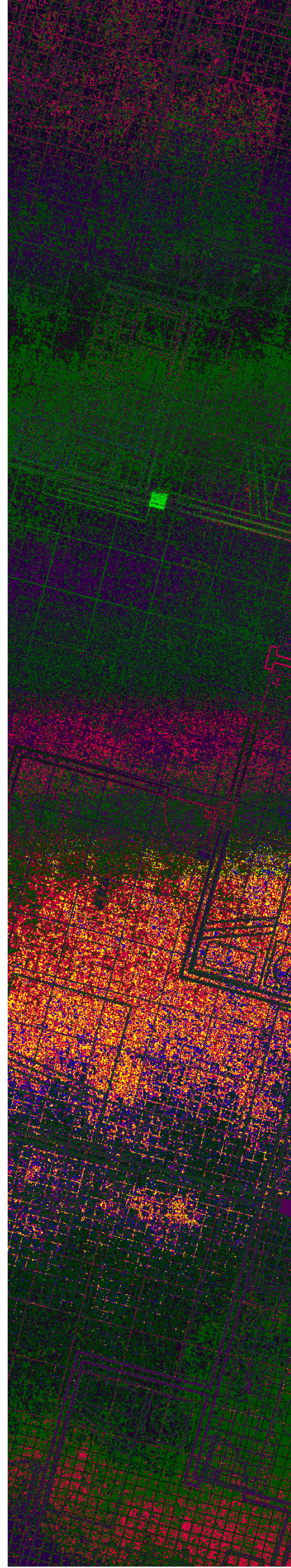
The Coal  
Authority

# Consultants Coal Mining Report

Stagecoach  
Unit 4  
Block A  
Penmaen Industrial Estate  
Pontllanfraith  
Caerphilly County Borough  
NP12 2DY

Date of enquiry: 10 June 2024  
Date enquiry received: 10 June 2024  
Issue date: 10 June 2024

Our reference: 51003430039001  
Your reference: 1271.01



# 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

Remada Ltd

## Enquiry address

Stagecoach  
Unit 4  
Block A  
Penmaen Industrial Estate  
Pontllanfraith  
Caerphilly County Borough  
NP12 2DY

## How to contact us

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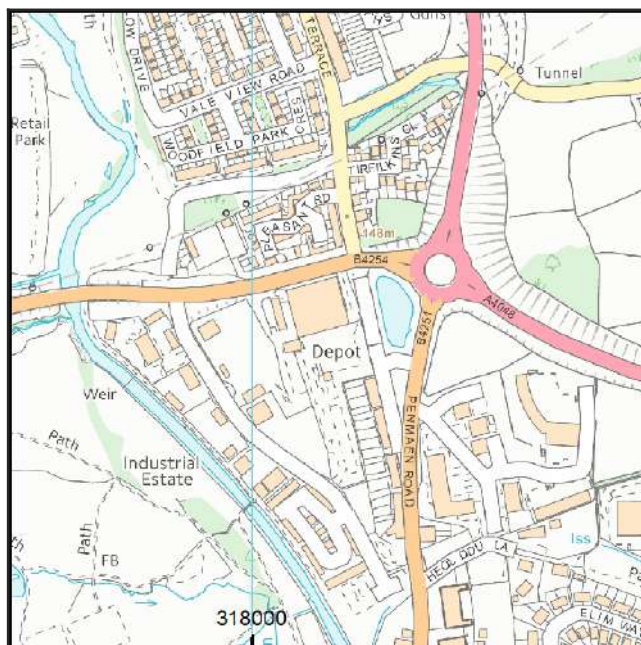
[www.groundstability.com](http://www.groundstability.com)

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



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
unnamed	MYNYDDISL WYN TOP LEAF	Coal	446D	49	North-East	4.8	North	76	1876
unnamed	MYNYDDISL WYN TOP LEAF	Coal	446E	90	Beneath Property	4.8	North	76	1873
OAKDALE	UPPER SIX FEET	Coal	54	624	North-East			199	1985
OAKDALE	UPPER SIX FEET	Coal	52	626	North-East			221	1983
BRITAINNIA	LOWER 7FT BOTTOM LEAF	Coal	45AP	630	West	5.4	North	150	1980
unnamed	LOWER NINE FOOT	Coal	45SZ	643	North-East	2.6	North-West	152	1976
unnamed	LOWER NINE FOOT	Coal	45T0	643	East	2.4	North-East	152	1973
OAKDALE	FIVE FOOT GELLIDEG	Coal	420J	661	West	3.2	North	210	1988
OAKDALE	FIVE FOOT GELLIDEG	Coal	420W	678	Beneath Property	3.3	North-East	248	1989
unnamed	LOWER 7FT BOTTOM LEAF	Coal	45A0	683	North	3.5	East	150	1970

## 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

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

SWR3072	SWR1820	SW1761
SWR1755	SWA3786	SWR1838
PO0	SWR1825	SW1757

Our records show we have more plans than those shown above which could affect the enquiry boundary.

**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

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

Distance to site investigation (m)	Direction
Within	N/A

See Section 4 for further information.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

A damage notice or claim for alleged subsidence damage was made in June 1995 for GOSSARD INTERNATIONAL BUILDING PENMAEN ROAD, PONTLLANFRAITH, BLACKWOOD, GWENT, NP12 2DX. The claim was settled by repairs to the value of £13,426.58.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

There are a further 4 claim(s) within 50 metres of the property boundary that do not match the property address. These are shown on the enquiry boundary plot.

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.

If further subsidence damage claims information is required, please visit [www.groundstability.com](http://www.groundstability.com).

See Section 4 for further information.

### 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 in an area where a notice to withdraw support was given in 1975.

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.

### Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

### Coal mining subsidence

The site is within an area of previous interest. It is close to where the Coal Authority or licensed mine operator has investigated and where necessary remediated issues relating to coal mining subsidence.

The site requires further investigation and may influence your risk assessment. We recommend that you order the appropriate **Coal Authority Subsidence Claims Report**, which will include more information about the hazard.

**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](mailto: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](mailto: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**

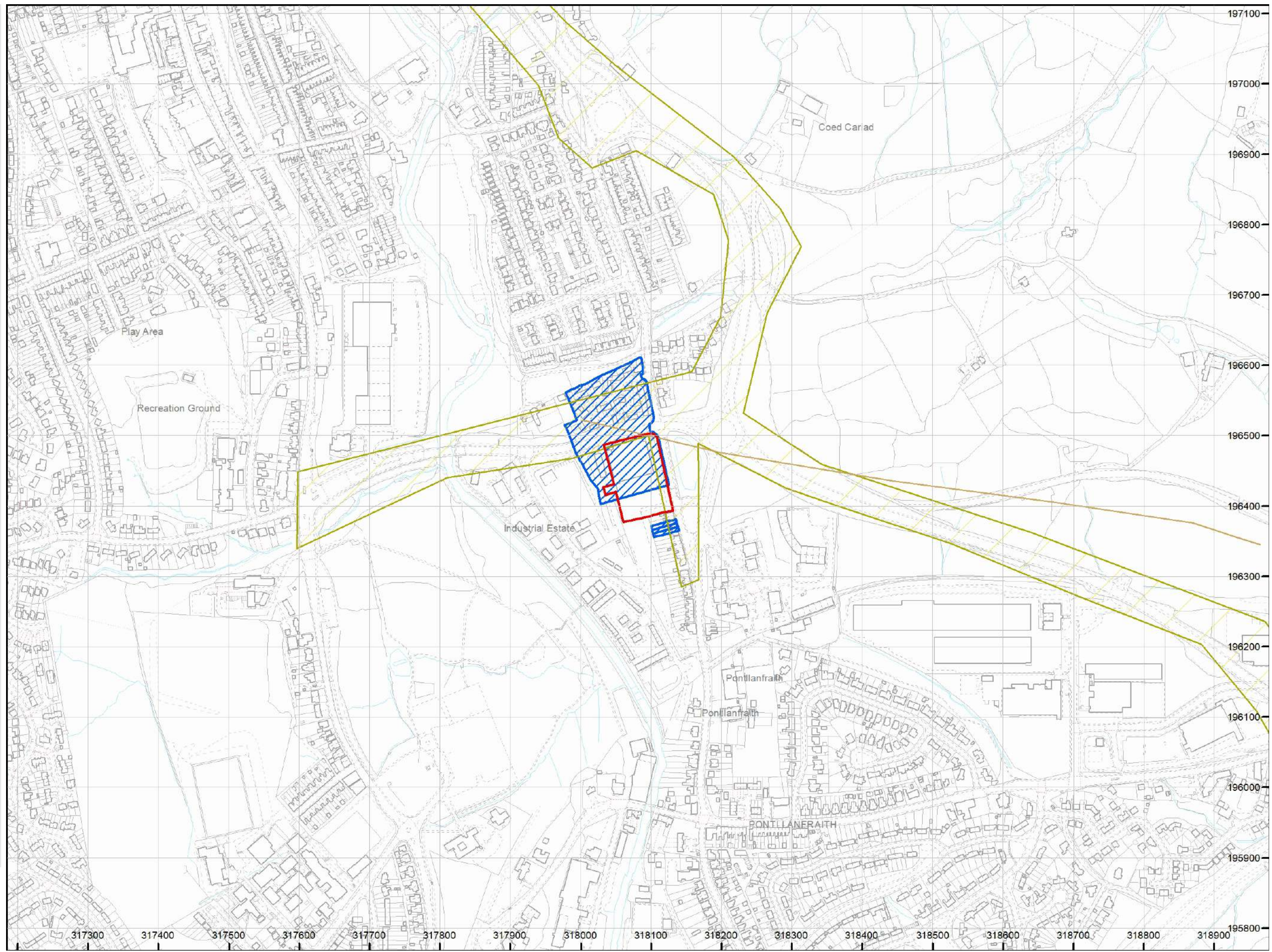
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.



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 
- Geological faults 
- Site investigations 
- Coal claim 



**How to contact us**  
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