

Archaeology Wales

Tower Colliery, Hirwaun Rhondda Cynon Taf

Desk Based Assessment



By
James Evans BA (hons) PgDip

Report No. 1848


Archaeology Wales

Tower Colliery, Hirwaun Rhondda Cynon Taf

Desk-based Assessment

Prepared For: Tower Regeneration Ltd


Edited by: Charley James-Martin

Signed: 

Position: Project Manager

Date: 06.11.19

Authorised by: Rowena Hart

Signed: 

Position: Regional Director

Date: 06.11.19

By

James Evans BA (hons) PgDip

Report No. 1848

November 2019

Contents

<i>Non-technical Summary</i>	1
<i>Crynodeb Annhechnegol</i>	2
1 Introduction	4
2 Site Description	4
3 Methodology	4
4 Archaeological and Historical Background.....	6
5 Map Regression	25
6 Aerial Photographs and Lidar	26
7 Site Visit.....	27
8 Impact Assessment.....	28
9 Conclusions.....	30
10 Mitigation.....	32
11 Sources	33

Tables

Table 1. Sites of archaeological interest within the 1km study area	9
Table 2. Listed Buildings within a 3km search area	29
Table 3. Sites of archaeological interest with potential indirect or direct impacts	31

Appendices

Appendix I Gazetteer of sites recorded on the Regional HER

Appendix II Figures

- Figure 1 Location of development area (red) with the 1km study area (red outline), showing all known sites of archaeological interest (blue)
- Figure 2 Plan showing the development area (red) with the 1km study area (red outline), 3km study area (green outline) and the Scheduled Monuments, Listed Buildings and Historic Landscapes.
- Figure 3 Historic plan of Glamorganshire of 1885

Appendix III Plates

- Plate 1 Northern area of the development site, looking north
- Plate 2 Northern area of the development site, looking west
- Plate 3 Northern area of the development site, looking north-west
- Plate 4 Tower Road facing south, with development area to the west and south
- Plate 5 Location of Hirwaun Common Rifle Range (GGAT01275m), looking south-east

Plate 6	Location of Bute Colliery and Hirwaun Tramway (GGAT02498.0m), looking north-west
Plate 7	Location of Knobby Drift Culvert (GGAT06020m), looking south-east
Plate 8	Location of Knobby Drift Culvert (GGAT06020m), looking east
Plate 9	Southern area of the development site, looking south-east
Plate 10	Southern area of the development site, looking south
Plate 11	Site of Hirwaun Ironworks (BR157) with limited views of development site, facing south
Plate 12	Site of Hirwaun Ironworks (BR157) with limited views of development site, facing south-east
Plate 13	Site of Hirwaun Ironworks (BR157) with limited views of development site, facing south
Plate 14	Views from development area towards East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3), looking north-east
Plate 15	Views from development area towards East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3), looking north-east

Appendix IV Written Scheme of Investigation

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright, Designs and Patents Act, 1988, and have granted a licence to Tower Regeneration Ltd. to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No.100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

Non-technical Summary

In August 2019 Archaeology Wales was commissioned by Tower Regeneration Ltd. to conduct an archaeological desk-based assessment and site visit to determine the archaeological potential of land adjacent to the former Tower Colliery, Hirwaun, Rhondda Cynon Taf, centred on NGR SN 94746 05273. The assessment has been undertaken in advance of the submission of a planning application for the proposed construction of 130 new residential properties, a hotel, petrol filling station and other commercial properties, and properties for employment use.

There are 160 sites of archaeological interest within the 1km study area. Two non-designated site lies within the boundary of the development; Hirwaun Common Rifle Range (GGAT07928m) and Bute Colliery and Hirwaun Tramway (GGAT02498.0m). There is one Scheduled Monument and four Grade II Listed Buildings; comprising of Tramway Causeway and Bridge at Hirwaun Ironworks (LB 26827), the Hirwaun War Memorial Clock Tower (LB 26828), The Nebo Independent Chapel (LB 21370), and 44 Swansea Road (LB 10898) within the 1km study area. No new sites of archaeological interest were identified during the assessment.

No Conservation Areas or Registered Historic Park & Garden will be directly or indirectly affected by the proposed development. There is a potential for the Registered Historic Landscapes of East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3), and The Rhondda (HLW (MGI) 5) to be indirectly affected by the proposed development.

There are several designated assets within the 3km search area which could be potentially indirectly impacted by the development. These comprise of two Scheduled Monuments; the Hirwaun Ironworks (BR157) and the Remains of Gamlyn Railway Viaduct (GM533) and fourteen Listed Buildings. However, these sites are visually obscured by the intervening topography, vegetation and built landscape. Therefore, overall indirect impact on the surrounding assets will be Negligible.

The proposed development has the potential to directly impact two sites. This is the Hirwaun Common Rifle Range (GGAT07928m) and Bute Colliery and Hirwaun Tramway (GGAT02498.0m) which are both deemed to be of Local (Low) value. However, previous non-intrusive archaeological work was unable to establish any physical remains of the rifle range. It is likely that the area had coal waste graded over it and was subsequently reclaimed and later used for pasture. It is unlikely that any physical remains are intact. If there are physical remains of the rifle range, then the development is assessed as having a Major impact. The route of the tramway is preserved to the east of the development, however, if physical remains of the trackway are present within the development area then the development is assessed as having a Minor impact. To mitigate against to the impact to the remains of the Hirwaun Common Rifle Range an archaeological watching brief is recommended to be undertaken in this area.

There is a potential for there to be indirect impacts on some of the designated assets within the area. The indirect impacts are the potential visual impacts from the designated assets towards the development site. The mitigation suggested in this report

is that the current level of tree growth and vegetation screening the site is maintained.

Crynodeb Annhechnegol

Ym mis Awst 2019 comisiynwyd Archeoleg Cymru gan Tower Regeneration Ltd. i gynnal asesiad desg archeolegol ac ymweliad safle i bennu potensial archeolegol y tir gerllaw hen Dŵr Pwll Glo, Hirwaun, Rhondda Cynon Taf, sydd wedi'i chanoli ar NGR SN 94746 05273. Cynhaliwyd yr asesiad cyn cyflwyno cais cynllunio ar gyfer y Gwaith arfaethedig i adeiladu 130 o dai preswyl newydd, gwesty, gorsaf betrol ac adeiladau masnachol arall, ac eiddo ar gyfer defnydd cyflogaeth.

Mae 160 o safleoedd o ddiddordeb archeolegol o fewn 1km o'r ardal yr astudiaeth. Mae dau safle di-dynodedig yn gorwedd o fewn ffin y datblygiad; Amrediad Reiffel Comin Hirwaun (GGAT07928m) a Glofa Bute a Thramffordd Hirwaun (GGAT 02498.0 m). Mae un heneb gofrestredig a phedwar adeilad rhestredig gradd II; yn cynnwys Tramsarn a Phont yng ngwaith haearn Hirwaun (LB 26827), Tŵr-cloc Cofeb Rhyfel, Hirwaun (LB 26828), Capel Annibynnol Nebo (LB 21370), a 44 Heol Abertawe (LB 10898) o fewn yr 1km ardal astudiaeth. Ni nodwyd unrhyw safleoedd o ddiddordeb archeolegol newydd yn ystod yr asesiad.

Ni fydd y datblygiad arfaethedig yn effeithio'n uniongyrchol nac yn anuniongyrchol ar unrhyw Ardaloedd Cadwraeth nac unrhyw Gerddi a Pharc Hanesyddol Rhestredig. Mae potensial i dirweddau hanesyddol cofrestredig; Dwyrain Fforest Fawr a Mynydd-y-glog (HLW (MGI) 3), a'r Rhondda (HLW (MGI) 5) gael eu heffeithio'n anuniongyrchol gan y datblygiad arfaethedig.

Mae nifer o asedau dynodedig o fewn yr 3km ardal chwilio a allai gael eu heffeithio'n anuniongyrchol gan y datblygiad. Mae'r rhain yn cynnwys dwy Heneb Gofrestredig; Gweithfeydd Haearn Hirwaun (BR157) ac olion Traphont Rheilffordd Gamlyn (GM533) a hefyd phedwar ar ddeg o adeiladau rhestredig. Fodd bynnag, mae'r safleoedd hyn wedi'u cuddio'n weledol gan y topograffi, y llystyfiant a'r dirwedd adeiledig. Felly, prin iawn fydd yr effaith anuniongyrchol gyffredinol ar yr asedau cyfagos.

Mae gan y datblygiad arfaethedig y potensial i effeithio'n uniongyrchol ar ddau safle. Hynny yw, Amrediad Reiffel Comin Hirwaun (GGAT07928m) a hefyd Glofa Bute a Thramffordd Hirwaun (GGAT 02498.0 m), y bernir eu bod o werth lleol (isell). Fodd bynnag, nid oedd gwaith archeolegol anymwthiol blaenorol yn gallu sefydlu unrhyw olion ffisegol o'r amrediad reiffel. Mae'n debyg bod gan yr ardal wastraff glo wedi'i raddio drosti, a'i bod wedi'i hadfer a'i defnyddio wedyn ar gyfer tir pori. Mae'n annhebygol bod unrhyw weddillion ffisegol yn gyflawn. Os oes olion ffisegol yr amrediad reiffel, yna asesir bod y datblygiad yn cael effaith fawr arni. Mae llwybr y dramffordd wedi'i chadw i'r dwyrain o'r datblygiad, fodd bynnag, os oes olion ffisegol y llwybr yn bresennol o fewn yr ardal ddatblygu, yna asesir bod y datblygiad yn cael effaith fach arnynt. Er mwyn lliniaru yn erbyn yr effaith ar olion Amrediad Reiffel Comin Hirwaun argymhellir bod briff gwylio archeolegol yn cael ei gynnal yn yr ardal hon.

Mae'n bosibl y ceir effeithiau anuniongyrchol ar rai o'r asedau dynodedig o fewn yr ardal. Yr effeithiau anuniongyrchol yw'r effeithiau gweledol posibl o'r asedau dynodedig tuag at y safle datblygu. Y lliniaru a awgrymir yn yr adroddiad hwn yw gynnal y lefel bresennol o dyfiant coed a sgrinio llystyfiant

1 Introduction

- 1.1 In August 2019 Archaeology Wales (AW) was commissioned by Tower Regeneration Limited to carry out an archaeological desk-based assessment ahead of the proposed construction of 130 new residential properties, a hotel, petrol filling station and other commercial properties, and properties for employment use on land adjacent to the former Tower Colliery, Hirwaun, Rhondda Cynon Taf, approximately centred on NGR SN 94746 05273.
- 1.2 This assessment has been prepared prior to the submission of a planning application. The purpose of the desk-based assessment, which is detailed in the following report, is to provide Glamorgan-Gwent Archaeological Trust Archaeological Planning Management (GGAT-APM), advisors to the local planning authority Rhondda Cynon Taf County Borough Council Planning Authority, with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy (revised edition 10, 2018), Section 6.1 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to highlight and assess the impact upon standing and buried remains of potential archaeological interest and to ensure that they are fully investigated and recorded if they are disturbed or revealed as a result of subsequent activities associated with the development.

2 Site Description

- 2.1 The proposed development site measures approximately 40 hectares of reclaimed land associated with the adjacent Tower Colliery surface mine. It lies to the south of the A4061, to the east of Rhigos Road, and to the south of the A465, forming a valley hillside that generally rises from north to south away from the main village with the land to the north forming open mountainside. The plot consequently sits above the main village and forms a highly visible and prominent site from the existing, established residential areas nearby, as well as from panoramic views at various locations in both the immediate and wider localities across the valley.
- 2.2 The geology beneath the proposed development area comprises of mudstone, siltstone and sandstone belonging to the South Wales Lower Coal Measures Formation. This bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period (BGS, 2019).

3 Methodology

- 3.1 The primary objective of this desk-based assessment is to assess the impact of the development proposals on the historic environment. This will help inform future decision making, design solutions and potential mitigation strategies. The aim is to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.
- 3.2 The work includes a comprehensive assessment of regional context within which the archaeological evidence rests and aims to highlight any relevant research issues within

national and regional research frameworks.

3.3 This report provides information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation in situ has been advocated where at all possible, but where engineering or other factors could result in the loss of archaeological deposits, preservation by record has been recommended.

3.4 This assessment considers the following:

a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area through assessment of various readily available primary sources:

- Collation and assessment of all relevant information held in the regional HER at the Glamorgan-Gwent Archaeological Trust in Swansea, within a 1km buffer zone around the proposed development area.
- Collation and assessment of the impact on all Designated archaeological sites (Scheduled Ancient Monuments, Listed Buildings, Historic Parks & Gardens, landscapes, Conservation Areas) within 3km buffer zone around the proposed development area.
- Assessment of all available excavation reports and archives including unpublished and unprocessed material affecting the site and its setting.
- Assessment of aerial photographic (AP) and satellite imagery evidence;
- Assessment of archive records held at the County Archive, the National Library of Wales (NLW) and the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW).
- Records held by the developer e.g. bore-hole logs, geological/geomorphological information, aerial photographs, maps, plans, ztv data.
- Map regression analysis using all relevant cartographic sources e.g. all editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
- Place-name evidence.
- Historic documents (e.g. charters, registers, estate papers).

b) The significance of any remains in their context both regionally and nationally and in light of the findings of the desk-based study.

c) The history of the site.

d) The potential impact of any proposed development on the setting of known sites of archaeological importance.

e) The potential for further archaeological remains to be present, which have not been identified in pre-existing archaeological records.

f) The potential for further work, with recommendations where appropriate for a suitable investigative and/or mitigation methodology.

3.5 In assessing the value of archaeological assets, and the potential impacts upon them by the proposed development, the terms and guidance used in the Design Manual for Roads and Bridges, Volume 11, Section 3 (Highways England 2007) has been utilised.

Values are given as:

- Very High (World Heritage Sites and other sites of international importance);
- High (Scheduled Monuments, undesignated assets of schedulable quality, assets of National importance that can contribute significantly to acknowledged national research objectives);
- Medium (Designated or undesignated assets of Regional importance that contribute to regional research objectives);
- Low (assets of local importance, assets compromised by poor preservation or poor survival of contextual associations);
- Negligible (assets with little or no surviving archaeological interest);
- Unknown (the importance of the resource has not been ascertained).

3.6 The magnitude of the potential impact on the archaeological assets (which can be either positive or negative), is given as:

- Major (change to most or all key archaeological materials, such that the resource is totally altered; comprehensive changes to setting);
- Moderate (changes to many key archaeological materials, such that the resource is clearly modified; considerable changes to setting that affect the character of the asset);
- Minor (changes to key archaeological materials, such that the asset is slightly altered; slight changes to setting);
- Negligible (very minor changes to archaeological materials, or setting);
- No Change

3.7 This work conforms to the Standard and Guidance for Archaeological Desk-Based Assessment, as produced by the Chartered Institute for Archaeologists (CIfA 2014).

4 Archaeological and Historical Background

4.1 Previous Archaeological Studies

4.1.1 There are fifteen previous archaeological investigations recorded on the regional Historic Environment Record within a 1km buffer zone around the proposed development area.

4.1.2 In 2004 a field visit was undertaken by Glamorgan-Gwent Archaeological Trust (GGAT) as part of the South East Wales Industrial Ironworks Landscapes Project (GGAT80 SEWILL Yr1). To assess the survival/condition of ironworks and related features (PRN E000044).

4.1.3 In 1941 an excavation was undertaken on a Cairnfield at Twyn Bryn-Hir by Fox and

Murray-Threipland. Nine cairns and burial mounds were completely excavated, and sections cut into three others on the main site. On the second site five out of the nine cairns were examined (PRN E000512).

- 4.1.4 In 1976 the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) surveyed the Hirwaun Causeway/Penderyn Railway/Aberdare Canal. It was recorded as a large early nineteenth century dry-stone embankment, characteristic of early railway construction. (PRN E000551).
- 4.1.5 Between 2005 and 2010 GGAT conducted the Southeast Wales Industrial Ironworks Project. This project was instigated in response to the ongoing threats faced by the industrial remains of southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscapes in the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes (PRN E000954).
- 4.1.6 A field visit was undertaken in 2005 by GGAT at Tappenden's Tramroad East and West. It was concluded that approximately 20% of the entire tramroad survives with numerous features in situ (PRN E001996).
- 4.1.7 In 2012 Mr and Mrs Humphreys undertook a photographic survey of Nebo Chapel, Merthyr Road, Hirwaun prior to working on the structure. Though it was not recommended as a planning condition (as it has already been previously recorded for a book) the survey was provided as an additional and independent study (PRN E002180).
- 4.1.8 In 2011 GGAT undertook an archaeological watching brief during the excavation of trial pits in advance of a mains renewal scheme at Hirwaun Industrial Estate, Hirwaun. A total of eight trial pits were observed during excavation. No archaeologically significant features, deposits or structures were encountered. Similarly, no artefactual material was recovered from the excavations (PRN E003405).
- 4.1.9 The Ironbridge Gorge Museum Trust Archaeological Unit conducted a field survey of the remains of the Hirwaun Ironworks ahead of a proposed reclamation scheme in 1993. This included a recording of all existing earthworks, and an investigation of the ironworks water supply, as well as gave recommendations regarding the approach to conservation and interpretation of the site (PRN E003867).
- 4.1.10 The Hirwaun Ironworks Reclamation Scheme generated several reports for Taylor Woodrow: In 1995 Glamorgan-Gwent Archaeological Trust (GGAT) conducted two watching briefs. One was at a site near the Hirwaun Bypass (PRN E002374), conducted for the import and export of fill material for the bypass. The second was in an area being excavated for use as a land fill in Hirwaun (PRN E003989). No archaeological remains were encountered. In 1996, GGAT conducted another watching brief continuing the site of works for the land fill (PRN E003990). Archaeological features discovered included three brick walls which were possibly part of a culvert. Also, in 1996, GGAT conducted another watching brief, following a desk-based assessment in 1994 and a survey in 1995, for works on an area of land near Hirwaun Iron Works for the import and export of fill materials (PRN E002394). Two features were encountered: a structure of mortared stone and slag blocks interpreted as a culvert

for the Afon Cynon; the other was a brick culvert probably associated with the railway lines formerly crossing the site.

- 4.1.11 A borehole survey was conducted by Professor F M Chambers and Dr E W Cloutman University of Gloucestershire and Dr P D M Hughes University of Southampton, commissioned by The Countryside Council for Wales to aid accurate categorisation of the site in support of its notification as a SSSI (PRN E004881).
- 4.1.12 The building of the A465 dual carriageway from Abergavenny to Hirwaun generated desk-based and non-intrusive archaeological works in 2003 (PRN E004946).
- 4.1.13 In 2006 GGAT was commissioned by the Countryside Council for Wales to undertake a management report (with a site visit) for Ty Draw Farm, Rhigos, Aberdare, as part of the Tir Gofal scheme (whole farm agri-environment scheme for Wales which encourages farmers to maintain and enhance the agricultural landscape). The report contains general observations, identifies conservation needs of historic features associated with the farm, and provides specific management recommendations to preserve the archaeological resource (PRN E005161).

4.2 Identified sites of archaeological interest

4.2.1 There are 160 sites of archaeological interest within the 1km study area (Figure 1, Table 1). These include four Grade II Listed Buildings, one Scheduled Monument, and one Site of Special Scientific Interest (SSSI). Two of these sites are located inside the development area; Hirwaun Common Rifle Range (GGAT07928m) and Bute Colliery and Hirwaun Tramway (GGAT02498.0m). The remaining sites lie outside of the proposed development area.

Table 1. Sites of archaeological interest within the 1km study area

PRN; NPRN; LB; SM	Name	NGR	Period	Type	Condition	Status
GGAT00006m	Cairn field, Twyn Bryn-Hir	SN93770662	Bronze Age	Cairn field	Destroyed	
GGAT01039.1m	Pontwalby Power Operated 2 Stage Incline	SN925075	Post-Medieval	Tramway	Damaged	
GGAT01039.2m	Manchester Place Tramway	SN96080540	Post-Medieval	Tramway	Destroyed	
GGAT01092m	Bryn Y Gaer	SN94440649	Post-Medieval	Farmstead	Not known	SSSI
GGAT01093.0m; LB 26827; NPRN 34847; NPRN 34649	Hirwaun Causeway, Penderyn Railway, Aberdare Canal	SN95750565	Post-Medieval	Tramway transport site	Near intact	Grade II Listed Building
GGAT01109m; BR157; NPRN 40381	Hirwaun Ironworks	SN95770592	Post-Medieval	Iron works	Near destroyed	Scheduled Monument
GGAT01275m; NPRN 301371	Inscribed Stone - Hirwaun Common	SN9505	Early Medieval	Inscribed stone	Not known	
GGAT01796m	Hirwaun Toll House	SN94120589	Post-Medieval	Toll house	Not known	
GGAT01797m; NPRN 226638	Crawshays Tower	SN9412004392	Post-Medieval	Folly	Not known	

GGAT01798m	Building, Glyneath to Aberdare Tramway	SN95160550	Post-Medieval	Building	Not known	
GGAT01799m	Manchester Place	SN95650542	Post-Medieval	House	Not known	
GGAT01800m	Hirwaun Ironworks Water Pump	SN95250590	Post-Medieval	Leat	Not known	
GGAT01801m; NPRN 33130	Hirwaun	SN95620599	Multi-period	Town	Not known	
GGAT01802m	Cardiff Arms Coaching House	SN95770567	Post-Medieval	Coaching inn	Not known	
GGAT01803m	Workers cottages, Hirwaun	SN95730556	Post-Medieval	Workers cottage	Not known	
GGAT01804m	Kendon Square Sweetshop	SN95870553	Post-Medieval	Shop	Not known	
GGAT01805m	Palace Cinema	SN956056	Post-Medieval	Cinema	Not known	
GGAT01806m	Maes y Rhydiau Farm	SN95920583	Post-Medieval	Lime kiln	Not known	
GGAT01808m	Stone road bridge	SN95120620	Post-Medieval	Bridge	Not known	
GGAT01809m	Hirwaun Ponds	SN94800599	Post-Medieval	Reservoir	Not known	
GGAT01815.0m	A185 Desk-Based Assessment L1	SN95300550	Post-Medieval	Railway	Not known	
GGAT02211m; LB 10898; NPRN 20013	44 Swansea Road, Town house	SN9610005480	Post-Medieval	House	Intact	Grade II Listed Building
GGAT02498.0m	Bute Colliery and Hirwaun Tramway	SN95200505	Post-Medieval	Tramway	Not known	
GGAT02880m	Hirwaun Ironworks Afon Cynon Culvert	SN95530593	Post-Medieval	Culvert	Not known	
GGAT02881m	Hirwaun Ironworks Railway Culvert	SN95580595	Post-Medieval	Culvert	Not known	
GGAT03168m	256 Culvert, Aberdare-Rhondda Tramroad	SN95820506	Post-Medieval	Culvert	Damaged	

GGAT03210m	251 Piggens	SN95440535	Post-Medieval	Pigsty	Damaged	
GGAT03219m	277 Hirwaun Common Railway (branch line)	SN96170500	Post-Medieval	Railway	Damaged	
GGAT03220m	276 The Hirwaun Common Mineral Railway	SN94950618	Post-Medieval	Railway	Damaged	
GGAT03221.0m	275 Tramway Branch-Hirwaun Common Railway	SN95970500	Post-Medieval	Tramway	Near destroyed	
GGAT03222m	273 Tramroad	SN95660520	Post-Medieval	Tramway	Near destroyed	
GGAT03223.0m	255B Tramroad B – branch of the Aberdare and Rhondda Tramroad	SN95810512	Post-Medieval	Tramway	Damaged	
GGAT03224m	255 Railway A - Aberdare and Rhondda railway	SN95780514	Post-Medieval	Railway	Near destroyed	
GGAT03227m	253 Turfstone Walled Landscape	SN95250533	Post-Medieval	Field boundary	Damaged	
GGAT03231.0m	255c Tramroad C	SN95870510	Post-Medieval	Tramway	Near destroyed	
GGAT03232m	274 Knobby Drift Ironstone Pit, Johnson Park	SN95590491	Post-Medieval	Quarry	Near destroyed	
GGAT03233m	254 Coal Tips, Bryngelli Estate	SN95200534	Post-Medieval	Spoil heap	Near intact	
GGAT05190m	Bute Pit	SN95230470	Post-Medieval	Colliery	Not known	
GGAT06020m	Knobby Drift Culvert, near Hirwaun	SN95320499	Post-Medieval	Culvert	Damaged	
GGAT07808m; LB 21370; NPRN 8889	Nebo Chapel, Merthyr Road	SN95900552	Post-Medieval	Chapel	Intact	Grade II Listed Building

GGAT07928m; NPRN 419301	Hirwaun Firing Range, Rhondda Cynon Taff, Rhigos	SN94900534	Modern	Firing range	Destroyed	
GGAT08091m	Cairn, Hirwaun Common	SN93750424	Unknown	Cairn	Damaged	
GGAT08098m	Tower Graig Tramway, near Hirwaun Common	SN93860525	Post-Medieval	Tramway	Near Destroyed	
GGAT08411m	Royal Observer Corps Monitoring Post, Hirwaun	SN95110609	Modern	Royal Observer Corps Site	Near Destroyed	
GGAT08465.2m	Bryngwyn Extension, Mr Glover's Railroad	SN9605405351	Post-Medieval	Railway	Near intact	
GGAT08466m	Stone Blocks, Mr Glover's Railroad	SN9588205751	Post-Medieval	Stone block	Not known	
GGAT08467m	Stone Blocks and Causeway, Mr Glover's Railroad	SN95870585	Post-Medieval	Stone block	Not known	
LB 26828	Hirwaun War Memorial Clock Tower	SN9574905649	Modern	Memorial	Not known	Grade II Listed Building
NPRN 85176, 85175, 85174, 85173	Hirwaun Ironworks: Furnaces No. 4, No. 3, No. 2, No. 1	SN95740584	Post-Medieval	Furnaces	Not known	
NPRN 422074	Tower Colliery Opencast Mine Workings	SN94590495	Post-Medieval	Coal Mine	Not known	
NPRN 86950	Hirwaun Common	SN9504	Prehistoric	Common Land	Intact	
NPRN 34640	Hirwaun Ironworks: Glover's Tramroad Bridge	SN9585905697	Post-Medieval	Bridge	Not known	
NPRN 91589	Towers and The Beacons, Hirwaun	SN95710525	Post-Medieval	Dwelling	Not known	
NPRN 13457	Mission Room, Hirwaun	SN9564005758	Post-Medieval	Mission Hall	Destroyed	
NPRN 13458	Baptist Chapel, Foundry Road, Hirwaun	SN95590548	Post-Medieval	Chapel	Not known	

NPRN 13461	Wesleyan Methodist Chapel, Penyard Road, Hirwaun	SN95910576	Post-Medieval	Chapel	Not known	
NPRN 85007	Tower (Old) Colliery, Hirwaun	SN94890484	Post-Medieval	Coal Mine	Not known	
NPRN 91588	Tower Graig Level, Hirwaun	SN93570470	Post-Medieval	Coal Mine	Not known	
NPRN 91587	Tower Drift Mine, Hirwaun	SN94140476	Post-Medieval	Coal Mine	Not known	
NPRN 24478	Sheepfold South Of Llethr Las	SN932042	Post-Medieval	Sheep Fold	Not known	
NPRN 421664	St Theresa Of Lisieux Catholic Church, Hirwaun	SN9579105660	Modern	Church	Not known	
NPRN 308127	Hirwaun Royal Ordnance Factory, Hirwaun	SN9350006300	Modern	Munitions Factory	Not known	
NPRN 88070	Bridge West Of Rhigos Halt, Hirwaun	SN93090692	Post-Medieval	Road Bridge	Not known	
NPRN 8914	Ramoth Welsh Baptist Chapel, Trevenock Place, Hirwaun	SN95870556	Post-Medieval	Chapel	Modified	
NPRN 8948	Soar Wesleyan Methodist Chapel (Cofeb Blaen-Gwawr), Station Road, Hirwaun	SN95810567	Post-Medieval	Chapel	Destroyed	
NPRN 8932	Penyard Calvinistic Methodist Chapel	SN9505	Post-Medieval	Chapel	Not known	
NPRN 8923	Bethel Welsh Calvinistic Methodist Chapel, Wind Street, Hirwaun, Aberdare	SN95990555	Post-Medieval	Chapel	Modified	
NPRN 8898	Tabernacle Independent Chapel, Harris Street, Hirwaun	SN95840544	Post-Medieval	Chapel	Destroyed	
NPRN 8888	Mount Pleasant English Independent Chapel, Harris Street, Hirwaun	SN95820543	Post-Medieval	Chapel	Intact	
NPRN 6153	Hirwaun Methodist Chapel (Wesleyan; Hirwain), Hirwaun	SN95920576	Post-Medieval	Chapel	Not known	

NPRN 300329	Swansea Road,45, Hirwaun	SN96090548	Post-Medieval	Building	Not known	
NPRN 402061	Hirwaun Pond, Hirwaun	SN9476506038	Unknown	Pond	Not known	
NPRN 286131; 286132; 286133; 286135	Bethel Place, 5; 6-7; 7-8; Nn, Hirwaun	SN95970552	Post-Medieval	Workers Housing	Not known	
NPRN 286134; 286405; 286328	Wind Street, Mm; Pp; Qq, Hirwaun	SN95970557	Post-Medieval	Workers Housing	Not known	
NPRN 286326; 286327	Penmark Row, 1-4; 5-14, Hirwaun	SN95310597	Post-Medieval	Workers Housing	Not known	
NPRN 19020	High Street, 5-19 And 22-30, Hirwaun	SN9563805671	Post-Medieval	Terraced Housing	Not known	
NPRN 407328	Tower Coal Preparation Plant, Hirwaun	SN9423004970	Post-Medieval	Coal Preparation Plant	Not known	
NPRN 409951	St Lleurwg's Church, Hirwaun	SN9582405642	Post-Medieval	Church	Not known	
NPRN 507344	Llethr Las, Pylons IX	SN9328204683	Modern	Electricity Pylon	Not known	
NPRN 507345; 507346	Nant-Y-Bwlch, Field Boundary I; II	SN9488304213	Post-Medieval	Field Boundary	Not known	
NPRN 507347	Twyn Canwyllyr, Coal Level	SN9422204395	Post-Medieval	Coal Mine	Not known	
NPRN 507348	Twyn Canwyllyr, Quarry I	SN9387804419	Post-Medieval	Quarry	Not known	
NPRN 507349	Llethr Las, Trackway III	SN9375404537	Post-Medieval	Path	Not known	
NPRN 507350	Llethr Las, Trackway IV	SN9368504612	Post-Medieval	Path	Not known	
NPRN 507351	Llethr Las, Trackway Iv	SN9372004594	Post-Medieval	Path	Not known	

NPRN 507624	Tirherbert Colliery, Fan House	SN9307604755	Modern	Fan House	Not known	
NPRN 507327	Padell-Y-Bwlch, Tramway I	SN9470104153	Post-Medieval	Tramway	Not known	
NPRN 507328	Nant-Y-Bwlch, Coal Level III	SN9470904163	Post-Medieval	Coal Mine	Not known	
NPRN 507329	Nant-Y-Bwlch, Spoil Tip VI	SN9471904215	Post-Medieval	Spoil Tip	Not known	
NPRN 507330	Nant-Y-Bwlch, Incline Engine House I	SN9444104241	Modern	Engine House	Not known	
NPRN 507331	Nant-Y-Bwlch, Inclined Plane II	SN9442204304	Modern	Inclined Plane	Not known	
NPRN 507332	Tower Graig Level, Subsidence Pits	SN9353104636	Post-Medieval	Pit	Not known	
NPRN 507333; 507334	Llethr Las, Quarry I; II	SN9362104578	Post-Medieval	Quarry	Not known	
NPRN 507625	Tirherbert Colliery, Field Bank	SN9314804777	Post-Medieval	Field Boundary	Not known	
NPRN 507626	Tirherbert Colliery, Enclosure	SN9315804783	Modern	Enclosure	Not known	
NPRN 507627	Llethr Las, Track	SN9317504786	Post-Medieval	Trackway	Not known	
NPRN 507628; 507629	Tower Collieries, Spoil Tip I; II	SN9350905085	Post-Medieval	Spoil Tip	Not known	
NPRN 507335	Llethr Las, Coal Level V	SN9380704556	Post-Medieval	Coal Mine	Not known	
NPRN 507336; 507337; 507338; 507339; 507340; 507341; 507342; 507343	Llethr Las, Pylons I; II; III; IV; V; VI; VII; VIII	SN9404404533	Modern	Electricity Pylon	Not known	
NPRN 507633; 507634	Tirherbert Colliery, Spoil Tip II; III	SN9302204765	Modern	Spoil Tip	Not known	
NPRN 507783	Twyn Canwylyr, Long Hut IV	SN9374904449	Post-Medieval	Long Hut	Not known	
NPRN 507784	Padell-Y-Bwlch, Hut V	SN9414004112	Post-Medieval	Long Hut	Not known	

NPRN 507794	Twyn Canwyllyr, Settlement	SN9367204366	Post-Medieval	Deserted Rural Settlement	Not known	
NPRN 507802	Llethr Las, Subsidence Pit II	SN9406104724	Modern	Pit	Not known	
NPRN 507803	Twyn Canwyllyr, Subsidence Pit	SN9422004390	Post-Medieval	Pit	Not known	
NPRN 507457	Nant-Y-Bwlch, Trackway VI	SN9425504192	Post-Medieval	Trackway	Not known	
NPRN 507458	Twyn Canwyllyr, Ditch I	SN9404904288	Unknown	Ditch	Not known	
NPRN 507459	Twyn Canwyllyr, Trackway	SN9409804312	Post-Medieval	Trackway	Not known	
NPRN 507460	Padell-Y-Bwlch, Tramway II	SN9475404115	Post-Medieval	Tramway	Not known	
NPRN 507320	Nant-Y-Bwlch, Spoil Tip V	SN9454604341	Modern	Spoil Tip	Not known	
NPRN 507321	Nant-Y-Bwlch, Trackway III	SN9470104486	Modern	Trackway	Not known	
NPRN 507322	Nant-Y-Bwlch, Culvert	SN9456404363	Modern	Culvert	Not known	
NPRN 507323	Nant-Y-Bwlch, Coal Level II	SN9467404217	Post-Medieval	Coal Mine	Not known	
NPRN 507324; 507325	Nant-Y-Bwlch, Subsidence Pits I; II	SN9466304209	Post-Medieval	Pit	Not known	
NPRN 507326	Nant-Y-Bwlch, Building Platform	SN9467604166	Post-Medieval	Building Platform	Not known	
NPRN 507440	Nant-Y-Bwlch, Cairn	SN9501104129	Unknown	Cairn	Not known	
NPRN 507441	Nant-Y-Bwlch, Sheepfold II	SN9488504007	Post-Medieval	Sheep Fold	Not known	
NPRN 507355	Twyn Canwyllyr, Air Shaft	SN9408204432	Post-Medieval	Shaft	Not known	
NPRN 507356	Twyn Canwyllyr, Track	SN9408504336	Post-Medieval	Path	Not known	
NPRN 507357; 507358; 507359	Twyn Canwyllyr, Long Hut I; II; III	SN9370604343	Post-Medieval	Long Hut	Not known	

NPRN 507283	Llethr Las, Engine House	SN9361004943	Post-Medieval	Engine House	Not known	
NPRN 507284	Llethr Las, Tramway I	SN9365304974	Modern	Tramway	Not known	
NPRN 507285	Llethr Las, Wall	SN9370805004	Modern	Wall	Not known	
NPRN 507286	Llethr Las, Workman's Hut	SN9371304990	Modern	Hut, Shelter	Not known	
NPRN 507287	Llethr Las, Subsidence Pits I	SN9375804971	Post-Medieval	Pit	Not known	
NPRN 507288	Llethr Las, Air Shaft I	SN9373304906	Post-Medieval	Shaft	Not known	
NPRN 507289	Llethr Las, Coal Level I	SN9379004887	Post-Medieval	Coal Mine	Not known	
NPRN 507290	Llethr Las, Spoil Tip I	SN9380604944	Post-Medieval	Spoil Tip	Not known	
NPRN 507291	Llethr Las, Trackway I	SN9384704834	Modern	Trackway	Not known	
NPRN 507292	Tower Graig Level, Incline	SN9364404844	Post-Medieval	Inclined Plane	Not known	
NPRN 507293	Llethr Las, Trackway li	SN9394104773	Modern	Trackway	Not known	
NPRN 507294	Tower Graig Level, Trackway I	SN9374504761	Post-Medieval	Trackway	Not known	
NPRN 507301	Llethr Las, Coal Level IV	SN9323704756	Post-Medieval	Coal Mine	Not known	
NPRN 507302; 507303	Tower Graig Level, Building I; II	SN9357804702	Post-Medieval	Coal Mine	Not known	
NPRN 507304	Tower Graig Level, Spoil Tip	SN9358004732	Post-Medieval	Spoil Tip	Not known	
NPRN 507453	Nant-Y-Bwlch, Coal Level IV	SN9427704228	Post-Medieval	Coal Mine	Not known	
NPRN 507454; 507455	Nant-Y-Bwlch, Spoil Tips VI; VII	SN9430504242	Post-Medieval	Spoil Tip	Not known	
NPRN 507456	Nant-Y-Bwlch, Trackway V	SN9423904295	Post-Medieval	Trackway	Not known	
NPRN 507305	Llethr Las, Subsidence Pits III	SN9396704646	Post-Medieval	Pit	Not known	

NPRN 507306	Llethr Las, Air Shaft III	SN9401904648	Post-Medieval	Shaft	Not known	
NPRN 507313	Nant-Y-Bwlch, Coal Level I	SN9452304309	Modern	Coal Mine	Not known	
NPRN 507314	Nant-Y-Bwlch, Inclined Plane I	SN9459604436	Modern	Inclined Plane	Not known	
NPRN 507315	Nant-Y-Bwlch, Coal Level Engine House	SN9454804319	Modern	Engine House	Not known	
NPRN 507316; 507317; 507319	Nant-Y-Bwlch, Spoil Tip II; III; IV	SN9439504419	Modern	Spoil Tip	Not known	
NPRN 507318	Nant-Y-Bwlch, Trackway II	SN9464804328	Modern	Trackway	Not known	
NPRN 507414	Nant-Y-Bwlch, Pylon Bases	SN9494504017	Modern	Electricity Pylon	Not known	
NPRN 507415	Nant-Y-Bwlch, Sheepfold I	SN9506204174	Post-Medieval	Sheep Fold	Not known	
NPRN 507295; 507297	Llethr Las, Coal Level II; III	SN9402504649	Post-Medieval	Coal Mine	Not known	
NPRN 507296; 507298	Llethr Las, Spoil Tip II; III	SN9406504677	Post-Medieval	Spoil Tip	Not known	
NPRN 507410; 507411; 507412	Nant-Y-Bwlch, Boundary Stone I; II; III	SN9520504150	Post-Medieval	Boundary Stone	Not known	
NPRN 507299; 507308	Llethr Las, Field Boundary I; II	SN9335204592	Post-Medieval	Field Boundary	Not known	
NPRN 507300	Llethr Las, Air Shaft II	SN9325004747	Post-Medieval	Shaft	Not known	
NPRN 507307	Llethr Las, Pit	SN9405604635	Post-Medieval	Coal Mine	Not known	
NPRN 507309	Nant-Y-Bwlch, Spoil Tip I	SN9452104386	Modern	Spoil Tip	Not known	
NPRN 507310	Gorllwyn Level	SN9435105606	Post-Medieval	Coal Mine	Not known	
NPRN 507311	Tower Graig Colliery, Trackway II	SN9349704866	Post-Medieval	Trackway	Not known	

NPRN 507312	Nant-Y-Bwlch, Trackway I	SN9455404477	Modern	Trackway	Not known	
NPRN 507369	Twyn Canwyllyr, Cairn	SN9375304253	Bronze Age	Cairn	Not known	
NPRN 507371	Craig-Y-Bwlch, Sheepfold	SN9400004177	Post-Medieval	Sheep Fold	Not known	
NPRN 416798	Victoria Hall Cinema and Working Men's Institute, Hirwaun	SN9567205556	Modern	Cinema	Destroyed	

4.3 The Historic Landscape

- 4.3.1 No Conservation Areas or Registered Historic Park & Gardens lie within the development area or within the study area.
- 4.3.2 Two Registered Historic Landscapes are located within a 3km study area. East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3) is located approximately 2km north-east of the proposed development area. The Rhondda (HLW (MGI) 5) is located approximately 2.6km south of the development area. Both of these landscapes are described as being landscapes of Special Historic Interest.

4.4 Scheduled Monuments

- 4.4.1 Scheduled Monuments are sites considered to be of national importance and have statutory protection under the Ancient Monuments and Archaeological Areas Act 1979. No Scheduled Ancient Monument lie within the boundary of the proposed development area, but there are two Scheduled Monument within the 3km study area.
- 4.4.2 The site of the Hirwaun Ironworks (BR157) is situated approximately 700m to the north-east of the development area. The Scheduled Monument is described below:
- 4.4.3 The Hirwaun Ironworks dates from 1757 when John Mayberry obtained a lease of 99 years from Lord Windsor for land at Hirwaun to erect a furnace. The works soon encountered financial difficulties and the lease was terminated. In 1780 Mayberry transferred the Hirwaun Ironworks to Anthony Bacon of Cyfarthfa. At some point during this period the ironworks converted from charcoal to coke to fire the furnaces, and this became the first in Wales to do so. However, it is unclear as to whether Bacon or Mayberry were responsible for the conversion. In 1803 Bacon's son and heir, Anthony, leased the ironworks to Homfray, Bowcer and Oliver. Homfray was soon replaced by George Overton, and this new partnership subsequently developed the site. This development consisted of two well-constructed furnaces, two cast houses, an air furnace and two fineries, a blast engine on Boulton and Watt's principle, with a blowing cylinder working through a water regulator, a forge with ten puddling furnaces and five balling furnaces and a Trevithick steam engine working two pairs of puddling and a pair of finishing rollers capable of rolling 80 to 100 tons weekly. Nonetheless, in 1813 the firm became bankrupt and the site was unoccupied until 1819. William Crawshay II bought the ironworks in 1819 and incorporated it with his works at Cyfarthfa. In the following years four new blast furnaces were built, with associated engine-house and mill-house. Output was improved and continued to rise with 7,020 tons of iron being produced in 1826 and 9,370 tons in 1830. The furnaces were in blast for the first six months of 1859 after which the Crawshay's abandoned the site. The works reverted to the landowner, the Marquis of Bute, and in 1864 was leased to Handel Cossham and Thomas Challender Hinde who put two furnaces in blast. Between 1865 and 1866 when the works was under the control of the Hirwaun Iron and Coal Company the remaining two furnaces were repaired. However, operations were short lived and in 1867 the word 'iron' was dropped from the title of the company. When the Hirwaun Ironworks was advertised for sale in 1870 it was

described as having four furnaces with a powerful blast engine, arrangements for utilising waste gases, hot air stoves, a spacious forge and mills with powerful engine, trains of rolls, nineteen puddling furnaces, forges and steam hammers. No interested parties came forward and the Hirwaun Coal Company was wound up. The ironworks site remained unoccupied until 1880 when the Stuart Iron, Steel and Tin Plate Company took it over. The Hirwaun Ironworks was renamed the Stuart Ironworks and some improvements were made to the furnaces. However, little production of iron took place and the works later became a general foundry. The works were abandoned in 1905 (Cadw SM Report; Grant, 1991).

- 4.4.4 The site currently comprises of four ruinous blast furnaces which survive as overgrown earthen mounds showing variable amounts of outer brickwork, both in situ and fallen. Aligned WNW-ESE they are separated from the charge bank by a blast passage. In addition to the ruins of the blast furnaces, the site retains a massive tramroad causeway and bridge (Cadw SM Report).
- 4.4.5 The second Scheduled Monument is remains of Gamlyn Railway Viaduct (GM533). The remains are approximately 2.8km east of the development area. The Scheduled Monument is described below:
- 4.4.6 The viaduct is described as a timber fan trestle viaduct designed by Isambard Kingdom Brunel. It was built between 1854 and 1857 and comprises of a high viaduct of timber on stone piers, which was designed to reduce the costs of new railways. The Gamlyn viaduct was one of the largest in South Wales. The line was built as a double track broad gauge railway using Barlow rails without sleepers. The remains include two approach embankments, ten stone piers and two abutments (Cadw SM Report).

4.5 Listed Buildings

- 4.5.1 No Listed Buildings lie within the proposed development area.
- 4.5.2 There are fourteen Listed Buildings within the 3km study area. Four of which lie within 1km of the development area. These are described below.
- 4.5.3 The Tramway Causeway and Bridge at Hirwaun Ironworks (LB 26827) is a Grade II Listed Building located approximately 900m to the north-east of the development area. The causeway and bridge can be found crossing the Afon Cynon approximately 100m north-east of St Lleurwg's church, on the north side of Station Road and south side of the former Hirwaun Ironworks. It was built by the engineer George Overton between the years 1806-08 and was built to replace an earlier bridge of a tramroad that was built in 1793. This tramroad was used to transport raw materials being carried to the furnaces of Hirwaun ironworks and the limestone being brought from the quarries at Penderyn. It is described as a high single-track causeway approximately 100m in length, of snecked rubble, in parts rebuilt in coursed rubble. It crosses the Afon Cynon in a single span with segmental arch and narrow dressed stone voussoirs. It is abutted on the R bank by coursed rubble revetments. The flat deck is a footpath retaining some stone sleeper blocks.
- 4.5.4 The Hirwaun War Memorial Clock Tower (LB 26828) is a Grade II Listed Building and it

is located approximately 760m north-east of the development area. The Listed Building Report describes this as an Art-Nouveau influenced 3-stage square clock tower of coursed rock-faced 'Shaddris' stone, with ashlar 'Patent Empire Stone' dressings and upper stage, and a swept pyramidal slate roof on bracketed eaves, with lead finial. The lower 2 stages have diagonal buttresses, the upper parts of which are ashlar with scroll enrichment to the offset. In its front and side faces the lower stage has metal plaques with marginal interlace ornament and roll of honour in raised letters for the 1914-18 and 1939-45 wars. At the rear is a doorway in a dressed surround with keyed tripartite lintel below a balustrade. The door is steel. In the second stage each face has a narrow opening with louvres on a corbelled apron. Above the openings each face has a segmental arch. In the upper stage are round clock faces to the front and sides, and a blind round panel to the rear. It was unveiled in 1924 and designed by E.W.G. Richards, architect of Merthyr Tydfil, and built by E.P. Davies of Dowlais. The clock was made by John Smith & Sons at Midland Clock Works, Derby.

- 4.5.5 The Nebo Independent Chapel (LB 21370) is a Grade II Listed Building that is located 790m to the north-east of the development area. The Listed Building Report describes this as a Welsh Independent chapel of 1851 in simple Victorian classical style, repaired in 1890. On the site of a building of 1823 that was rebuilt in 1830 and improved in 1836. Now the only Welsh-speaking chapel in Hirwaun, following the absorption of the neighbouring Bethel congregation in 1996. It was listed for its architectural interest as one of the earliest surviving chapels in the region, retaining mid-19th century external character with unaltered later 19th century interior.
- 4.5.6 44 Swansea Road is a grade II Listed Building (LB 10898), including its forecourt wall and piers, it is situated 950m north-east of the development area. It is located immediately to the east of 45 Swansea Road, which has been argued, predates that of 44 Swansea Road (Franklin, 2001). The Listed Building Report describes 44 Swansea Road as an early-19th century house shown on the 1840 Tithe map, which may therefore have been occupied by a clerk or manager at Hirwaun Ironworks. Its physical appearance is described as a Georgian house of two storeys with attic and basement, of limewashed rubble-stone three-window front, roof replaced with synthetic slates, and rendered end stacks. It was listed as a rare well-preserved early-19th century town house retaining original character.
- 4.5.7 The remaining ten Listed Buildings lie within 3km of the development area. South of the proposed development lie remnants of Tower Colliery; and include the Engine House and Fan House at Tower Colliery (LB 10901) and the Headframe and pithead at Tower Colliery (LB 10902). North of the proposed development include; Old house, with attached byre and barn at Trebanog Fach (LB 26832), Church of St Cynog (LB 18046), Signpost at road junction SE of St Cynog's church (LB 26834), Churchyard wall, including pound & lych gate, at St Cynog's church (LB 18047), The Rectory (LB 18048), Siloa Baptist Church (LB 21371), Agricultural range at Bodwigiad (LB 26833), and Bodwigiad (LB 11381).

4.6 Known Archaeological Remains and Historical Development

- 4.6.1 There are 160 sites listed in the regional Historic Environment Record (HER) and the National Monuments Record (NMR) and by Cadw within 1km of the proposed development site, two of which lie within the proposed development site (Appendix I).
- 4.6.2 A search of artefacts and coins recorded within the Portable Antiquities Scheme database (www.finds.org.uk) within the same search area recorded no finds from the 'Hirwaun' area.
- 4.6.3 The recorded archaeological sites are briefly described below, according to period, where they are incorporated into a summary of the historical development of the area.

Prehistoric: Palaeolithic (c.450,000 – 10,000 BC), Mesolithic (c.10,000 – 4400 BC), Neolithic (4400 BC – 2300 BC), Bronze Age (2300 BC – 700 BC) & Iron Age (700 BC – AD 43)

- 4.6.4 There is significant prehistoric activity within the surrounding area of the proposed development. However, no prehistoric sites are located within the boundary of the site and there is only one located within 1km of the proposed development area.
- 4.6.5 Approximately 950m north-west of the development site is the former cairnfield of Twyn Bryn-Hir (PRN 00006m), now the site of Hirwaun Industrial Estate. This cairnfield comprised of seventeen mounds which were dated to the Bronze Age. Twelve of the mounds were excavated in 1942 by Fox and Murray-Threipland, but none were found to contain burials or grave goods.
- 4.6.6 Although outside of the 1km study area, a notable late Bronze Age/Early Iron Age hoard was discovered approximately 3km south-west of the development area. The Llyn Fawr hoard (00023m) was uncovered by workers buried beneath two feet of peat. The hoard included a cauldron, several chisels, sickles and socketed axes, a sword, a spearhead, a razor, and horse harness equipment.
- 4.6.7 Iron Age activity is prevalent in wider area, but there are no sites of this period in the 1km study area.

Roman (AD 43 – c. AD 410)

- 4.6.8 There are no Roman sites recorded on the HER within the 1km search area or in the surrounding area.

Early Medieval (c. AD 410 – AD 1086), Medieval (1086 – 1536)

- 4.6.9 There is very little evidence of Early Medieval or Medieval activity within this area. The only evidence within 1km of development area is an apparent Early Medieval inscribed stone (GGAT01275m). An inscribed stone was reported in 1827 to be on Hirwaun Common, and it was believed to be an early Christian inscription of the late 5th century.

The stone is now lost and due to extensive open-cast mining in the area, and it is unlikely to be rediscovered.

Post-Medieval (1536 – 1899) & Modern (1900 – present day)

- 4.6.10 There is an abundance of Post-medieval activity within 1km of the development area and within the wider landscape. Hirwaun, like other areas in this part of South Wales, changed considerably during the late 18th and 19th century due to heavy industry.
- 4.6.11 There are two sites that will be located within the development area, Hirwaun Common Rifle Range (NPRN 419301; GGAT07928m) and the Bute Colliery and Hirwaun Tramway (GGAT02498.0m).
- 4.6.12 The site of the rifle range is approximately 220m south of the roundabout linking the A465 with the A4061 and A4059. The rifle range is first shown on the 1885 Ordnance Survey map (see section 5.3 below). Shooting competitions on Hirwaun Common were reported in the local press as early as 1861. The range had gone out of use by 1904 but it is believed that it came back into use briefly during the First World War. The field the range was located on has been truncated by the A465 to the north and opencast mining/reclamation to the south. The site was visited in 2013 and failed to detect any traces of the mapped range features. It was concluded that the field has had coal waste graded over it at some point since the range went out of use, part of the field being reclaimed and now used for pasture.
- 4.6.13 The site of the tramway is located at the eastern extent of the development area. The tramway is also first shown on the 1885 Ordnance Survey map. The route of the tramway is preserved to the east of the development but similarly, to the rifle range, it is possible that at some point the former tramway could have had coal waste graded over it, within the development area, and the land reclaimed.
- 4.6.14 The site of Hirwaun Ironworks is located approximately 900m to the north of the development area. In 1757 John Mayberry founded the Hirwaun Ironworks (BR157; PRN 01109m) with the building of a furnace. This was to be the first coke-fired furnace in Wales. The ironworks were built along the River Cynon, which supplied the water to help power the ironworks. The Hirwaun Ironworks currently comprise of the ruins of the former ironworks. This includes four blast furnaces aligned WNW-ESE survive as overgrown earthen mounds showing variable amounts of outer brickwork, both in situ and fallen. They are separated from the charge bank by a blast passage which runs the full length to their rear. The Hirwaun Ironworks was the last of its type to close in the area and remained a forge and foundry until the 1900s.
- 4.6.15 The surrounding hillsides of Hirwaun contained outcrops of coal and ironstone these were subsequently mined extensively during the Post-Medieval and Modern period. This mining activity led to the construction of related infrastructure, e.g. railways and tramways. Many of these are recorded on Ordnance Survey maps (see section 5) and the remains of these industrial structures account for the majority of the site of archaeological interest on HER (Table 1).
- 4.6.16 Numerous houses, cottages, chapels, and schools also account for several sites

recorded on the HER/NMR. Again, this correlates with the expanding industrial activity and the increase in population in the late 18th, 19th and early 20th century.

5 Map Regression

5.1 Tithe Map, Plan of the parish of Penderyn in the County of Brecon, 1840

- 5.1.1 The tithe map of 1840 shows the 'Herwain' Ironworks and its associated buildings to the north of the River Cynon. There are also a number of structures to the east of the ironworks.
- 5.1.2 However, south of the River Cynon is the parish boundary and there are no further details on this map.

5.2 Tithe Map, A plan of the parish of Aberdare in the County of Glamorgan, 1847

- 5.2.1 The tithe map of 1847 map shows the village of Hirwaun, south of the River Cynon, in more detail.
- 5.2.2 There are several roads and structures within the village itself, and the River Cynon can be seen running north-west to south-east through the village.
- 5.2.3 The proposed development area at this point is located to the south of the village of Hirwaun and the parish boundary and is made up of common land.

5.3 Ordnance Survey Map, 1885, 6-inch map (Figure 3)

- 5.3.1 This is the first detailed Ordnance Survey map of Hirwaun and its surrounding areas. The proposed development area is located to the south of the Aberdare Rhondda Railway and the Hirwaun Common Railway. There are also several tramways crossing this area associated with the heavy industry.
- 5.3.2 Within the development area, south of the A465 roundabout upgrade, a Volunteer Rifle Range is located. The range is detailed as having three targets and ranges in 100 yard increments up to 500 yards.
- 5.3.3 Two coal mines are also detailed on this map within close proximity of the development area; Four Feet Level and Bute Pit along with their associated structures, e.g. engine house. North-east of Bute Pit an Ironstone mine, labelled Knobby Drift, is located.
- 5.3.4 Earthworks associated with the mines discussed above can be seen spread out across the landscape.
- 5.3.5 Further south of the development area Tower Colliery can be seen.

5.4 Ordnance Survey Map, 1901, 6-inch map

- 5.4.1 By 1901 the rifle range is no longer in use and the targets are now labelled as 'Old Targets'. Also, the mines of Four Feet Level, Bute Pit and Knobby Drift are now all labelled as being no longer in use at this time.
- 5.4.2 The predominant industrial activity within the area of the proposed development is now Tower Colliery. The railway that was labelled as belonging to the Aberdare Rhondda Railway is now labelled as Tower Colliery Railway.
- 5.4.3 No other visible changes can be seen.

5.5 Ordnance Survey Map, 1905, 6-inch map

5.5.1 There are no visible changes between 1901 and 1905.

5.6 Ordnance Survey Map, 1921, 6-inch map

5.6.1 There are no visible changes between 1905 and 1921.

5.7 Ordnance Survey Map, 1934, 6-inch map

5.7.1 There are no visible changes between 1921 and 1934.

5.8 Ordnance Survey Map, 1951, 6-inch map

5.8.1 The only noticeable change between 1934 and 1951 is that the railway, located to the south of Hirwaun and north of the development area, that was labelled as Tower Colliery railway has now been decommissioned. The former railway is now an unnamed road.

5.9 Ordnance Survey Map, 1962 (Partial), 1:2,500

5.9.1 A noticeable change in this version of the OS maps is that to the south of Hirwaun and to the east of the development area a recreation ground, including a bowling green and tennis courts, have been built.

5.9.2 Also, the village of Hirwaun has expanded to its east towards the village of Penywaun.

6 Aerial Photographs and Lidar

6.1 Aerial Photographs

6.1.1 A search for aerial photographs of the area produced twenty-six images between 1945 and 2009.

6.1.2 There are two photographs from 1945 and these are the earliest available. The photographs show the development area as a mix of cultivated fields and a landscape heavily scarred by industrial activity. The village of Hirwaun can be seen to the south-east of the photo.

6.1.3 The photographs from 1946 and 1947 show no change from the 1945 photograph.

6.1.4 The photograph from 1953 to 1972 document the growth of the village of Hirwaun to the north and east of the development site. Industrial activity in the area continues and this can be seen to the west of the development area where the industrial estate increases in size. Also, south of the development area the expansion of Tower Colliery is noticeable. However, there is little change to the development site itself, and it appears to be made up of fields with boundaries.

6.1.5 The nine photographs between 1973 and 1988 now clearly show the newly constructed A465 road. Again, little has changed in and around the development area. However, there is now a sports field to the east of the development site.

6.1.6 The seven photographs between 1989 and 2009 show no change to the development area itself. But, again, the continuing activity at Tower Colliery seems to change throughout time. At the southern edge of the development site there appears to be structures relating to the mining activity and land reclamation at Tower Colliery.

6.2 Lidar

- 6.2.1 The Lidar data coverage of the site area is at a 2m resolution for digital terrain models (DTM), which illustrates the topography of the site but does not allow for much detail.
- 6.2.2 There is no Lidar data available for the area to the west of the A465 roundabout. The data that is available clearly shows the natural feature of the Nant y Bwlch stream running north-south and Tower Road which is running on the same axis as Nant y Bwlch. There is some activity in the northern area of the development site, just to the south of the A465, but this appears to be trees and vegetation. There are other features showing on the Lidar, but these appear to be trackways that are already noted on Ordinance Survey maps.

7 Site Visit

- 7.1.1 A site visit was undertaken on the 9th October 2019 (Plates 1-15). Conditions were overcast with occasional precipitation. Visibility was poor in the distance due to low-lying clouds.
- 7.1.2 The site was as described in Chapter 2. The north-eastern area of the site is adjacent to the current layout of the A465. This area is mostly made up of fields consisting of long grass and vegetation (Plates 1-3). Tower Road also lies within this area of the site (Plate 4), and just to the east of Tower Road a footpath is within the proposed boundary of the site. There are two sites recorded on the HER which are located in this area of the site (GGAT07928m & GGAT02498.0m). GGAT07928m refers to the Hirwaun Common Rifle Range, but there was no evidence to suggest that any remains of this survive (Plate 5). This is also true of GGAT02498.0m, the Bute Colliery and Hirwaun Tramway (Plate 6). Two other sites are also noted on the HER, although outside of the proposed development, they are in close proximity of the development. One of these sites is the Inscribed Stone (GGAT01275m), but this was lost in the 19th century and there is no way of ascertaining its location in the present day. The other site is the Knobby Drift Culvert (GGAT06020m), during the site visit there was no trace of this. The landscape where the culvert was situated has undergone many changes linked to the Tower Colliery's industrial activities, land reclamation, etc. therefore it is likely that the culvert was destroyed in the process (Plate 7 & 8).
- 7.1.3 The north-western area of the site is situated to the south of Rhigos Road and on the edges of Hirwaun Industrial Estate. This area of the site is currently used by the remnants of the Tower Colliery workforce for offices and storage yards.
- 7.1.4 The southern area of the development area is dominated by the activities of the former Tower Colliery, and coal tips can be seen throughout this southern area of site (Plate 9 & 10).
- 7.1.5 The site generally rises from north to south away from the A465 to the north forming open mountainside. The southern area of site sits above the main village of Hirwaun and is in a prominent position. Whereas the northern area of the site is in a lower position and views are limited due to industrial and residential properties on the opposite side of the A465.

- 7.1.6 It is not possible to establish any visual relationship north-west to the site of the Scheduled Monument of the Hirwaun Ironworks (BR157). However, the southern area of the proposed site may be visible from the ironworks (Plates 11-13).

8 Impact Assessment

8.1 Assessment of Archaeological Potential and Importance

- 8.1.1 The site is considered to have a low potential for archaeological remains associated with Prehistoric-Medieval activity throughout the proposed development boundary. The Post-Medieval remains of the Hirwaun Common Rifle Range and Bute Colliery and Hirwaun Tramway were not evident within the development area during the site visit, but there could be below ground remains of these structures. Therefore, it is considered to be a moderate potential for Post-Medieval remains, and such remains are likely to be of a more local (Low) archaeological importance.

8.2 Previous Impacts

- 8.2.1 Previous impacts across the proposed development area are of great significance in determining the survival and importance of the known and potential archaeological resource.
- 8.2.2 It is clear from historic maps, aerial photography, and the site visit that the proposed development area, and its immediate surroundings, has seen intensive development from the latter half of the 19th century onwards with various mining and other industrial activities.

8.3 Potential Impacts of the Proposed Development

- 8.3.1 The proposed development is still in the development process, the outline elements of which include new residential properties, a hotel, petrol filling station and other commercial properties, and properties for employment use. Any of the following activities associated with the proposed development could therefore expose, damage, or destroy archaeological remains:
- Enabling works, such as the installation of the contractor's compound, construction of access roads, parking areas, storage areas, and associated services;
 - Landscaping and terracing works;
 - Surface stripping and levelling;
 - Construction of roads and infrastructure;
 - Foundation excavations;
 - Service installation.
 - Any other ground disturbing works
- 8.3.2 The proposed development also has the potential to generate indirect effects on archaeological sites, such as altering the visual setting or tranquillity of the sites and landscapes.

8.4 Historic Landscapes

- 8.4.1 No Conservation Areas or Registered Historic Park & Gardens will be directly or indirectly affected by the proposed development.
- 8.4.2 No Registered Historic Landscape will be directly affected by the proposed development area. However, East Fforest Fawr and Mynydd-y-Glog HLW (MGI) 3 has the potential to be indirectly affected by the proposed development. This historic landscape is visible from some areas of the site, but it is from a distance (Plate 14 & 15). The overall indirect impact on East Fforest Fawr and Mynydd-y-Glog will be Negligible.
- 8.4.3 The Registered Historic Landscape of The Rhondda (HLW (MGI) 5) is not visible from the proposed development area, nor is the proposed development visible from the historic landscape. The impact on this landscape will be Negligible.

8.5 Scheduled Monuments

- 8.5.1 No Scheduled Monuments (SM) will be directly affected by the proposed development.
- 8.5.2 There are two SMs within 3km of the proposed development site. This is the Hirwaun Ironworks (BR157) and Gamlyn Railway Viaduct (GM533). Much of the site of the former ironworks is hidden from view by the intervening topography, vegetation and built landscape. The remains of the viaduct are not visible from the site, neither is the site visible from the viaduct. The overall indirect impact on the SMs will be Negligible.

8.6 Listed Buildings

- 8.6.1 No listed buildings will be directly affected by the proposed development.
- 8.6.2 There are 14 listed buildings within a 3km search surrounding the proposed development, which have the potential to be indirectly impacted. These include the Tramway Causeway and Bridge at Hirwaun Ironworks (LB 26827), the Hirwaun War Memorial Clock Tower (LB 26828), Nebo Independent Chapel (LB 21370), and 44 Swansea Road including its forecourt wall and piers (LB 10898) which lie within 1km of the development. The other Listed Buildings are in the table below.

Table 2. Listed Buildings within a 3km search area

Listed Building Number	Name	NGR	Grade
26827	Tramway Causeway and Bridge at Hirwaun Ironworks	SN 95847 05730	II
26828	Hirwaun War Memorial Clock Tower	SN 95749 05649	II
21370	Nebo Independent Chapel	SN 95896 05517	II

10898	44 Swansea Road (including its forecourt wall and piers)	SN 96100 05480	II
10901	Engine House and Fan House at Tower Colliery	SN 92649 04267	II
10902	Headframe and pithead at Tower Colliery	SN 92649 04267	II
26832	Old house, with attached byre and barn at Trebanog Fach	SN 94437 07377	II
18046	Church of St Cynog	SN 94480 08550	II
26834	Signpost at road junction SE of St Cynog's church	SN 94515 08505	II
18047	Churchyard wall (including pound & lych gate, at St Cynog's church)	SN 94510 08503	II
18048	The Rectory	SN 94525 08464	II
21371	Siloa Baptist Church	SN 95061 08096	II
26833	Agricultural range at Bodwigiad	SN 95363 08456	II
11381	Bodwigiad	SN 95363 08485	II

8.6.3 The intervening topography, vegetation and the built environment obscures all surrounding listed buildings from view. The overall indirect impact on the listed buildings will be Negligible.

8.7 Non-designated Archaeological Sites

8.7.1 It is likely that the development which has previously been undertaken within the site boundary has removed any physical remains of the Hirwaun Common Rifle Range (GGAT07928m) and possibly the Bute Colliery and Hirwaun Tramway (GGAT02498.0m), all of Local (Low) value. There is the potential for below-ground remains of such structures to remain, which could be disturbed by further development of this area. If physical remains of these sites are extant then the development is assessed as having a Major impact of the Rifle Range and Minor on the Tramway. This is due to the elements of the railways continuing beyond the site boundary for some distance so only a small portion of the site would be altered, if any survives.

9 Conclusions

9.1 Indirect Impacts

9.1.1 The Registered Historic Landscape of East Fforest Fawr and Mynydd-y-Glog HLW (MGI)

3 has the potential to be indirectly affected by the proposed development. The historic landscape is only partially visible from the site, and the views are relatively limited due to the distances involved. Whereas the Registered Historic Landscape of The Rhondda (HLW (MGI) 5) is not visible from the site, or from the historic landscape. There are a number of designated assets within the 3km study area which could be potentially indirectly impacted by the development. These comprise of two Scheduled Monuments and fourteen Listed Buildings. These sites are visually obscured by the intervening topography, vegetation and built landscape. There will be little change in the setting to these designated sites, beyond the construction phase, as the majority of the sites are obscured and are not visible to/from the site. The proposed site may be visible from certain designated sites, for example, Hirwaun Ironworks. But this will not be dramatic and will not affect the setting of the designated asset(s). Therefore, the overall indirect impact on the surrounding assets is considered to be Negligible.

9.2 Direct Impacts

9.2.1 There are two sites with the potential to be directly impacted by the proposed development. These include Hirwaun Common Rifle Range (GGAT07928m) and Bute Colliery and Hirwaun Tramway (GGAT02498.0m), all of Local (Low) value. Although unlikely, if physical remains of the rifle range are extant then the development is assessed as having a Major impact, as it will destroy the remains. If physical remains of the tramway survive then the development is assessed as having a Minor impact.

Table 3. Sites of archaeological interest with potential indirect or direct impacts

PRN; NPRN; LB; SM	Name	Site type	Value	Magnitude of Impact
BR157	Hirwaun Ironworks	Ironworks	High	Negligible
GM533	Gamlyn Railway Viaduct	Railway Viaduct	High	Negligible
LB26827	Tramway Causeway and Bridge at Hirwaun Ironworks	Tramway	High	Negligible
LB26828	Hirwaun War Memorial Clock Tower	Clock tower	High	Negligible
LB 21370	The Nebo Independent Chapel	Chapel	High	Negligible
LB 10898	44 Swansea Road	House	High	Negligible
GGAT07928m; NPRN 419301	Hirwaun Common Rifle Range	Rifle Range	Low	Major
GGAT02498.0m	Bute Colliery and Hirwaun Tramway	Tramway	Low	Minor

10 Mitigation

- 10.1.1 There will be little change in the setting to any designated sites, beyond the construction phase, as the sites are visually obscured by the intervening topography, vegetation and built landscape. The only mitigation that can be suggested is that the current tree growth and vegetation is maintained, this is to ensure that there will be no future indirect impacts upon the designated assets.
- 10.1.2 The sites of direct impact have possibly been destroyed during mining/reclamation operations over the decades at Tower Colliery. These sites are deemed as having Low value. If remains of the Bute Colliery and Hirwaun Tramway survive the development is deemed to have a Minor impact. However, if the remains of the Hirwaun Common Rifle Range survive the development will have a Major impact, because it is likely to destroy or change all key archaeological materials. Therefore, archaeological mitigation should be in the form of an archaeological watching brief in the area where the rifle range was located.
- 10.1.3 No previously unknown sites of archaeological interest have been discovered during the course of this assessment.

11 Sources

General

Cadw, CCW & ICOMOS UK. 1998. *Register of Landscapes of Historic Interest in Wales*

Evans, J. 2019. *Written Scheme of Investigation for an Archaeological Desk-Based Assessment: Tower Colliery* (Archaeology Wales Report: Project Number 2751)

Franklin, G. 2001. *The Archaeology of 45 Swansea Road, Hirwaun: Volume 1 & Volume 2* (MA Dissertation, University of York)

Grant, R. 2001. *Cynon Valley in the Age of Iron* (Cynon Valley Borough Council)

Muller, J. 2019. *Archaeological Desk-based Assessment: Hirwaun Primary School Hirwaun, Rhondda Cynon Taf* (Archaeology Wales Report 1784)

Maps

David, E. and Williams, J. T. 1847. *A Plan of the Parish of Aberdare in the County of Glamorgan, Tithe Map and Apportionments*

Jones, W. 1840. *Plan of the Parish of Penderyn in the County of Brecon, Tithe Map and Apportionments*

Ordnance Survey, 1885. County Series, 6-inch map

Ordnance Survey, 1901. County Series, 6-inch map

Ordnance Survey, 1905. County Series, 6-inch map

Ordnance Survey, 1921. County Series, 6-inch map

Ordnance Survey, 1934. County Series, 6-inch map

Ordnance Survey, 1951. County Series, 6-inch map

Ordnance Survey, 1962. County Series (partial) 1:2,500

Archives (Glamorgan Archives)

DBDT/UNL/7. 1931. *Bute Estate Maps*

DCH/32. 1813-1814. *Plan of Hirwaun Common, Aberdare*

DSA/1/66. 1923. *The Marquis of Bute's Hirwaun and Rhigos Estates (Lots 1 – 108)*

Aerial Photos (Central Register of Air Photography for Wales)

Hirwaun Industrial Estate; 1945, 1946, 1947, 1953, 1954, 1955, 1960, 1969, 1972,

1973, 1975, 1976, 1977, 1981, 1983, 1985, 1987, 1988, 1989, 1991, 1993, 1995, 2001, 2009

Websites

Cadw, <https://cadw.gov.wales/advice-support/cof-cymru/search-cadw-records>
(accessed 18/09/19)

Archaeology
Wales

**APPENDIX I:
Gazetteer of sites recorded on
the Regional HER**

GLAMORGAN GWENT ARCHAEOLOGICAL TRUST HISTORIC ENVIRONMENT RECORD ENQUIRY REPORT - EVENT RECORDS

Enquiry reference number: 6117

Prepared by: Calli Rouse, Glamorgan Gwent Archaeological Trust
Produced for: Charley James-Martin, Archaeology Wales

The following information has been provided under the terms and conditions of access as detailed on the GGAT HER Enquiry and Copyright Declaration forms. Copyright is reserved on all data supplied by the GGAT HER Charitable Trust. All output resulting from the use of the data must acknowledge the source as follows:-
Derived from information held by the GGAT HER Charitable Trust copyright.

If you wish to use information derived from material held by the GGAT HER Charitable Trust for publication in printed or multimedia form or to compile resources for commercial use (with the exception of grey literature reports), prior permission must be obtained in writing.

Search criteria

Hirwaun, RCT - see attached shapefile

PRN E000044 **NAME** *Field visit, Hirwaun Ironworks* **NGR** SN95770592 **COMMUNITY** *Hirwaun*
TYPE *Field visit* **YEAR** 2004 **ORGANISATION** *Glamorgan-Gwent Archaeological Trust (GGAT)* **PERSON** *R. Roberts*
SUMMARY *Field visit undertaken as part of the South East Wales Industrial Ironworks Landscapes Project (GGAT80 SEWIL Yr1).*

DESCRIPTION *Field visit undertaken as part of the South East Wales Industrial Ironworks Landscapes Project (GGAT80 SEWIL Yr1). To assess the survival/condition of ironworks and related features.*

COMMENTS

ARTEFACTS

TYPE: *None recorded* **MATERIAL:** *-* **PERIOD:** *-* **DESCRIPTION:** *-*

CROSS REFERENCES *E000955 GGAT01109m*

SOURCES

PRN E000512 **NAME** *CAIRNFIELD, TWYN BRYN-HIR, UNSPECIFIED EXCAVATION, 1941* **NGR** SN93770662 **COMMUNITY** *Hirwaun*
TYPE *Excavation* **YEAR** 1941 **ORGANISATION** *-* **PERSON** *Fox & Murray-Threipland*
SUMMARY *An excavation was undertaken on a Cairnfield at Twyn Bryn-Hir by Fox and Murray-Threipland in 1941. Nine cairns and burial mounds were completely excavated and sections cut into three others on the main site. On the second site five out of the nine cairns were examined*

DESCRIPTION *An excavation was undertaken on a Cairnfield at Twyn Bryn-Hir by Fox and Murray-Threipland in 1941. Nine cairns and burial mounds were completely excavated and sections cut into three others on the main site. On the second site five out of the nine cairns were examined (Fox and Murray Threipland 1942).*

COMMENTS *Previously recorded as 40006m*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES - GGAT00006m

SOURCES

Article Fox, A and Murray Thriepland, L 1942-43 The excavation of Two cairn cemeteries near Hirwaun, Glamorgan

PRN E000551 **NAME** HIRWAUN CAUSEWAY, PENDERYN RAILWAY, ABERDARE CANAL, SURVEY, NGR SN95750565 **COMMUNITY** Hirwaun

TYPE FIELD SURVEY **YEAR** 1976 **ORGANISATION** Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) **PERSON** -

SUMMARY A survey was undertaken at Hirwaun Causeway, Penderyn Railway, Aberdare Canal by the Royal Commission on the Ancient and Historical Monuments of Wales in 1976. It was recorded as a large early nineteenth century dry-stone embankment, characteristic of early railway construction.

DESCRIPTION A survey was undertaken at Hirwaun Causeway, Penderyn Railway, Aberdare Canal by the Royal Commission on the Ancient and Historical Monuments of Wales in 1976. It was recorded as a large early nineteenth century dry-stone embankment, characteristic of early railway construction (Hughes and Richards 1976).

COMMENTS *Previously recorded as 40502m*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES - GGAT01093.0m

SOURCES

Journal Hughes, S.R. and E.T. Richards 1976 Hirwaun Causeway, Penderyn Railway, Aberdare Canal

PRN E000954 **NAME** Southeast Wales Industrial Ironworks

Project NGR SO0965205462 **COMMUNITY** Darran Valley

TYPE Project **YEAR** 2005-2010 **ORGANISATION** Glamorgan-Gwent Archaeological Trust (GGAT) **PERSON** -

SUMMARY This project was instigated in response to the ongoing threats faced by industrial remains of Southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscape in the area of the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes.

DESCRIPTION This project was instigated in response to the ongoing threats faced by industrial remains of Southeast Wales. The aim of the project was to assess the current state of survival/preservation of ironworks landscape in the area of the northern coalfield rim to inform conservation, protection and management of these monuments and their associated landscapes. Currently, this project is made up of 5 stages: Year 1 Assessment of the core Ironworks areas Year 2 Assessment of the associated limestone transport infrastructure Year 3 Assessment of the related water management features Year 4 Assessment of related extractive areas and features Year 5 The Upper Sirhowy, Ebbw and Ebbw Fach Valleys

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES E000955, E000956, E000957, E000958, E002092

SOURCES

Online Resource Glamorgan-Gwent Archaeological Trust 2010 Southeast Wales Industrial Ironworks Landscapes Website accessed 29 Feb 2012 <http://www.ggat.org.uk/cadw/swi/english/index.html>

PRN E001996 **NAME** Field visit Tappenden's Tramroad East and

West NGR SN8871206736 **COMMUNITY** Glynneath

TYPE Field visit **YEAR** 2005 **ORGANISATION** Glamorgan-Gwent Archaeological Trust (GGAT) **PERSON**

SUMMARY Field visit undertaken. Approximately 20% of the entire tramroad survives with numerous features in situ.

DESCRIPTION Field visit undertaken as part of the Cadw project GGAT80 Southeast Wales Industrial Ironworks

Landscapes to establish the condition/survival of archaeological features. Approximately 20% of the entire tramroad survives with numerous features in situ (Roberts and Jones 2006).

COMMENTS

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES E000956 GGAT03225.0m, GGAT03225.1m, GGAT03225.2m, GGAT03225.3m, GGAT01039.1m

SOURCES

Report Roberts, R. Jones, C. 2006 Southeast Wales Industrial Ironworks Landscape Year 2: transport networks 2060 ReportPDF/2060_GGAT80_IronworksYr2_ASS.pdf

PRN E002180 **NAME** Nebo Chapel, Merthyr Road **SUR** **NGR** SN95900552 **COMMUNITY** Hirwaun
TYPE Photographic Survey **YEAR** 2012 **ORGANISATION** - **PERSON** Humphreys, Mr and Mrs
SUMMARY Mr and Mrs Humphreys undertook a photographic survey of Nebo Chapel, Merthyr Road, Hirwaun prior to working on the structure. Though it was not recommended as a planning condition (as it has already been previously recorded for a book) the survey was provided as an additional and independent study. The survey comprises a series of 75 photographs of the interior and exterior of the chapel (Humphreys 2012).

DESCRIPTION Mr and Mrs Humphreys undertook a photographic survey of Nebo Chapel, Merthyr Road, Hirwaun prior to working on the structure. Though it was not recommended as a planning condition (as it has already been previously recorded for a book) the survey was provided as an additional and independent study. The survey comprises a series of 75 photographs of the interior and exterior of the chapel (Humphreys 2012).

COMMENTS None

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES - GGAT07808m

SOURCES

Report Humphreys, Mr and Mrs 2012 Digital photographs (75) Nebo Chapel, Merthyr Road HER_MM_0266; HERP2249.1-75

Report (digital) Humphreys, Mr and Mrs 2012 Photographic Survey Record Report: Nebo Chapel, Merthyr Road, Hirwaun, Aberdare CF44 9PB 3251; HER_MM_0266

PRN E002374 **NAME** Hirwaun Ironworks Reclamation, Stage 1 -

WB **NGR** SN95770592 **COMMUNITY** Hirwaun

TYPE Watching Brief **YEAR** 1995 **ORGANISATION** Glamorgan-Gwent Archaeological Trust

(GGAT) **PERSON** -

SUMMARY The Glamorgan-Gwent Archaeological Trust was commissioned by Taylor Woodrow to undertake an Archaeological Watching Brief, at a site by the Hirwaun Bypass. The work was carried out for the import and export of fill material for the bypass. Nothing of any archaeological significance was uncovered at the site (Locock 1995).

DESCRIPTION The Glamorgan-Gwent Archaeological Trust was commissioned by Taylor Woodrow to undertake an Archaeological Watching Brief, at a site by the Hirwaun Bypass. The work was carried out for the import and export of fill material for the bypass. Nothing of any archaeological significance was uncovered at the site. It is intended that further assessment of the recorded features should be undertaken by reference to the later OS surveys, and contemporary photographic evidence. The objective will be to place the present landforms in the context of the overall site development. The slag samples will be submitted for initial specialist examination, to characterise their process of production; it is not envisaged at this stage, however, that any more detailed residue analysis will be necessary (Locock 1995).

COMMENTS None

ARTEFACTS

TYPE: slag MATERIAL: slag PERIOD: Post-medieval DESCRIPTION: -

CROSS REFERENCES - GGAT01109m

SOURCES

Report Locock, M 1995 Hirwaun Ironworks Reclamation, Stage 1 - WB 386 95/04

PRN E002394 **NAME** *Hirwaun Ironworks, Mid Glamorgan WB* **NGR** SN955059 **COMMUNITY** *Hirwaun*
TYPE *Watching Brief* **YEAR** 1996 **ORGANISATION** *Glamorgan-Gwent Archaeological Trust*
(GGAT) **PERSON** -

SUMMARY *Planning permission was granted for an area of land near Hirwaun Iron Works (a scheduled historic monument) for the import and export of fill materials (or aggregates). Mid-Glamorgan allowed consent for the build on condition that archaeological works take place. A preliminary survey took place in 1995 and a desk-based assessment in 1994. Following the removal of extensive amounts of slag, GGAT were commissioned to carry out a watching brief on the site. Two features were identified: a structure of mortared stone and slag blocks (interpreted as a culvert for the Afon Cynon) and a brick culvert (probably associated with the railway lines formerly crossing the site (Maynard 1996).*

DESCRIPTION *Planning permission was granted for an area of land near Hirwaun Iron Works (a scheduled historic monument) for the import and export of fill materials (or aggregates). Mid-Glamorgan allowed consent for the build on condition that archaeological works take place. A preliminary survey took place in 1995 and a desk-based assessment in 1994. Following the removal of extensive amounts of slag, GGAT were commissioned to carry out a watching brief on the site (Maynard 1996). Two features were identified: a structure of mortared stone and slag blocks (interpreted as a culvert for the Afon Cynon) and a brick culvert (probably associated with the railway lines formerly crossing the site. The stone structure was partially uncovered during the extraction of slag for road construction. The faces of two walls were uncovered, with a top to another being visible, the first wall was 3.8m long and stood at a height of at least 2m. The full length of the wall was uncovered showing a coursed square stone blocks with fairly hard grey mortar (containing flecks of coal and limestone) with the top edge being marked mostly by slag. The second wall was at least 4.8m long and 1.25m high which consisted of at least four courses of random-coursed rubble and slag blocks, bonded with the same mortar as wall 1. Wall 3 is at a right-angle to wall 2, approximately 4m of the wall survived which consisted of two faces of square stone blocks with a core of small stone rubble. Wall 3 is the portal for the culvert, with wall 1 forming the eastern retaining wall for a splayed opening. The stone and slag wall 2 is part of the lining of the culvert, the area of brick seen is probably the roof of the tunnel. The brick culvert was photographed when it was first uncovered, as it was potentially dangerous earth was put over it from discovery. Although noted during the site visit spoil had partially filled the interior through a breach in the roof so detailed recording was not carried out (Maynard 1996).*

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES *E003863, E002338 GGAT01109m*

SOURCES

Report Maynard, D. 1996 Archaeological Watching Brief, Hirwaun Ironworks, Hirwaun, Mid Glamorgan, Final Report 398 96/01 ReportPDF/398_A246_HirwaunIronworksWB.pdf

PRN E003405 **NAME** *Hirwaun Industrial Estate, Rhondda Cynon*

Taff **NGR** SN93940659 **COMMUNITY** *Hirwaun*

TYPE *Watching Brief* **YEAR** 2011 **ORGANISATION** *Glamorgan-Gwent Archaeological Trust*

(GGAT) **PERSON** *Dunning, R*

SUMMARY *GGAT Projects were commissioned by Dwr Cymru Welsh Water to undertake a watching brief during the excavation of trial pits in advance of a mains renewal scheme at Hirwaun Industrial Estate, Hirwaun, RCT..*

DESCRIPTION *GGAT Projects were commissioned by Dwr Cymru Welsh Water to undertake a watching brief during the excavation of trial pits in advance of a mains renewal scheme at Hirwaun Industrial Estate, Hirwaun, RCT. A total of eight trial pits were observed during excavation. No archaeologically significant features, deposits or structures were encountered. Similarly, no artefactual material was recovered from the excavations.*

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES *- GGAT00006m*

SOURCES

Report Dunning, R 2011 Hirwaun Industrial Estate, Rhondda Cynon Taff 2972 2011/06 ReportPDF/2972_P1509_HirwaunIndustrialEstWB.pdf

PRN E003867 NAME *Hirwaun Ironworks Mid Glamorgan: An Archaeological*

Evaluation **NGR** SN95770592 **COMMUNITY** *Hirwaun*

TYPE *Field Survey* **YEAR** 1994 **ORGANISATION** *Ironbridge Gorge Museum Trust Archaeological Unit* **PERSON** *Richardson R.*

SUMMARY *The field took place in October 1993 ahead of a proposed reclamation scheme. It comprised of documentary research and fieldwork. Detailed descriptions were made of all existing earthworks. Recommendations were then made regarding the approach to conservation and interpretation of the site. An investigation was also made of the ironworks water supply. Although these lay outside of the proposed reclamation area they are of great importance and may be considered in a future development.*

DESCRIPTION *The field survey took place in October 1993 ahead of a proposed reclamation scheme. It comprised of documentary research and fieldwork. Detailed descriptions were made of all existing earthworks. Recommendations were then made regarding the approach to conservation and interpretation of the site. An investigation was also made of the ironworks water supply. Although these lay outside of the proposed reclamation area they are of great importance and may be considered in a future development.*

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES - *GGAT01093.0m, GGAT01109m, GGAT01800m, GGAT01801m, GGAT02881m, GGAT02880m, GGAT01808m, GGAT03220m*

SOURCES

Report Richardson S. 1994 Hirwaun Ironworks Mid Glamorgan An Archaeological Evaluation for Mid Glamorgan CC 94/03

PRN E003989 NAME *Hirwaun Ironworks Reclamation Scheme Phase I*

NGR SN955059 **COMMUNITY** *Hirwaun*

TYPE *Watching brief* **YEAR** 1995 **ORGANISATION** *Glamorgan-Gwent Archaeological Trust (GGAT)* **PERSON** *Martin Lawler*

SUMMARY *Glamorgan Gwent Arhaeological Trust were aked to conduct a watching brief whilst an area was being excavated for Taylor Woodrow to use as a land fill in Hirwaun.*

DESCRIPTION *Glamorgan Gwent Arhaeological Trust were aked to conduct a watching brief whilst an area was being excavated for Taylor Woodrow to use as a land fill in Hirwaun.*

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES -

SOURCES

PRN E003990 NAME *Hirwaun Ironworks Reclamation Scheme Final*

Report **NGR** SN955059 **COMMUNITY** *Hirwaun*

TYPE *Watching brief* **YEAR** 1996 **ORGANISATION** *Glamorgan-Gwent Archaeological Trust (GGAT)* **PERSON** *Martin Lawler*

SUMMARY *Glamorgan Gwent Arhaeological Trust were aked to conduct a watching brief whilst an area was being excavated for Taylor Woodrow to use as a land fill in Hirwaun. The archaeological fetures encountered included three brick walls which possibly formed part of a culvert.*

DESCRIPTION *Glamorgan Gwent Arhaeological Trust were aked to conduct a watching brief whilst an area was being excavated for Taylor Woodrow to use as a land fill in Hirwaun. The archaeological fetures encountered included three brick walls which possibly formed part of a culvert., not previously seen on the OS survey, but noted on the OS map*

COMMENTS *None*

ARTEFACTS

TYPE: None recorded MATERIAL: - PERIOD: - DESCRIPTION: -

CROSS REFERENCES - GGAT01109m

SOURCES

Report Martin Lawler 1996 Hirwaun Reclamation Scheme Phase I Final 398 2013/03

PRN E004881 **NAME** Palaeoecological investigation at Cors Bryn - y Gaer, Rhondda-Cynon-Taff **NGR** SN94420670 **COMMUNITY** Hirwaun

TYPE BOREHOLE SURVEY **YEAR** 2003 **ORGANISATION** Countryside Council for Wales **PERSON** -

SUMMARY A palaeoecological investigation of part of Cors Bryn-y-Gaer commissioned by the Countryside Council for Wales to aid accurate categorisation of the site in support of its notification as a SSSI.

DESCRIPTION The Countryside Council for Wales commissioned a palaeoecological investigation of part of Cors Bryn-y-Gaer to aid accurate categorisation of the site in support of its notification as a SSSI. The investigation was carried out in September 1999 by Professor F M Chambers and Dr E W Cloutman University of Gloucestershire and Dr P D M Hughes University of Southampton. Two detailed deep cores were sampled. Macrofossil determinations were made on the basis of field examination of peats retrieved from the corer. A third location was subjected to examination to establish total peat thickness. Leveling surveys were conducted of parts of the mire. A considerable depth of peat was found at the site, much displaying comparatively well preserved macrofossil assemblage; the site has significant value as a palaeo-environmental archive. There was wide-spread presence of sub-fossil *Sphagnum imbricatum*. The main vegetation cover on the surface of the mire was *Scirpus cespitosus*-*Eriophorum vaginatum* blanket mire. However, from the depth of the peat, its semi-confinement by topography and the succession of macrofossil assemblages, the mire was finally classified as raised rather than (lowland) blanket bog. It was listed on the latest register of Welsh raised bogs. (Chambers, Hughes, Jones & Cloutman 2003)

COMMENTS None

ARTEFACTS

TYPE: None recorded **MATERIAL:** - **PERIOD:** - **DESCRIPTION:** -

CROSS REFERENCES -

SOURCES

Report Chambers F M, Hughes P M D, Jones P S & Cloutman E W 2003 Palaeoecological investigations at Cors Bryn- y Gaer SSSI, Rhondda Cynon Taff, South Wales 1554 203/11

PRN E004946 **NAME** A465 dualling - Abergavenny to Hirwaun Master

Event **NGR** SN9499505521 **COMMUNITY** Rhigos

TYPE PROJECT **YEAR** 2003 **ORGANISATION** Babtie Group **PERSON** -

SUMMARY Master event for archaeological works along the A465 Abergavenny to Hirwaun dualling route.

DESCRIPTION In 1995 the Secretary of State for Wales announced the preferred route for dualling the A465 between Abergavenny and Hirwaun. In accordance with the "Design Manual for Roads and Bridges" (DMRB) (Highways Agency et al, 1992) a Stage 1 archaeological assessment was produced by the contracts section of the Glamorgan-Gwent Archaeological Trust (GGAT 1994) (E003863). This was supplemented by a more intensive survey by Cadw (Wakelin 1995). In 1995 Babtie Group were commissioned to carry out further archaeological studies, based on brief CO15L986 PP prepared by Cadw for the Welsh Office (Highways Directorate). The brief required two main phases of work which equated to Archaeological Assessments Stage 2 and 3 (E002394) as defined in DMRB. The results of these assessments formed the basis of the cultural Heritage section of the Environmental Statement (Vol. 2.2 and Gazetteer, 1997) (Williams 1999). The first phase of Babtie's work - "A465 Abergavenny to Hirwaun Archaeological Survey Phase 1 Report" (Babtie, 1996; equivalent to DMRB Stage 2) - included further desktop and non-intrusive field survey. A total of 282 sites were identified and these were previously graded into four categories of importance (A - D). Sites whose grades need confirmation by field evaluations were assigned Grade E (Williams 1999). The second phase of the assessment work (DMRB Stage 3) included a programme of geographical survey or trial trenching of Category E sites. The evaluations enabled a fuller assessment of these sites to be made, and mitigation strategies to be recommended for each of the potentially affected sites (Williams 1999). For the results of Section 1, see E002338 For the results of Section 2, see E004891 For the results of Section 3, see E004908

COMMENTS None

ARTEFACTS

TYPE: None recorded **MATERIAL:** - **PERIOD:** - **DESCRIPTION:** -

CROSS REFERENCES E004891, E004908, E002414

SOURCES

Report Spackman S 2003 A465 Abergavenny to Hirwaun Dualling Section 2: Clydach to Gilwern Archaeological Fieldwork Report 1392 203/05

Report Spackman S 2003 Abergavenny to Hirwaun: Brynmawr to Tredegar Section 3 Archaeological Fieldwork Report no 7202213/D1/4a/04

PRN E005161 **NAME** Ty Draw Farm, Rhigos, Aberdare, Rhondda, Cynon,

Taff NGR SN94100442 **COMMUNITY** Rhigos

TYPE FIELD VISIT **YEAR** 2006 **ORGANISATION** Glamorgan-Gwent Archaeological Trust

(GGAT) **PERSON** Thomas, C

SUMMARY The Glamorgan-Gwent Archaeological Trust was commissioned by the Countryside Council for Wales to undertake a management report (with a site visit) for Ty Draw Farm, Rhigos, Aberdare, as part of the Tir Gofal scheme.

DESCRIPTION The Glamorgan-Gwent Archaeological Trust was commissioned by the Countryside Council for Wales to undertake a management report (with a site visit) for Ty Draw Farm, Rhigos, Aberdare, as part of the Tir Gofal scheme (whole farm agri-environment scheme for Wales which encourages farmers to maintain and enhance the agricultural landscape). The report contains general observations, identifies conservation needs of historic features associated with the farm, and provides specific management recommendations to preserve the archaeological resource.

COMMENTS None

ARTEFACTS

TYPE: None recorded **MATERIAL:** - **PERIOD:** - **DESCRIPTION:** -

CROSS REFERENCES - GGAT08091m, GGAT08092m, GGAT08093m, GGAT08094m, GGAT08095m, GGAT08096m, GGAT08097m, GGAT08098m

SOURCES

Report Thomas, C 2006 Ty Draw Farm, Rhigos, Aberdare, RCT: Tir Gofal HE2 Farm Visit Report: 3018

AM - 09.16.19 (15:09) - HTML file produced from GGAT HER, GGAT file number 2139.

Glamorgan Gwent Archaeological Trust, Heathfield House, Heathfield, Swansea, SA1 6EL.
tel (01792) 655208 , fax (01792) 474696, email her@ggat.org.uk , website www.ggat.org.uk

Archaeological data, from the Regional Historic Environment Record, supplied by The Glamorgan-Gwent Archaeological Trust in partnership with Local Authorities, Cadw and the partners of ENDEX GGAT, 2010.

Archaeology *Wales*

APPENDIX II: Figures

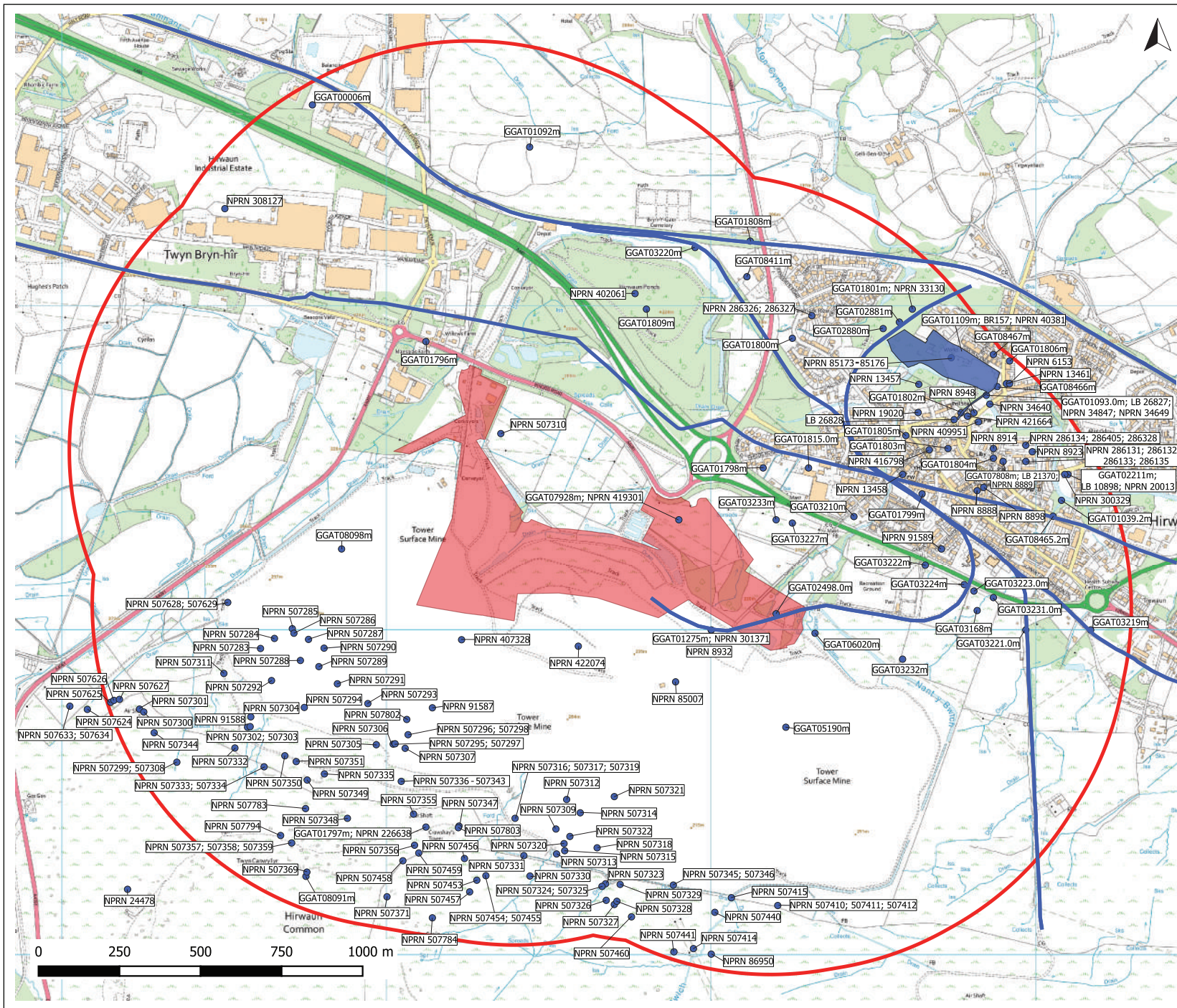


Figure 1
 Location of development area (red) with the 1km study area (red outline), showing all known sites of archaeological interest (blue)

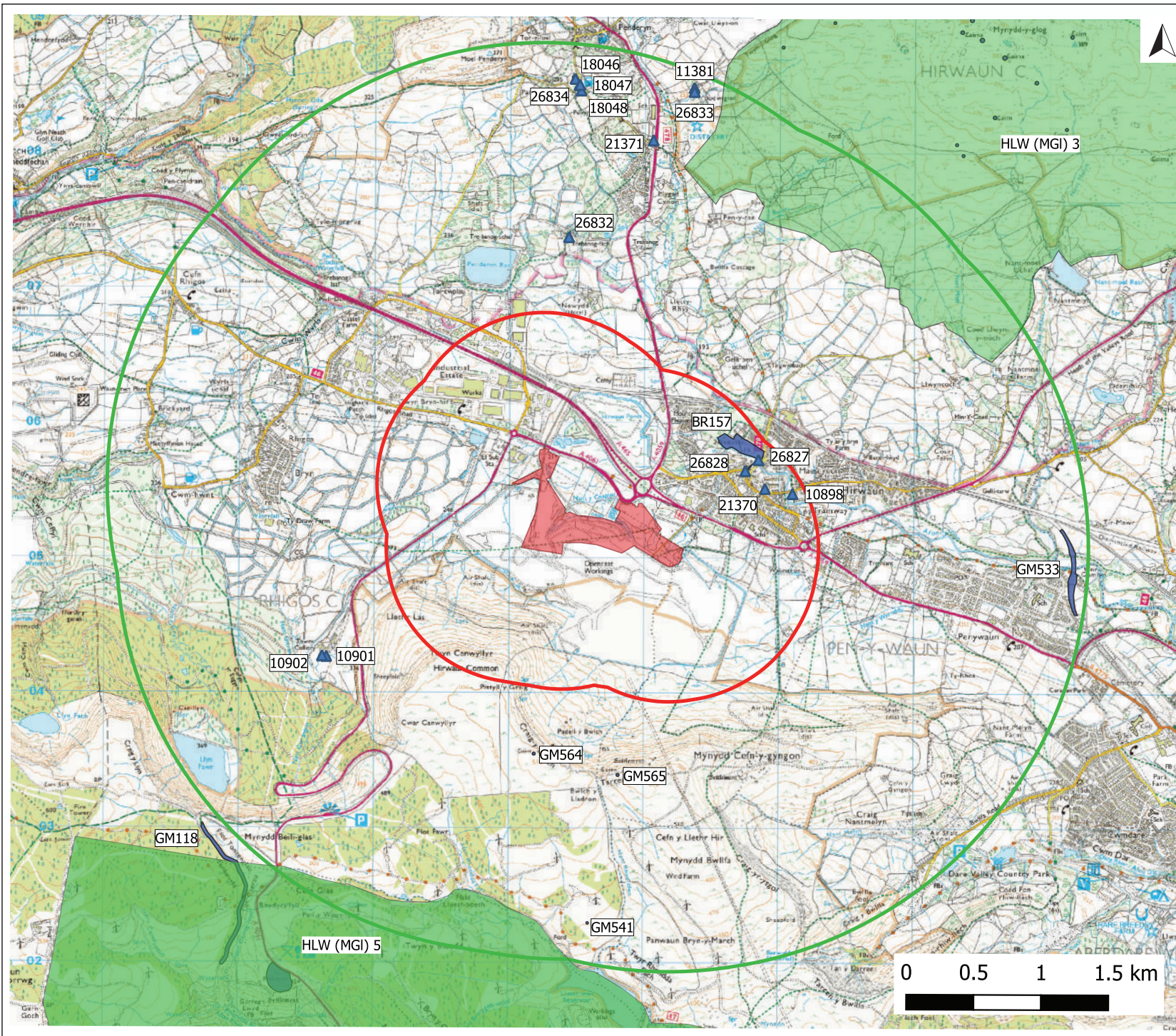


Figure 2
 Plan showing the development area (red) with the 1km study area (red outline), 3km study area (green outline) and the Scheduled Monuments, Listed Buildings and Historic Landscapes.

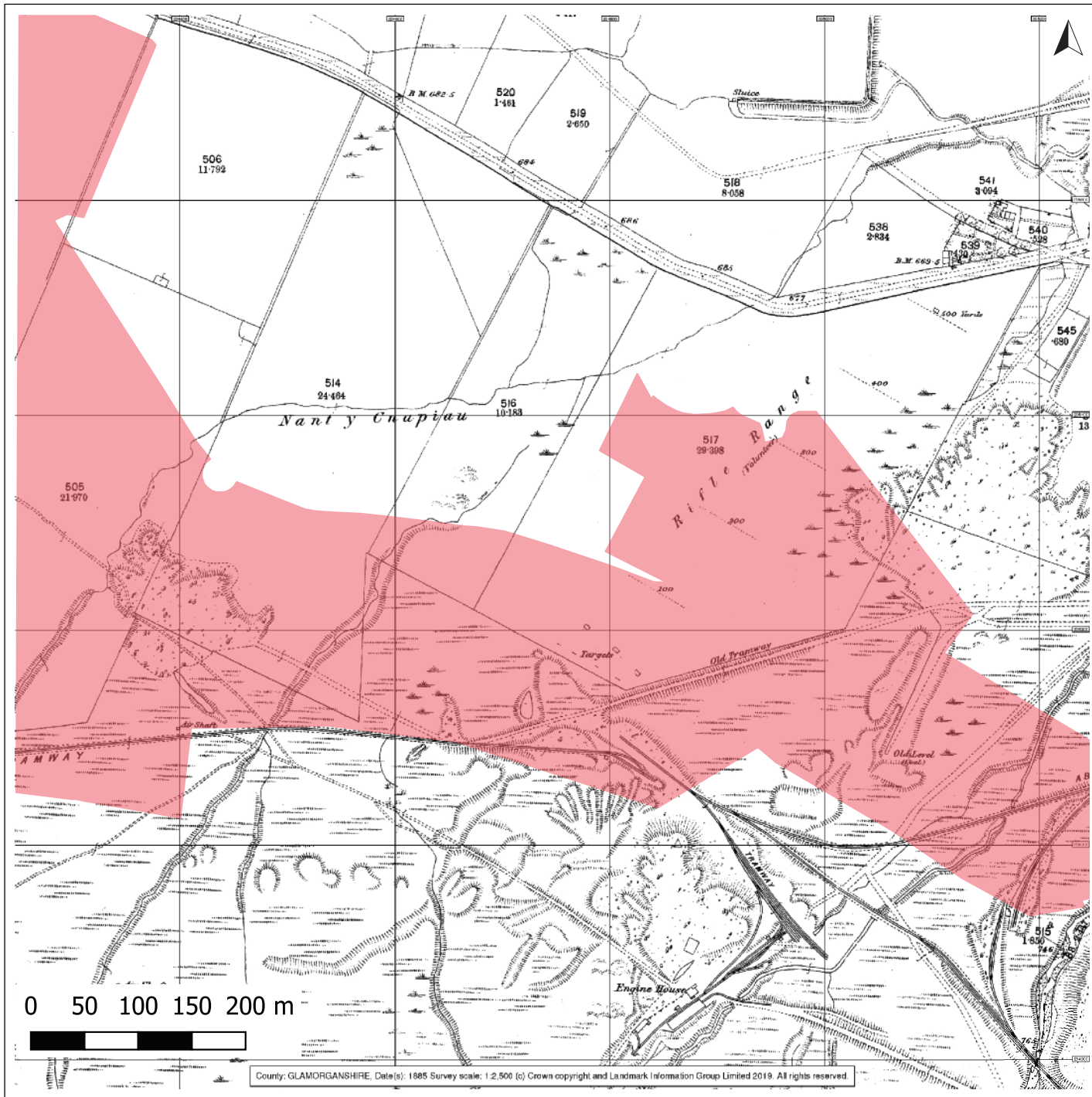


Figure 3
 Historic plan of
 Glamorganshire of 1885

Archaeology
Wales

APPENDIX III:
Plates



Plate 1. Northern area of the development site, looking north



Plate 2. Northern area of the development area, looking west



Plate 3. Northern area of the development site, looking north-west



Plate 4. Northern area of the development site, looking north-west



Plate 5. Location of Hirwuan Common Rifle Range (GGAT01275m), looking south-east



Plate 6. Location of Bute Colliery and Hirwaun Tramway (GGAT02498.0m), looking north-west



Plate 7. Location of Knobby Drift Culvert (GGAT06020m), looking south-east



Plate 8. Location of Knobby Drift Culvert (GGAT06020m), looking east



Plate 9. Southern area of the development site, looking south-east



Plate 10. Southern area of the development site, looking south



Plate 11. Site of Hirwaun Ironworks (BR157) with limited views of development site, facing south



Plate 12. Site of Hirwuan Ironworks (BR157) with limited views of the development site, facing south-east



Plate 13. Site of Hirwaun Ironworks (BR157) with limited views of development site, facing south



Plate 14. Views from development area towards East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3), looking north-east



Plate 15. Views from development area towards East Fforest Fawr and Mynydd-y-Glog (HLW (MGI) 3), looking north-east

Archaeology
Wales

APPENDIX IV:
Written Scheme of Investigation

Archaeology Wales Ltd
The Reading Room, Town Hall, Llanidloes SY18 6BN
T: 01686 440371
E: info@arch-wales.co.uk
www.arch-wales.co.uk

Specification

For Archaeological Desk Based Assessment:

Tower Colliery, Rhondda Cynon Taf

Prepared for:
Tower Regeneration Limited

Project No: 2751

September 2019

Archaeology Wales Limited
The Reading Room, Town Hall,
Great Oak St., Llanidloes, Powys, SY18 6BN
Tel: +44 (0) 1686 440319
Email: admin@arch-wales.co.uk



Contents	Page
<i>Summary</i>	2
1. Introduction.....	2
2. Development Details & Site Description	2
3. Site specific objectives.....	3
4. The proposed archaeological work	3
5. Method statement for a detailed desk-based assessment (Stage 1).....	4
6. Method statement for the site visit (Stage 2)	5
7. Method statement for the production of an illustrated report and the deposition of the site archive (Stage 3)	5
8. Resources and timetable.....	6
9. References.....	7

Figure 1. Location of development area (red)

Summary

This Specification details the proposal for an archaeological Desk-Based Assessment associated with the proposed construction of a development on 40 hectares of reclaimed land associated with the adjacent Tower Colliery surface mine in Hirwaun, Rhondda Cynon Taf. The proposed development will be a mix of residential use, employment use, and commercial use. It has been prepared by Archaeology Wales Ltd for Tower Regeneration Ltd.

1. Introduction

The proposed development site is located to the south and west of the village of Hirwaun, Rhondda Cynon Taf, approximately centred on NGR SN 94746 05273 (Figure 1). The site covers an area of approximately 40 hectares, and this includes approximately 4.4 hectares set out for residential use; 5.4 hectares for commercial use (including a hotel, petrol filling station and flexible A1-A3 uses); and 26.4 hectares for employment use. The archaeological advisors to Rhondda Cynon Taf County Borough Council Planning Authority is The Glamorgan-Gwent Archaeological Trust Archaeological Planning Management (GGAT-APM).

This Specification has been prepared by James Evans, Archaeology Wales Ltd (Henceforth - AW) at the request of Tower Regeneration Ltd. It provides information on the methodology that will be employed by AW during a Desk Based Assessment and Site Visit.

The purpose of the proposed Desk-Based Assessment is to provide GGAT-APM with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy Wales (Ed.10 December 2018), Section 6, and Technical Advice Note 24. The work is to highlight and assess the impact upon standing and buried remains of potential archaeological interest to ensure that they are adequately preserved or fully investigated and recorded if they are disturbed or revealed as a result of subsequent activities associated with the development.

All work will conform to the Standard and Guidance for Archaeological Desk Based Assessment (ClfA, 2014) and be undertaken by suitably qualified staff to the highest professional standards.

2. Development Details & Site Description

The proposed development comprises of plans for the construction of 130 new residential properties, a hotel, petrol filling station and other commercial properties, and properties for employment use. The site is currently made up of approximately 40 hectares of reclaimed land associated with the adjacent Tower Colliery surface mine. It lies to the south of the A4061, to the east of Rhigos Road, and to the south of the A465, forming valley hillside that generally rises from north to south away from

the main village with the land to the north forming open mountainside. The plot consequently sits above the main village and forms a highly visible and prominent site from the existing, established residential areas nearby, as well as from panoramic views at various locations in both the immediate and wider localities across the valley.

The geology beneath the proposed development area comprises of mudstone, siltstone and sandstone belonging to the South Wales Lower Coal Measures Formation. This bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period (BGS, 2019).

3. Site specific objectives

The primary objective of the desk-based assessment will be to assess the potential impact of the development proposals on the historic environment by means of a detailed desk-based study and site visit. This will help inform future decision making, design solutions and potential mitigation strategies. The aim will be to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.

The work will include a comprehensive assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

This desk-based assessment will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. The information could then be used to determine further archaeological investigation or appropriate mitigation strategies for any archaeological remains within the area to be implemented prior to or during the proposed development. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

4. The proposed archaeological work

The proposed archaeological work relates to the whole of the site, i.e. all of the application area.

The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- A detailed desk-based assessment (Stage 1)
- A site visit (Stage 2)
- The production of an illustrated report and the deposition of the site archive (Stage 3)

5. Method statement for a detailed desk-based assessment (Stage 1)

The assessment will consider the following:

- a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area. It will involve the following areas of research:
 1. Collation and assessment of all relevant information held in the regional HER at the Glamorgan-Gwent Archaeological Trust in Swansea, within a 1km buffer zone around the proposed development area.
 2. Collation and assessment of the impact on all Designated archaeological sites (Scheduled Ancient Monuments, Listed Buildings, Historic Parks & Gardens, landscapes, Conservation Areas) within 3km buffer zone around the proposed development area.
 3. Assessment of all available excavation report and archives including unpublished and unprocessed material affecting the site and its setting.
 4. Assessment of all extant aerial photographic (AP) evidence. This will include visits to Central Register of Air Photography for Wales, in Cardiff.
 5. Assessment of archive records held at the County Archives, and as appropriate, site files held by RCAHMW
 6. Records held by the developer e.g. bore logs, geological/geomorphological information, aerial photographs, maps, plans.
 7. Map regression analysis using all relevant cartographic sources e.g. All editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
 8. Place name evidence.
 9. Internet sourced satellite imagery and Lidar imagery as available.
 10. Assessment of the records held at the Portable Antiquities Scheme.
 11. Historic documents (e.g. Charters, registers, estate papers).
- b) The significance of any remains in their context both regionally and nationally and in light of the findings of the desk-based study.
- c) The history of the site, based on the areas of research outlined above.
- d) The potential impact of any proposed development on the setting of known sites of archaeological importance (this will constitute a brief assessment, rather than a formal assessment such as that detailed in the Design Manual of Roads and Bridges).
- e) The potential for further archaeological remains to be present, which have not been identified in pre-existing archaeological records.
- f) The potential for further work, with recommendations if requested and where appropriate for a suitable investigative and/or mitigation methodology.

6. Method statement for the site visit (Stage 2)

The site visit will be a visual walked search of the accessible development area. The ground surface will be visually inspected for all earthworks, structures and finds. The location of any environmental archaeological deposits, or areas which may have a potential for such deposits, will also be taken into account along with the visible archaeology.

All located sites or finds will be accurately fixed by means of GPS. Each individual find or site location will have an accurate NGR reference attached. Where a close cluster of related features is identified a single NGR for the centre of the cluster will be used, and each constituent feature separately described in the text.

The character, function, condition, vulnerability, potential dating and relationship to other features of each identified site or find will be described fully. The importance of the site or find will be assessed in terms of local, regional or national significance.

Written, drawn and photographic records of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs, including scales, will be taken using cameras with resolutions of 10 mega pixels or above.

The site visit will also assess the visual impact of the proposed development on the setting of known sites of archaeological importance. Photographs will be taken from the proposed development to help illustrate and assess this visual impact and Designated sites within the study area will also be visited with photographs taken towards the proposed development to help illustrate and assess this visual impact on these sites.

7. Method statement for the production of an illustrated report and the deposition of the site archive (Stage 3)

A report will be produced which synthesises the results of stages 1 and 2 and thereby assesses the total archaeological resource within the development area.

The results will be presented in a report and will be detailed and laid out in such a way that data and supporting text are readily cross-referenced. The report will adhere to the Welsh Archaeological Trust's joint Guidance for the Submission of Data to the Welsh Historic Environment Records (2018). The historical development of the site will be presented in phased maps and plans comprising clearly, the outline of the site.

Within the report an attempt will be made to indicate areas of greater or lesser archaeological significance and the sites will be ranked in level of overall archaeological importance (locally, regionally and nationally).

All relevant aerial photographs, re-plots and historic maps will be included and be fully referenced.

The report will specifically include the following:

1. a copy of the design brief (if applicable)

2. a location plan
3. all identified sites plotted on an appropriately scaled plan of the proposal site
4. a gazetteer of all located sites

Copies of the report will be sent to the client and to GGAT for inclusion in the HER. Digital copies will be provided in pdf format.

The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited with the National Monuments Records, held and maintained by the RCAHMW, Aberystwyth, on completion of the report. It will also conform to the guidelines set out in 'The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017' (National Panel for Archaeological Archives in Wales 2017). The digital archive will be deposited with the NMR.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after completion of the work.

Other significant digital data generated by the survey (i.e. AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

8. Resources and timetable

Standards

The desk-based assessment will be undertaken by AW staff using current best practice.

All work will be undertaken to the standards and guidelines of the ClfA.

Staff

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Charley James-Martin – project manager, AW (MCIfA).

Timetable of archaeological works

The work will be undertaken at the convenience of the client and is likely to commence imminently.

Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

Health and safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act, 1974*, and the Health and Safety Policy Statement of AW.

9. References

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, compilation, transfer and deposition of archaeological archives.*

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, documentation, conservation and research of archaeological materials.*

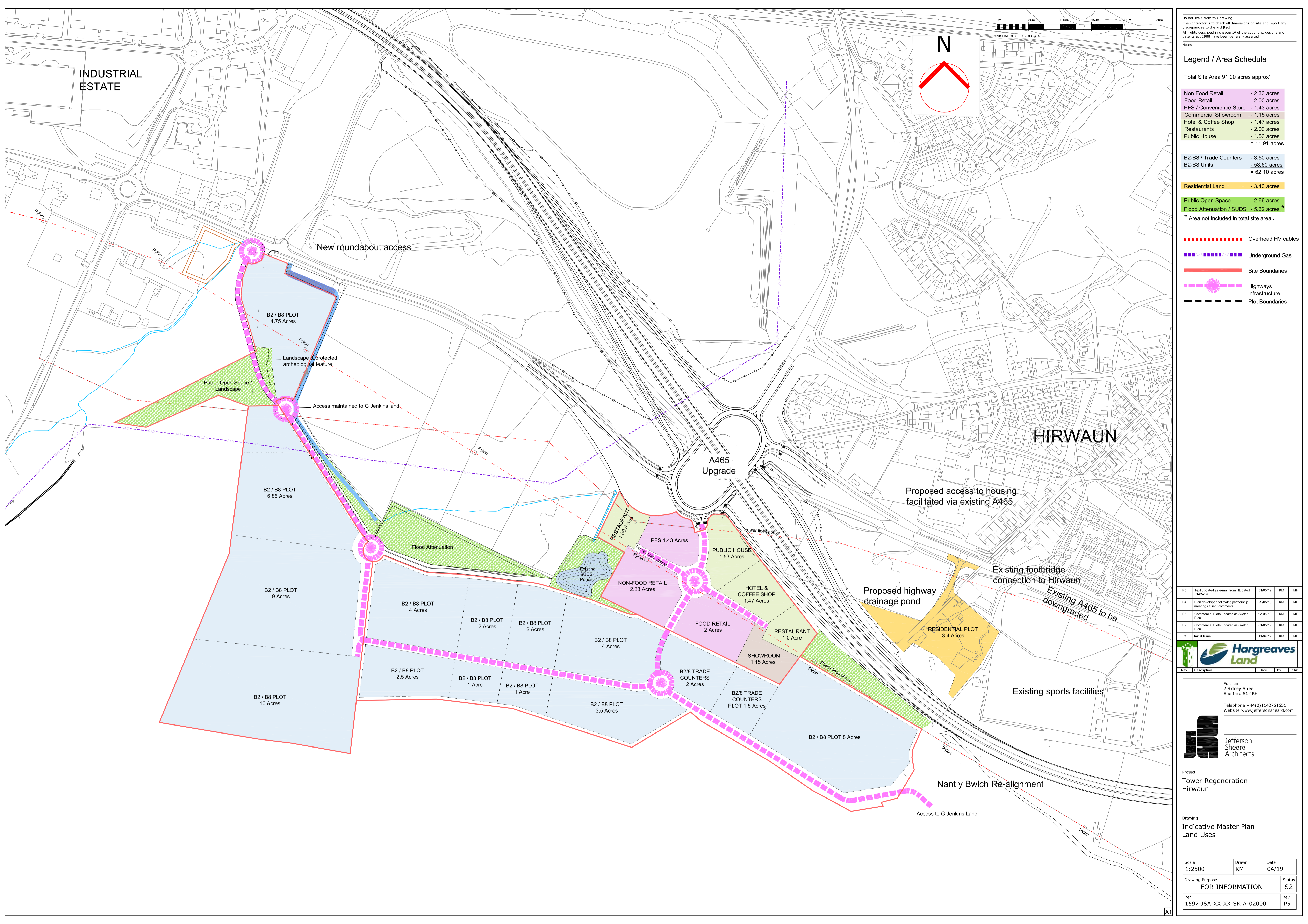
Chartered Institute for Archaeologists, 2014. *Standards and guidance for historic environment desk-based assessment.*

National Panel for Archaeological Archives in Wales, 2017. *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales*

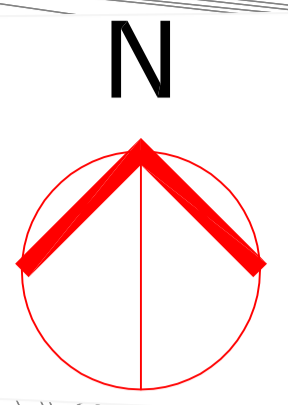
Welsh Archaeological Trusts, 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs).*

British Geological Survey: Geology of Britain viewer:

www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html



0m 50m 100m 150m 200m 250m
 VISUAL SCALE 1:2500 @ A3



Do not scale from this drawing
 The contractor is to check all dimensions on site and report any discrepancies to the architect
 All rights described in chapter IV of the copyright, designs and patents act 1988 have been generally asserted
 Notes

Legend / Area Schedule

Total Site Area 91.00 acres approx'

Non Food Retail	- 2.33 acres
Food Retail	- 2.00 acres
PFS / Convenience Store	- 1.43 acres
Commercial Showroom	- 1.15 acres
Hotel & Coffee Shop	- 1.47 acres
Restaurants	- 2.00 acres
Public House	- 1.53 acres
	= 11.91 acres

B2-B8 / Trade Counters	- 3.50 acres
B2-B8 Units	- 58.60 acres
	= 62.10 acres

Residential Land - 3.40 acres

Public Open Space	- 2.66 acres
Flood Attenuation / SUDS	- 5.62 acres *

* Area not included in total site area .

- Overhead HV cables
- Underground Gas
- Site Boundaries
- Highways infrastructure
- Plot Boundaries

P5	Text updated as e-mail from HL dated 31/05/19	31/05/19	KM	MF
P4	Plan developed following partnership meeting / Client comments	29/05/19	KM	MF
P3	Commercial Plots updated as Sketch Plan	12-05-19	KM	MF
P2	Commercial Plots updated as Sketch Plan	01/05/19	KM	MF
P1	Initial Issue	11/04/19	KM	MF



Rev	Description	Date	By	CHK
-----	-------------	------	----	-----

Fulcrum
 2 Sidney Street
 Sheffield S1 4RH
 Telephone +44(0)1142761651
 Website www.jeffersonsheard.com



Project
 Tower Regeneration
 Hirwaun

Drawing
 Indicative Master Plan
 Land Uses

Scale	1:2500	Drawn	KM	Date	04/19
Drawing Purpose	FOR INFORMATION		Status	S2	
Ref	1597-JSA-XX-XX-SK-A-02000	Rev.	P5		

ARCHIVE COVER SHEET

Tower Colliery, Hirwaun

Site Name:	Tower Colliery, Hirwaun
Site Code:	TCH/19/DBA
PRN:	GGAT07928m, GGAT02498.0m
NPRN:	
SAM:	
Other Ref No:	
NGR:	NGR SS 7860 9058
Site Type:	Construction of 130 new residential properties, a hotel, petrol filling station and other commercial properties, and properties for employment use.
Project Type:	Desk Based Assessment
Project Manager:	Charley James-Martin
Project Dates:	September - November 2019
Categories Present:	-
Location of Original Archive:	AW
Location of duplicate Archives:	RCAHMW, Aberystwyth
Number of Finds Boxes:	-
Location of Finds:	-
Museum Reference:	-
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

Archaeology Wales Limited

The Reading Room, Town Hall, Llanidloes, SY18 6BN

Tel: +44 (0) 1686 440371

Email: admin@arch-wales.co.uk

Company Directors: Mark Houlston MCifA & Jill Houlston

Company Registered No. 7440770 (England & Wales)

Registered Office: Morgan Griffiths LLP, Cross Chambers

9 High Street, Newtown, Powys, SY16 2NY

