

Foel Trawsnant Windfarm Connection

Archaeological Desk-Based Assessment & Assessment of the Significance of the Impact of the Development on the Historic Landscape (ASIDOHL2)



Prepared
For

Western Power Distribution Plc

By



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Comisiynwyd Archeoleog Mynydd Du Cyf gan Western Power Distribution i gwblhau Asesiad Desg ac Asesiad o Arwyddocâd Effaith y Datblygiad ar y Dirwedd Hanesyddol (ASIDOHL2) ar gyfer llinell cysylltiad pŵer arfaethedig am Fferm Wynt Foel Trawsnant, Castell-Nedd Port Talbot, sy'n croesi'n rhannol mewn i Tirwedd Gofrestredig o Ddiddordeb Hanesyddol Arbennig Mynydd Margam (PGW (WGI/MGI)2) (Ffigur 1). Mae'r cynlluniau arfaethedig yn cynnwys llinell pŵer gyda hyd gyfanswm o 9.9km (gydag adran gladdedig o c.940m oddi tano'r Cwrs Golff Maesteg) yn rhedeg i'r de o'r fferm gwynt yn Foel Trawsnant (NGR SS 83754 94105), i Mynydd Margam (NGR SS 82187 88868) lle mae'n troi tua'r dwyrain i'w ben terfyn at Fynon y Gilfach (NGR SS 84178 87439). Mae'r gosodiad y llinell arfaethedig llinell arfaethedig yn cynnwys codi nifer o bolion H ar hyd y llwybr.

Mae'r asesiad wedi nodi effeithiau uniongyrchol ac anuniongyrchol posibl y datblygiad arfaethedig ar asedau treftadaeth a'r Ardaloedd Cymeriad Tirwedd Hanesyddol (HLCA). Mae wedi asesu'r effaith ar osodiad ac arwyddocâd asedau dynodedig statudol, a thrwy broses ASIDOHL2, mae wedi asesu arwyddocâd yr effaith ar y Dirwedd Hanesyddol yn ei chyfanrwydd.

Mae'r asesiad desg archeolegol wedi'i baratoi i'r safonau proffesiynol y Sefydliad Siartredig Archeolegwyr a'i fwriad yw i cwrdd Safon a Chanllawiau ar gyfer Asesiadau Desg Archeolegol (2014, diwygiwyd 2020). Mae'r ASIDOHL2 wedi'i baratoi i safonau proffesiynol y Sefydliad Siartredig Archeolegwyr a'i fwriad yw i cwrdd a'r safon ac arweiniad a nodwyd gan Cadw yn Canllaw i Arfer Da ar Ddefnyddio'r Cofrestr Tirweddau o Ddiddordeb Hanesyddol yng Nghymru yn y Broses Gynllunio a Datblygu (2^{il} argraffiad 2007).

Non-Executive Summary

Black Mountains Archaeology Ltd was commissioned by Western Power Distribution to carry out an Archaeological Desk-based Assessment and an Assessment of the Significance of the Impact of the Development on the Historic Landscape (ASIDOHL2) for a proposed power connection line for Foel Trawsnant Windfarm, Neath Port Talbot, that partially crosses into the Mynydd Margam Registered Landscape of Special Historic Interest (PGW (WGI/MGI)2) (Figure 1). The proposed plans include a power line with a total length of 9.9km (with a buried section of c.940m beneath Maesteg Golf Course) running south from the windfarm out Foel Trawsnant (NGR SS 83754 94105), to Mynydd Margam (NGR SS 82187 88868) where it turns eastwards to its terminal end at Fynon y Gilfach (NGR SS 84178 87439). The installation of the proposed line includes the erection of a number of H poles along the length of the route.

The assessment has identified the potential direct and indirect effects of the proposed development on heritage assets and Historic Landscape Character Areas (HLCAs). It has assessed the impact on the setting and significance of statutory designated assets, and through the ASIDOHL2 process, it has assessed the significance of impact on the Historic Landscape as a whole.

The archaeological desk-based assessment has been prepared to the professional standards of the Chartered Institute for Archaeologists and is intended to meet Standard and Guidance for Archaeological Desk-based Assessments (2014, revised 2020). The ASIDOHL2 has been prepared to meet Standard and Guidance set out by CADW in ASIDOHL2 Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process (2nd Edition 2007).

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Summary of Assessment

The Archaeological Desk-based Assessment has identified the potential direct and indirect effects of the proposed powerline together with an assessment of the setting and significance of high value heritage assets.

The assessment concluded that there would be no direct effect to known heritage assets by the proposed powerline. The southern curtilage boundary of Scheduled Monument Caer Blaen-y-cwm/ Roman Camp (HA01) lies in very close proximity to the proposed powerline. It is recommended that measures should be undertaken to ensure its protection in the form of continued archaeological consultation during the planning phase and an archaeological watching brief of archaeologically sensitive areas during construction.

*Eight heritage assets within a primary (250m radius) study area were identified as being subject to potential indirect (visual) effects. The most significant of these is Caer Blaen-y-cwm/ Roman Camp (HA01) which would have intervisibility with the proposed powerline that has been assessed as causing a **Very Slight** effect to the monument; whilst the proposed powerline will be noticeable it will cause little discernible severance of cultural links. The remaining seven non-designated assets were also assessed as being subject to a **Very Slight** effect.*

The ASIDOHL2 process considered the potential effect to all Registered Historic Landscapes and resulted in the identification of just a single landscape being affected; Mynydd Margam Landscape of Special Historic Interest (PGW (WGI/MGI)2) with remaining landscapes on the Register being discounted as too distant. Three Historic Landscape Character Areas (HLCAs) were identified for potential direct effects from the proposed scheme; Llangynwyd (HLCA005), Mynydd Margam (HLCA 010) and Upper Cwm Kenfig (HLCA013).

*These HLCAs were assessed for both 'absolute' and 'relative' impacts. The assessment indicated that the absolute direct impact on Llangynwyd (HLCA005) would be **Very Slight** with 0.06ha of a total area of 705.27ha affected, equal to 0.01%, whilst the Magnitude of Direct Effect (including relative impact) was assessed as **Slight**. Mynydd Margam (HLCA010) would be subject to a **Very Slight** absolute direct impact with 0.88ha of a total area of 1641.62ha affected, equal to 0.05%, with the Magnitude of direct impact assessed as **Slight**. Finally Upper Cwm Kenfig (HLCA013) would be subject to a **Very Slight** absolute direct impact of 0.13ha of 95.83ha affected, equal to 0.13%, however the Magnitude of Direct Effect was assessed as **Moderate**. In total the absolute direct impact of the development on the Registered Historic Landscape as a whole is 1.07ha of a total 3233.57ha which is equal to 0.03%.*

*Stage 3 of the ASIDOHL2 process identified six HLCAs as being potentially affected indirectly by the proposed scheme. The assessment concluded that due to the small scale of the proposed development, there would be no Indirect Physical Impact; there would be no physical change from an increased risk of exposure, increased management needs, severance or fragmentation of related elements, frustration of access leading to decreased opportunities for education and enjoyment of the amenity elements will occur. The Indirect Non-Physical (Visual) Impacts were also assessed from these six HLCAs and the Magnitude of Effect was assessed for all six as **Very Slight**.*

*Stage 4 of the ASIDOHL2 process assessed the relative importance of parts or elements of these HLCA's that may be directly or indirectly, wholly or partially, affected by the proposed development. The resulting overall averaged landscape value was assessed as **Considerable**.*

*The final ASIDOHL2 assessment process (Stage 5) identified the overall significance of the impact of development and the effect that altering the Historic Landscape Character Area (HLCA) concerned has on the whole of the Historic Landscape on the Register (Cadw 2007, 28). The effect of the development on each HLCA was scored and the value assessed in relation to the likely loss and consequent reduction in value of the Registered Historic Landscape as a whole. The results indicated that the summary of overall significance of the impact of development on the historic landscape is **Very Low** for all HLCA's. The development impact on key elements is such that value of the historic landscape on the Register remains essentially unchanged.*

Acknowledgements and Copyright

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Abbreviations

- AP: Aerial Photograph
- CRAPW: Central Register of Air Photography for Wales
- GGAT Glamorgan Gwent Archaeological Trust
- HER: Historic Environment Record (curated by Glamorgan Gwent Archaeological Trust)
- HLCA Historic Landscape Character Area
- LB: Listed Building
- LPA: Local Planning Authority
- NGR: National Grid Reference
- NMR: National Monuments Record (curated by RCAHMW)
- NPRN: National Primary Record Number (in NMR)
- PRN: Primary Record Number (in HER - curated by Glamorgan Gwent Archaeological Trust)
- RCAHMW: Royal Commission on the Ancient and Historical Monuments of Wales
- SAM: Scheduled Ancient Monument

1 Introduction

1.1 Project Background and Proposals

1.1.1 Black Mountains Archaeology Ltd was commissioned by Western Power Distribution to carry out an Archaeological Desk-Based Assessment and an Assessment of the Significance of the Impact of the Development on the Historic Landscape (ASIDOHL2) for a proposed power connection line for Foel Trawsnant Windfarm, Neath Port Talbot, that partially crosses into the Mynydd Margam Registered Landscape of Special Historic Interest (PGW (WGI/MGI)2) (Figure 1). The proposed plans include a power line with a total length of 9.9km (with an underground section of c.940m beneath Maesteg Golf Course) running south from the windfarm at Foel Trawsnant (NGR SS 83754 94105), to Mynydd Margam (NGR SS 82187 88868) where it turns eastwards to its terminal end at Fynon y Gilfach (NGR SS 84178 87439). The installation of the proposed powerline includes the erection of a number of H poles along the length of the route.

1.1.2 The present assessment follows a previous Environmental Impact Assessment (EIA) and ASIDOHL carried out in 2018 by Wood Environment & Infrastructure Solutions Ltd on the proposed Foel Trawsnant Wind Farm (P2014/0825/ES). The assessment considered ten Scheduled Monuments and the Mynydd Margam Historic Landscape for potential setting effects caused by the wind farm but none were found to be subject to any significant effects.

1.2 Objectives

1.2.1 The purpose of a desk-based assessment as set out by the *Chartered Institute for Archaeologists* (2014, revised 2020) is to gain an understanding of the historic environment resource in order to formulate as required:

- an assessment of the potential for heritage assets to survive within the Area of Study.
- an assessment of the significance of the known or predicted heritage assets considering, their archaeological, historic, architectural and artistic interests.
- strategies for further evaluation whether or not intrusive, where the nature, extent or significance of the resource is not sufficiently well defined.
- an assessment of the impact of proposed Development or other land use changes on the significance of the heritage assets and their settings.
- strategies to conserve the significance of heritage assets, and their settings.
- design strategies to ensure new Development makes a positive contribution to the character and local distinctiveness of the historic environment and local place-shaping.
- proposals for further archaeological investigation within a programme of research, whether undertaken in response to a threat or not.

1.2.2 To this we can further add that the objectives of desk-based assessment are:

- An assessment of available information to determine the extent and character of heritage assets, in local, regional and national contexts.

- An assessment of the significance of heritage assets considering all of the cultural heritage values that people associate with it, or which prompt them to respond to it.
- An assessment of impact (physical or visual) on heritage assets and their setting.
- The careful consideration and presentation of mitigation recommendations aimed at reducing the impact of the Development on heritage assets and their setting.
- Finally, the presentation of this information in a written report and the preparation and deposition of an archive of data generated by the assessment in line with professional standards.

1.3 Legislative Framework

- 1.3.1 Planning legislation is set out in the *Town and Country Planning Act 1990*. *Planning Policy Wales (PPW 11th Edition)* sets out the land use planning policies of the Welsh Government. Chapter 6 sets out the Welsh Government's policy towards the historic environment. It states "*The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.*" (PPW 2021, 126).
- 1.3.2 Underpinning PPW are a series of legislative powers and TANs. *The Planning (Wales) Act 2015* sets out a series of legislative changes to deliver reform of the planning system in Wales, to ensure that it is fair, resilient and enables Development. The 2015 Act also introduces a mandatory requirement to undertake pre-application consultation for certain types of Development. The *Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016* defines in *Schedule 4(l)* the parameters and definitions for the requirement of pre-application consultation by Welsh Ministers, particularly in response to the effect of statutory designated monuments, buildings, and parks and gardens.
- 1.3.3 Advice on archaeology and buildings in the planning process is contained in *Welsh Office Circular 60/96 Planning and the Historic Environment: Archaeology and Welsh Office Circular 1/98 Planning and the Historic Environment, which updates Welsh Office Circular 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas* following the Shimizu (U.K.) Ltd. v. Westminster City Council Judgement (February 1997). Detailed advice on Environmental Impact Assessment is contained within *Welsh Office Circular 11/99 Environmental Impact Assessment*.

- 1.3.4 Any works affecting an ancient monument and its setting are protected through implementation of the *Ancient Monument and Archaeological Areas Act 1979*. In Wales the 1979 Act has been strengthened by *The Historic Environment (Wales) Act 2016*. The 2016 Act makes important improvements for the protection and management of the Welsh historic environment. It also stands at the centre of an integrated package of secondary legislation (Annexes 1-6), new and updated planning policy and advice, and best-practice guidance on a wide range of topics (*TAN 24 Historic Environment*). Taken together, these will support and promote the careful management of change in the historic environment in accordance with current conservation philosophy and practice. Following adoption of the *TAN 24 Historic Environment* on 31st May 2017, *Welsh Office Circulars 60/96 Planning and the Historic Environment: Archaeology*; *61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas*; and *1/98 Planning and the Historic Environment* have been cancelled.
- 1.3.5 The *Ancient Monument and Archaeological Areas Act 1979* and *The Historic Environment (Wales) Act 2016* sets out a presumption in favour of preservation *in-situ* concerning sites and monuments of national importance (scheduled/listed), and there exists in the current *Planning Policy Wales* (Chapter 6) a presumption in favour of preservation *in-situ* of all types of heritage assets.
- 1.3.6 Cadw are the Welsh Government body responsible for determining applications for Scheduled Monument Consent (SMC) and is a statutory consultee for certain types of Developments affecting Scheduled Ancient Monuments, World Heritage Sites and Registered Historic Parks, Gardens and Landscapes, Strategic Environmental Assessments and scoping opinions for Environmental Impact Assessments (PPW 2021). Cadw published their *Conservation Principles* for the sustainable management of the historic environment in Wales in 2011. These principles provide the basis upon which Cadw discharges its statutory duties, makes decisions or offers advice about changes to historic assets. Cadw further advise that the *Conservation Principles* should also be used by others (including owners, developers and other public bodies) to assess the potential impacts of a Development proposal on the significance of any historic asset/assets and to assist in decision-making where the historic environment is affected by the planning process (PPW 2021).
- 1.3.7 Important or historic hedgerows (and boundaries) are protected under *The Environment Act 1995 (section 95)*. The *Hedgerow Regulations 1997* (under the 1995 Act) provides protection and guidance for those development/agricultural activities outside of planning. The regulations permit the removal of any hedgerow (including any length of hedgerow) for ‘carrying out Development for which planning permission has been granted’ provided the loss of the hedgerow has been properly assessed against the benefits of the proposed Development.

1.3.8 Following review in 1998, a simplified set of assessment criteria was proposed where all substantially complete boundaries (hedgerows) that predate 1845 were to be afforded consideration/protection. The Environment, Transport and Regional Affairs Committee's Report 'The Protection of Field Boundaries' 1999 was acknowledged by Government but no amendments were made to the 1997 regulations. Judicial Review of the application in 2002 of the regulations (Flintshire County Council v NAW and Mr J T Morris) has clarified the interpretation of some of the criteria (see *The Hedgerow Regulations 1997, Schedule 1, Part 2 Archaeology and History* and Section 1.5 below).

1.4 Assessment Methodology (heritage assets)

1.4.1 The assessment of the historic environment includes the interrogation of a number of sources (but not limited to):

- Statutory designated monuments, buildings and landscapes (including conservation Areas, parks, gardens and battlefields).
- Regional Historic Environment Record (HER).
- National Monuments Record (NMR).
- Aerial photographic archives.
- Local and national archives.
- Cartographic and documentary sources.

1.4.2 Information on statutory designated sites (World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, Registered Landscapes, Battlefields, Parks and Gardens) was obtained from Cadw (Received 12/10/18 and accessed through Cof Cymru - National Historic Assets of Wales (a Welsh Government online mapping resource). Information recorded on the Regional Historic Environment Record (Received 12/10/18) and National Monuments Record (NMR Enquiry no. RC20-0451/RC20-0465 Received 07/11/18) were assessed as was collections of aerial photographs held by the Central Register of Air Photography for Wales. Cartographic Archives held by The National Library of Wales were also consulted.

1.4.3 The assessment reviewed the existing information pertaining to the Historic Environment based on a primary 250m (radius) study area centred on the proposed windfarm connection line. A selection of statutory designated sites was assessed outside the study area (up to 500m radius) for the impact to their setting (see Figure 1).

1.4.4 Important or historic hedgerows were assessed according to current legislation that details the following criteria:

- The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose, "historic" means existing before 1850.
- The hedgerow incorporates an archaeological feature which is (a) included in the schedule of monuments compiled by the Secretary of State under Section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979(7); or (b) recorded at the relevant date in a Historic Environment Record.
- The hedgerow (a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and (b) is associated with any monument or feature on that site.

- The hedgerow (a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Historic Environment Record or in a document held at that date at a Record Office; or (b) is visibly related to any building or other feature of such an estate or manor.
 - The hedgerow (a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Enclosure Acts; or (b) is part of, or visibly related to, any building or other feature associated with such a system, and that system (i) is substantially complete; or (ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Act, for the purposes of Development control within the authority's Area, as a key landscape characteristic.
 - There are other criteria relating to rights of way and ecology.
- 1.4.5 Heritage assets are categorised according to the only values that are nationally agreed in the Department of Transport/Welsh Office/Scottish Office *Design Manual for Roads and Bridges. Formerly Vol. 11 Section 3 Part 2 (HA 208/07 Cultural Heritage) 2007, amended 2009 (DMRB 2007), as amended January 2020 LA 106 Revision 1*. A cultural heritage asset is an individual archaeological site or building, a monument or group of monuments, an historic building or group of buildings, an historic landscape etc., which, together with its setting, can be considered as a unit for assessment. Heritage assets are assessed according to the following criteria.
- 1.4.6 Understanding value is subjective beyond any statutory or registered designation and is based on the professional experience and knowledge of the assessor. Other factors do contribute to the overall assessment of value (and significance) of heritage assets and the assessment criteria below contributes to an overall robust assessment framework.

Value			Criteria
A*	Very High	International/National	World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.
A	High	National	Scheduled Monuments (including proposed sites). Undesignated assets of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives.
B	Medium	Regional	Designated or undesignated assets that contribute to regional research objectives.
C	Low	Local	Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.
D	Negligible	Local	Assets with very little or no surviving archaeological interest.
U	Unknown	Unknown	The importance of the resource has not been ascertained.

Table 1. Factors for assessing the value of heritage assets (after Table 5.1 DMRB 2009)

Effect	Category					
	A*	A	B	C	D	U
Very High	Very Significant	Very Significant	Very Significant	Significant	Significant	Unknown
High	Very Significant	Very Significant	Very Significant	Significant	Significant	Unknown
Moderate	Very Significant	Very Significant	Significant	Significant	Slight Significance	Unknown
Low	Very Significant	Significant	Significant	Slight Significance	Slight Significance	Unknown
None	None	None	None	None	None	None

Table 2. Significance of effect to heritage assets (matrix)

- 1.4.7 The criteria below is adapted from notes made in Annex 2 of the *DMRB Vol. 11 Section 3 Part 2* (HA 208/07 Cultural Heritage) 2007, as amended January 2020 LA 106 Revision 1, that refer to the Scheduling Criteria as set out by the *Ancient Monument and Archaeological Areas Act 1979* and *The Historic Environment (Wales) Act 2016* and finally Stage 4 Evaluating Relative Importance as set out in *ASIDOHL2, Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (2nd Edition 2007). While comprehensive, the criteria should not be regarded as definitive, rather they are indicators which contribute to a wider judgement based on the professional experience of the assessor and the circumstance and context of the assessment and heritage asset. An ASIDOHL2 is a staged approach to assessing the significance of impact to historic landscapes (and constituent character Areas) as characterised in the *Register of Landscapes of Outstanding Historic Interest in Wales* (Pt 2.1, 1998) and *Register of Landscapes of Special Historic Interest in Wales* (Pt 2.2, 2001) to the method set out in the *Guide to Good Practice on Using the register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (revised 2nd Edition 2007).
- 1.4.8 **Rarity:** there are some monument categories, which in certain periods are so scarce that all surviving examples which still retain some archaeological potential should be preserved. This should be assessed in relation to what survives today, since elements of a once common type may now be rare.
- Very high: sole survivor of its type.
 - High: very few sites of this type are known.
 - Medium: the site is not unusual but cannot be considered common.
 - Low: the site is quite common.
- 1.4.9 **Documentation and association:** the significance of a heritage asset may be enhanced by the existence of records of previous investigations or, in the case of more recent monuments, by the supporting evidence of contemporary written records. Furthermore, any important historical associations relating to the heritage asset, such as institutions, cultural figures, movements or events, will enhance value. The survival of documentation and/or historic association that increases our understanding of a heritage asset will raise its importance, though this is difficult to quantify owing to the extremely varied nature of documentary and historical material. Therefore, a professional judgment is given based on the actual amount or importance of evidence and its academic value.
- Very High: a highly significant, authentic and nationally well-known association(s) and/or complete documentary record, or exceptionally important sources available.
 - High: a significant, authentic and regionally well-known association(s) and/or considerable quantity of relevant material, or highly important sources available.
 - Moderate: an authentic, but less significant, perhaps locally well-known association(s) and/or some relevant material, or moderately important sources available.
 - Low: unauthenticated or a little-known association(s) and/or little relevant material, or only modestly important sources available.

- None: no known associations and/or relevant material available.

1.4.10 **Group Value:** relates to the diversity (or similarity) of elements including their structural and functional coherence. The value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement and cemetery) or with monuments of different periods.

- Very high: largely complete interconnected complex of heritage assets or landscapes (e.g UNESCO World Heritage Site).
- High: significant survival of an interconnected complex of heritage assets.
- Moderate: some surviving elements of an interconnected complex of heritage assets; some disintegration has occurred.
- Low: single or unconnected/unrelated groups of heritage assets.

1.4.11 **Survival/Condition:** the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features. The Historic Environment Records (HERs) of the four Welsh Archaeological Trusts note the condition of sites according to the following criteria:

- Intact: the site is intact.
- Near intact: the site is nearly intact.
- Damaged: the site has been moderately damaged.
- Near destroyed: the site has nearly been destroyed.
- Destroyed: the site has been destroyed.
- Restored: the site has been restored.
- Moved: the site has been moved (usually finds).
- Not known: the condition of the site is not known.

1.4.12 To these criteria, we can add the following assessment:

- Very Good: elements surviving in very good condition for their class.
- Good: elements surviving in good or above average condition for their class.
- Moderate: elements surviving in moderate or average condition for their class.
- Fair elements surviving in fair or below average condition for their class.
- Poor elements surviving in poor condition for their class.

1.4.13 **Direct Effects** are outcomes resulting from an assessment of the impact of the proposed development on the heritage asset or landscape. The direct effect of a course of action (e.g. development) can only be assessed once the assessment criteria above has been completed and potential outcomes fully understood (as far as any development proposal or construction design is reasonably understood). The direct effect of the proposed Development on heritage assets has been assessed using the following criteria:

- Very high: total loss of the integrity of the heritage asset(s).
- High: significant loss of integrity to the heritage asset(s), significant reduction of group and rarity values.

- Moderate: some loss of integrity to heritage asset(s) and reduction in value.
- Low: slight loss of integrity to heritage asset(s) and value.
- None: no perceived or identified effect, or loss in value.
- Beneficial: Development will protect, preserve or enhance the heritage asset resulting in an increase in value.

1.4.14 Assessing **Indirect Effects (visual)** to heritage assets is intrinsically linked to setting and significance (see section 1.6). The criteria below are adapted from standard EIA evaluation criteria and Stage 3 Assessment of Indirect Impacts of Development as set out in *ASIDOHL2, Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process (2nd Edition 2007)*. Assessment is confined to sites of International, National and in some cases Regional value.

- Very severe: the key views and/or essential lines of sight to and from the heritage asset are dominated or obscured by the Development resulting in severance of cultural heritage links.
- Severe: the key views and/or essential lines of sight to and from the heritage asset are interrupted by the Development resulting in partial severance of cultural heritage links.
- Considerable: the key views and/or essential lines of sight to and from the heritage asset are significantly visible resulting in limited severance of cultural heritage links.
- Moderate: the key views and/or essential lines of sight to and from the heritage asset are visible resulting in some severance of cultural heritage links.
- Slight: the key views and/or essential lines of sight to and from the heritage asset are noticeable resulting in diminished cultural heritage links.
- Very slight: the key views and/or essential lines of sight to and from the heritage asset are noticeable resulting in little discernible severance of cultural heritage links.
- None: the key views and/or essential lines of sight to and from the heritage asset are not noticeable resulting in no severance of cultural heritage links.

1.5 Assessment Methodology (setting and significance)

1.5.1 The *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)* explains what **setting** is, how it contributes to the **significance** of a historic asset and why it is important. It also outlines the principles used to assess the potential impact of Development or land management proposals on the settings of World Heritage Sites, ancient monuments (scheduled and unscheduled), listed buildings, registered historic landscapes, parks and gardens, and conservation areas. These principles, however, are equally applicable to all individual historic assets, irrespective of their designation.

1.5.2 Certain major Developments require pre-application consultation with the local planning authority and, where specialist advice is required, the Welsh Ministers through Cadw. Any Development likely to directly or indirectly (visual) effect a statutory designated heritage asset or high value undesignated heritage asset and its setting will likely require 'consultation before grant of permission' under the *Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016, schedule 4 (l)(i) and (ii)* if the proposed Development meets any of the following criteria:

- Development likely to affect the site of a registered historic park or garden or its setting.
- Development is within a registered historic landscape that requires an Environmental Impact Assessment and ASIDOHL2.
- Development likely to have an impact on the outstanding universal value of a World Heritage Site.
- Development is within a distance of 0.5 kilometres from any point of the perimeter of a scheduled monument.
- Development is within a distance of 1 kilometre from the perimeter of a scheduled monument and is 15 metres or more in height, or has an Area of 0.2 hectares or more.
- Development is within a distance of 2 kilometres from the perimeter of a scheduled monument and is 50 metres or more in height, or has an Area of 0.5 hectares or more.
- Development is within a distance of 3 kilometres from the perimeter of a scheduled monument and is 75 metres or more in height, or has an Area of 1 hectare or more.
- Development is within a distance of 5 kilometres from the perimeter of a scheduled monument and is 100 metres or more in height, or has an Area of 1 hectare or more.

1.5.3 An assessment of the impact of the proposed Development on the setting of the statutory designated heritage asset or high value undesignated heritage asset will be required if any of the criteria in 1.5.2 above are met. The assessment of the setting of heritage assets follows the four-stage approach detailed in the *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)*:

- Stage 1: Identify the historic assets that might be affected by a proposed change or development and their significance.
- Stage 2: Define and analyse the settings to understand how they contribute to the ways in which the historic assets are understood, appreciated and experienced.
- Stage 3: Evaluate the potential impact of a proposed change or Development on those settings.
- Stage 4: Consider options to mitigate the potential impact of a proposed change or Development on those settings.

1.5.4 The assessment of **significance** is intrinsically linked to the setting (see paragraphs 1.5.1 to 1.5.3 above) and value (see criteria in section 1.5 above) of a heritage asset/registered landscape, park and garden.

- 1.5.5 The significance of an historic asset embraces all of the cultural heritage values that people associate with it, or which prompt them to respond to it. These values tend to grow in strength and complexity over time, as understanding deepens and people's perceptions evolve (*Conservation Principles for the sustainable management of the historic environment in Wales 2011, p10*).
- 1.5.6 There are four values that need to be considered when assessing significance and these are set out in Cadw's *Conservation Principles for the sustainable management of the historic environment in Wales*:
- 1.5.7 **Evidential value:** relates to those elements of a heritage asset that can provide evidence about past human activity, including its physical remains or historic fabric. These may be visible and relatively easy to assess, or they may be buried below ground, under water or be hidden by later fabric. These remains provide the primary evidence for when and how a heritage asset was made or built, what it was used for and how it has changed over time. The unrecorded loss of historic fabric represents the destruction of the primary evidence. Additional evidential values can be gained from documentary sources, pictorial records and archaeological archives or museum collections. To assess the significance of this aspect of an asset, all this evidence needs to be gathered in a systematic way and any gaps in the evidence identified.
- 1.5.8 **Historical value:** a heritage asset might illustrate a particular aspect of past life or it might be associated with a notable family, person, event or movement. These illustrative or associative values of a heritage asset may be less tangible than its evidential value but will often connect past people, events and aspects of life with the present. Of course, the functions of a heritage asset are likely to change over time and so the full range of changing historical values might not become clear until all the evidential values have been gathered together. Historical values are not so easily diminished by change as evidential values and are harmed only to the extent that adaptation has obliterated them or concealed them.
- 1.5.9 **Aesthetic value:** relates to the way in which people draw sensory and intellectual stimulation from a heritage asset. This might include the form of a heritage asset, its external appearance and how it lies within its setting. It can be the result of conscious design or it might be a seemingly fortuitous outcome of the way in which a heritage asset has evolved and been used over time, or it may be a combination of both. The form of an asset normally changes over time. Sometimes earlier pictorial records and written descriptions will be more powerful in many people's minds than what survives today. Some important viewpoints may be lost or screened, or access to them may be temporarily denied.
- 1.5.10 To assess this aspect of an asset, again the evidence of the present and past form must be gathered systematically. This needs to be complemented by a thorough appreciation on site of the external appearance of an asset in its setting. Inevitably understanding the aesthetic value of a heritage asset will be more subjective than the Study of its evidential and historical values. Much of it will involve trying to express the aesthetic qualities or the relative value of different parts of its form or design. It is important to seek the views of others with a knowledge and appreciation of the heritage asset on what they consider to be the significant aesthetic values.

- 1.5.11 **Communal value:** relates to the meanings that a heritage asset has for the people who relate to it, or for whom it figures in their collective experience or memory. It is closely linked to historical and aesthetic values but tends to have additional or specific aspects. Communal value might be commemorative or symbolic. For example, people might draw part of their identity or collective memory from a heritage asset, or have emotional links to it. Such values often change over time and they may be important for remembering both positive and uncomfortable events, attitudes or periods in Wales's history. Heritage assets can also have social value, acting as a source of social interaction, distinctiveness or coherence; economic value, providing a valuable source of income or employment; or they may have spiritual value, emanating from religious beliefs or modern perceptions of the spirit of a place.
- 1.5.12 The first stage of assessing significance is by understanding the value of the heritage asset by carefully considering its history, fabric and character and then comparing these values with other similarly designated or types of heritage asset locally, regionally or if necessary, nationally. The outcome of this process is a Statement of Significance, which is partly a subjective exercise based on the assessor's experience and knowledge.

2 Baseline

2.1 Location, Topography and Geology

- 2.1.1 The proposed power line has a total length of 9.9km is located in an upland location that features a mixture of forestry plantation and heath and grassland common. The route essentially follows the county boundary between Neath Port Talbot and Bridgend. Running south from the windfarm at Foel Trawnsnant (NGR SS 83754 94105), the line crosses Afan Forest Park followed by a buried section of c.940m beneath Maesteg Golf Course, then crosses to Mynydd Margam (NGR SS 82187 88868), where it turns eastwards to its terminal end at Fynon y Gilfach (NGR SS 84178 87439). The installation of the above ground sections of the proposed line includes the erection of a number of H poles along the length of the route.
- 2.1.2 The underlying geology along the route is varied. The bedrock at the northern end of the route at Foel Trawnsnant is Rhondda Member Sandstone with bands of Llynfi Member Mudstone, Siltstone and Sandstone. The route crosses the South Wales Middle Coal Measures at Rhiw Tor Cymry, which continues across the head of Cwm Farteg valley. The bedrock returns to Rhondda Member Sandstone on the north-facing slopes of Mynydd Margam, with the slightly younger Brithdir Member Sandstone surviving towards the summit. All of these bedrock types represent sedimentary deposits dating to the Carboniferous period dating to between 318 - 309 million years ago. Overlying superficial deposits are isolated to the valleys where there are some accumulations of Devensian diamicton glacial tills formed during the Quaternary period between 116 – 11.8 thousand years ago (British Geological Survey 2021).
- 2.1.3 Soils follow a similar distribution with the summits of Foel Trawnsnant and Mynydd Margam having very acid loamy upland soils with a wet peaty surface, whilst the valley slopes feature freely draining acid loamy soils over rock and the valley bottom has slowly permeable wet very acid upland soils with a peaty surface All of these upland soils support open grass moor and heath with some areas of flush and bog that is laid to rough grazing and forestry (Cranfield University 2021). The proposed route crosses a single recorded surface peat deposit close to Heol y moch, at the head of Cwm Nant-y-glo (British Geological Survey 2021).

2.2 Conservation Areas

- 2.2.1 There are no Conservation Areas within the development area, the nearest being Maesteg Town Centre (CA260) (1.4km E), Llangynwyd (CA259) (2.8km E) and Margam Park (CA151) (2.8km SW). All Conservation Areas were discounted as too distant and/or having no intervisibility with the development area.

2.3 Registered Landscapes, Parks and Gardens

- 2.3.1 The proposed power line crosses into the Mynydd Mountain Registered Landscape of Special Historic Interest (PGW(WGI/MGI)2) (Figure 1) which is described in the Register as:

“a discrete block of the South Wales uplands situated at the south west fringe of the historical Glamorgan Blaenau, displaying continuity, density and diversity of human occupation from the prehistoric period to the recent past. The area includes: Bronze Age ritual and funerary monuments, large Iron Age hillforts, settlements, enclosures and trackways; a Roman road, a large and important group of Early Christian Inscribed Stone monuments and associations; medieval defensive works; Margam Abbey, later a site for gentry residences, a landscaped park, pleasure gardens and a magnificent Georgian orangery; Second World War defensive installations” (Cadw & ICOMOS 2001 p63).

- 2.3.2 The proposed line will cross three HLCAs; Mynydd Margam (HLCA 010), Llangynwyd (HLCA005) and Upper Cwm Kenfig (HLCA013) which will be assessed for potential direct effects (Figure 2). The Registered Landscape contains a further fourteen HLCAs.
- 2.3.3 No further Historic Landscapes were considered for assessment as they were considered too distant; the nearest being Merthyr Mawr, Kenfig & Margam Burrows (HLW(MGI)1) (5.1km SW) and The Rhondda (HLW(MGI)5) (8km NE).
- 2.3.4 Margam Park Grade I Registered Park & Garden (PGW(Gm)52) which is the same as HLCA001, lies 1.4km to the SW.

2.4 Scheduled Ancient Monuments and Listed Buildings

- 2.4.1 Caer Blaen-y-cwm/ Roman Camp (HA01) lies in very close proximity of the proposed power line route at its southern curtilage boundary. This is the only designated site to fall within the Primary (250m radius) Study Area.
- 2.4.2 Outside the Primary (250m radius) Study Area lie further Scheduled Monuments including Y Bwlwarcaw Iron Age Hill Fort (HA58) (NE <500m), Twmpath Diwlith Round Barrow (HA57) and Site of Bodvoc Stone (HA56) (both 600m E) as well as Llangynwyd Castle (HA62) (NE 1.5km). To the south of the development area lie a number of prehistoric camps including Danish Camp (HA66) (1.2km SW), Camp N of Tonmawr (HA55) (900m SW) and Camp 530m E of Tonmawr (HA70) (1.3km S). Towards the north end of the development area lies Cefn yr Argoed Camp (HA54) (<500m W). Finally, Cae'r Mynydd Ventilation Furnace & Mine (HA53) lies west of Rhiw Tor Cymry (1km W).
- 2.4.3 There are no Listed Buildings within the development area and the only sites with potential indirect effects are the Grade II Listed Kiln Block at Former Bryn Brickworks (HA61) (800m W), which falls within the Registered Historic Landscape, and Gilfach-ganol Farmhouse (HA59) and Bee boles and Stile in Garden Wall at Gilfach-uchaf Farm (HA60) (both 700m E).

2.5 Non-designated sites of archaeological and historical interest

2.5.1 There are 32 sites within the Primary (250m radius) Study Area recorded on the local Historic Environment Record (HER) managed by Gwent Glamorgan Archaeological Trust (GGAT). There are eleven further sites recorded in the National Monuments Record (NMR) held by RCAHMW and an additional eight unrecorded sites identified during the study from historic mapping and the walkover survey.

2.6 Archaeological and Historical

2.6.1 The study area is situated within a remarkable relic archaeological landscape that displays a continuity of human activity from the Mesolithic to the present day. A detailed assessment of the Mynydd Margam Historic Landscape has been carried out by Gwent Glamorgan Archaeological Trust (Robertson 2003) and the wider landscape has been assessed as part of the LANDMAP Historic Landscape Assessment of Neath Port Talbot (Lewis 2004). Rather than repeat that information here, the summary below will be constrained to the present study area.

2.6.2 The line of the proposed power line largely follows the modern administrative boundary between Neath Port Talbot and Bridgend, which follows the upland ridge to the east of Margam and Cwmafan (Robertson 2003 p29). This administrative boundary was marked in the landscape in the post-medieval period (shown on historic mapping) with boundary stones along its route, although most if not all of these have been destroyed by modern forestry activity. The Ffordd-y-Gilfraith/ Heol-y-moch routeway (HA04) follows the line of this ridge and is recognised by the Royal Commission (RCAHMW) as a probable Roman road (RRN23), itself bisected by several cross-ridge dykes along its route. It would be safe to infer that this routeway was in use in the prehistoric period as indicated by the numerous Bronze Age funerary monuments and Iron Age enclosures situated in what would have been an important strategic and monumental location. Later the ridgeway appears to form the interface between the medieval ecclesiastical territories of Margam to the west and Llangynwyd to the east, whilst on a wider scale the medieval commotes of Tir Iarll to the east and Margam (or Afan) to the west.

2.6.3 Mesolithic

2.6.4 The earliest evidence of human activity on Mynydd Margam is an assemblage of lithic tools of more than one type dating from the Mesolithic to the Early Bronze Age (HA67) (Locock 2000, p52). The findspot is fairly isolated with further scatters being recorded much further in land, however, they are an indication that in the post-glacial period these uplands were seasonal hunting grounds for the itinerant hunter-gatherer Mesolithic communities.

2.6.5 Bronze Age and Iron Age

- 2.6.6 A distribution of five round barrows are spread across the summit of Mynydd Margam, four of which are fairly unique in Glamorgan because they feature enough earth content in the mound to be classified as barrows rather than cairns (Evans 2004 p9). The most substantial of these sites is the Scheduled Monument Twmpath Diwlith (HA57, Plates 28, 31-32) which is situated on the level summit at a height of about 338m OD and falls on the Ffordd-y-Gilfraith/ Heol-y-moch routeway (HA04). “The mound is grass covered with dimensions of 22.9m in diameter and a maximum height of 1.5m” (RCAHMW 1976, p84). The site was one of a number excavated by National Museums Wales in 1921 which revealed that “the barrow had been built of turves, covering a rough cist containing fragmentary burnt bones. Later it had been enlarged with earth; the secondary interment had been rifled” (ibid, Fox 1934; Wheeler 1923). The barrow’s (HA57) condition hasn’t altered significantly since the survey carried out in 2002 (Evans 2002, p9; Plates 28, 31-32). About 120m to the west of Twmpath Diwlith and close to the current forestry track lies a ring cairn labelled as Site of Bodvoc Stone (HA56, Plates 28-30), so named because it features a (replica of) an early medieval inscribed stone. The ring cairn is recorded by the Royal Commission as “12.8m in diameter with a stony bank about 3m wide and 0.3m high and a suggestion of a slight outer ditch (RCAHMW 1976 p84, Evans 2002 p18). Again, the ring cairn’s (HA56) condition hasn’t altered significantly since the survey carried out in 2002 (Evans 2002, p9; Plates 28-30).
- 2.6.7 Llyndwr Fawr East (HA68, Plate 33) and Llyndwr Fawr Southeast (HA69, Plate 34) round barrows lie in close proximity to the historic Llyndwr pond (HA48, Plate 35). Both survive as low grass covered mounds with a diameter of 21.3m and heights of 0.6-0.9m and appear to have suffered damage from robbing and forestry activities (RCAHMW 1976 p84). The site visit confirmed that the condition of these two barrows has not altered since the 2002 survey (Evans 2002, p9) . Lastly, Rhyd Llechws round barrow (HA08, Plate 39) is recorded on historic mapping, however, it now lies under forestry and is recorded as destroyed by the RCAHMW and Evans (2002), which has also been confirmed by the present study. Carreg Bica (HA33, Plates 59-60) is marked on historic mapping and is recorded in the HER as a Bronze Age Standing Stone situated in a prominent position on the Heol-y-moch routeway (HA04). It was described in 1956 as “Two upright stone slabs so placed that they form a ‘T’”, however the site is now ‘destroyed’. Environmental evidence from nearby Crug-yr-Afan (GGAT00722) indicates that by the Bronze Age the uplands had largely been cleared of the dense broadleaf woodland that dominated since the end of the last Ice Age, leaving a landcover of heathland with open tree cover dominated by oak (Crampton 1967, Robertson 2003). This environment would have made these funerary monuments and megalith sites prominent in the landscape.

- 2.6.8 Iron Age activity in the study area is represented by sites of occupation rather than burial, with a series of enclosures including Caer Blaen-y-cwm/ 'Roman Camp' (HA01, Plates 1-23) which falls in the present study area, Y Bwlwarcau Hill Fort (HA58), Caer Cwm Philip/ Camp N of Tonmawr (HA55) and Danish Camp (HA70). These sites are understood to reflect the use of Mynydd Margam for upland pasture although a defensive and/ or administrative use is also probable considering their strategic location. Caer Blaen-y-cwm/Roman Camp (HA01, Plates 1-23) is situated on a broad spur of Mynydd Margam and consists of a quadrangular enclosure covering 0.1ha that has an overall width of 11-15m. It is defended by two banks (4-6m wide and 0.7m high) separated by a ditch (1.5m deep) with an entrance on the south side measuring 4.5m wide. Cyril and Lady Fox (1934) considered that the enclosure formed the centre of a much larger enclosure about 210m across but RCAHMW argues that only the north side of this 'enclosure' is a genuine earthwork and should in fact be interpreted as an early-medieval cross-ridge dyke that runs from the River Kenfig westwards past Caer Blaen-y-cwm and continues into what is now forestry plantation (1976b p34). A hollow trail runs north to south through the site, appearing to utilise the southern entrance but then punches through the northern defences before meeting the cross-ridge dyke that appears to cut across the route.
- 2.6.9 Just 500m to the NE lies Y Bwlwarcau Hillfort (HA58). The remains comprise a small fairly strongly defended enclosure with slighter banks that protect a much larger area. The site has several phases of construction; the inner enclosure is pentagonal with an area of 0.3ha with a bank and ditch and counterscarp bank, which seems to have been superimposed on an earlier enclosure. This is surrounded by an outer pair of banks and ditches encompassing an area of c.4.4ha that appears to have been superseded by a slightly larger bank and ditch enclosing a D-shaped area of c.7.2ha. The outer enclosure also encloses a contemporary 'yard' as well as several later platform houses (RCAHMW 1976b p61). Meanwhile, Caer Cwm Philip/ Camp N of Tonmawr (HA55) is described as "two polygonal enclosures; the inner enclosure is trapezoidal in plan with an area of 0.4ha and is defended by a bank with external ditch whilst the outer enclosure is roughly pentangle with an area of c.2.7ha, bordered to the NE by a stream and with a ditch and bank enclosure forming three sides. The monument has suffered extensive plough damage and has been cut through by modern hedge banks but does not appear to have been affected by forestry plantation" (RCAHMW 1976b 57). To the north of the study area lies Cefn yr Argoed Camp (HA54) which is described as "an oval/ sub-rectangular enclosure measuring 45m long by 33m wide enclosing an area of 0.1ha, and is bounded by a substantial bank and external ditch (Cadw 2021). The site is currently situated in dense forestry plantation.

2.6.10 Roman and Early Medieval

- 2.6.11 RCAHMW recognises the Ffordd y Gyfraith/ Heol-y-Moch Way (HA04) as a possible Roman road (RRN23) due to the typically Roman engineering found near Laleston. This road would have acted as a spur running north from RR60 at Laleston towards the uplands via the strategically important area around Llangynwyd where a fort might be expected” (RCAHMW 2010, p329, RCAHMW 1976b p5). Whilst Caer Blaen-y-cwm/ Roman Camp (HA01) is marked on historic mapping as ‘Roman Camp’, and is of a comparable size to known Roman fortlets in Wales, without excavation one can only speculate that it may have served this function in what is an important strategic location. There are no known Roman sites in the vicinity, however, a large spread of Roman coin finds recorded by the Portable Antiquities Scheme (PAS) indicates an ongoing presence, with dates ranging the full span of Roman occupation.
- 2.6.12 A number of cross-ridge dykes survive in the study area including north of Caer Blaen-y-cwm/Roman Camp (HA01) and at Foel-y-Dyffryn (HA71) at the northern end of the proposed power line. These sites are frequent in the uplands of Glamorgan and are generally situated across significant ridgeways, often on Early-medieval administrative boundaries. This observation is supported by environmental evidence gathered from a number of these sites which indicate that the dykes were excavated into a *sol brun acid* containing *Ericaceae* pollen that was formed in the early medieval period (Crampton 1966; Lewis 2006). The presence of these dykes within the study area is indicative once again of the continued strategic importance of this location in the Early-medieval period.
- 2.6.13 The Bodvoc stone is an Early-medieval inscribed stone dated to the 6th century and originally situated in the centre of a ring cairn (HA56, Plates 28-30) as already described above. The well-squared pillar stone measures 1.01 metres tall and 33cm narrowing to 28cm wide with a thickness of 22cm. The inscription on the stone is translated as ‘Of Bodvocus – he lies here, the son of Catotigirnus and great-grandson of Eternalis Vedomavus’ and has been dated to the 6th century (RCAHMW 1976 p37). Robertson speculates that Bodvoc stone may be linked to the secondary construction phase and associated interment of Twmpath Dilwyth, which lies 120m to the east (2004 p32). The siting of this feature on the Heol-y-moch routeway (HA04), and the administrative and ecclesiastical boundary between the parishes of Margam and Llangynnd, points to a possible consolidation of administrative control in the period (*ibid*; Knight 1995). Bodvoc stone is one of a large concentration of Early-medieval inscribed stones in the Margam area which suggests that the medieval foundation of Margam Abbey may have roots in an earlier ecclesiastical centre.

2.6.14 Medieval

2.6.15 Surviving evidence of the exploitation of the uplands in the medieval period is largely limited to house platforms relating to *hafodau* settlement of which there are several examples in the study area. Cefn-yr-Argoed 2 (HA32, Plates 40-41) is located at c.360mOD on a SW facing slope of Foel Trawsnant. It is a small example measuring 8x4m in plan cut into the slope on a NE/SW axis, with a the 'hood' measuring 1m in height (RCAHMW 1982 p32-34, Locock 2001). Further examples can be found within Y Bwlwarcaw Hillfort (HA58), Llest-wen (GGAT00112-4), Moel Ton Mawr (NPRN15364) and throughout the wider upland landscape. These sites formed part of a survey carried out by archaeologists Cyril and Aileen Fox in 1934 who concluded that these platforms, which are generally found in pairs, represented a year round habitation rather than a seasonal one. Similar sites excavated at Gelligaer were found to contain 13th - 14th century pottery but no absolute dating has yet been undertaken (RCAHMW 2003 p33). It is unknown how these sites interacted with the other medieval sites found in the wider Margam area, such as Penhydd Grange, which was administered from Margam Abbey from the early 13th century, but they do appear to correlate with the expansion of monastic activity in the uplands at this time (*ibid*). The medieval period saw an expansion and monastic monopoly on the wool trade and sheep husbandry.

2.6.16 Further medieval sites in the vicinity include a beacon or signal post (HA68, Plates 36-38) believed to be sited beneath Mynydd Margam trig point and a (now destroyed) chapel dedicated to St Illtyd (HA09) believed to have been situated in Afan Argoed in the parish of Llangynwyd.

2.6.17 Post Medieval

2.6.18 The administrative focus within the study area continues into the Post-medieval period represented by a series of thirteen boundary markers marking the county boundary. The Garn-wen boundary stones (HA23-25, 27-31) and Heol-y-Moch boundary stones (HA19-20, 22) are marked on the 1884 1st edition Ordnance Survey map but none were located during the site walkover and must be considered impacted upon by forestry plantation. The Post-medieval period sees a continuation of a rural economy with scattered farmsteads, such as the Grade II listed Gilfach-gynol farmhouse (HA59) and a number of sheepfolds indicating the continuation of upland pasture in the study area (HA12). Some pre-industrial enclosure boundaries are visible, e.g. (HA46), however the archaeological record for the Post-medieval period is dominated by sites related to extractive activity; a pattern that is representative of the huge expansion of industrial activity that occurred throughout Glamorgan at this time.

- 2.6.19 By the time of the 1842 tithe map of the parish of Llangynwyd, the nearby Llynfi/Cambrian Ironworks (GGAT01321m) were in operation and the apportionments suggest that the uplands were being exploited for industry, possibly for quarrying (parcels 4, 7 & 8, now under Maesteg Golf Course). By 1877 (First Edition Ordnance Survey (OS) map) the Llynfi Ironworks was much expanded with vast areas of quarrying, now laid to public amenity land and housing. Just to the north was Dyffryn Pit which was sunk in 1831 to provide coal for the ironworks and was evidently well established by 1877 with several 'Old Levels' marked on the OS map, as well as the two substantial quarries at Garn-wen (HA26, Plates 64-73) which communicated with the colliery by tramway (HA69). Production at the ironworks is known to have ceased in 1885 and the 1900 OS map marks the Dyffryn Colliery as 'disused' with coal extraction activities being concentrated elsewhere.
- 2.6.20 Extractive features are marked on the 1877 map at Cae'r Mynydd (GGAT03976w, 03984w-03985w, 03987w-03988w), which were linked to the Bryn Colliery situated to the west on the Nant Ffwrdd Wylt river. However, the 1899 OS map shows the Cae'r Mynydd site to be disused by this date. Meanwhile, extractive activity began at Dyffryn Rhondda Colliery on Foel Trawnant (NPRN516682, 516689, 516679, 516680) by 1900, whilst quarrying activity also continued at Foel Trawnant (HA35-38) and to the south of the study area at Moel Tonmawr (HA16-17). Industrial sites in the Margam region were soon to be linked by the construction by 1900 of the Cwmceryn Tunnel (HA14) and the Cwmceryn Tramway (HA13) that was established as a branch of the Port Talbot Railway (HA52), described by Barrie as a 'fearsome line' on account of its steep gradient of 1:40. The railway, which was established by C.R.M Talbot of Margam, enabled the transport of industrial produce from the region to the newly founded Port Talbot Docks (1994 p190).
- 2.6.21 Further phases of expansion are marked on the 3rd Edition OS map with the establishment of Ton-hir Colliery (HA02, Plates 52-58) which was linked to the Port Talbot Railway at the east end of the Cwmceryn Tunnel by tramway. The site visit confirmed that a number of features associated with the colliery are visible on the ground, including a shaft and possible ponds, and the 2m DTM lidar indicates that the fingerbar spoil tips appear to be fairly *intact* beneath the forestry plantation. The Ton-hir Colliery was established in 1902 to mine for house and manufacturing coal, employing 160 men at its peak in 1914, however its activities were short-lived and the colliery closed in 1918 (welshcoalmines.co.uk Accessed 12/04/21).

2.7 Previous Studies

- 2.7.1 In 1921 a number of excavations were carried out by National Museums Wales on sites in the vicinity of the development area including Rhyd Llechws Round Barrow (HA08, E000457) and Bodvoc Stone Ring Cairn (HA56, E000460) which both lie in the Primary (250m radius) Study Area. No records survive of these excavations.
- 2.7.2 2001 Field Visit by GGAT to Llanfugeil Ydd Mound as part of the Funerary and Ritual Sites project (Evans 2002) (E001725). The site lies within the Primary (250m radius) Study Area and is situated within the curtilage of Caer Blaen-y-Cwm/ Roman Camp (HA01). The survey concluded that the site was not a cairn but possibly a mound associated with a holloway.

- 2.7.3 In 2001 a desk-based assessment was carried out by Archaeological Solutions Ltd for a proposed wind farm on Mynydd Margam (E002643) (Vice 2001). A subsequent resistivity survey (E004910) identified a number of sites in the vicinity of the current development area including a series of possibly prehistoric linear features and ditches to the east of Roman Camp (SAMGm058) (Boucher 2002).
- 2.7.4 A Historic Landscape Characterisation of Mynydd Margam Registered Landscape of Special Historic Interest was commissioned by Cadw and carried out by GGAT in 2003 (E004838). This detailed landscape study (LANDMAP Level 4) resulted in a total of 17 Historic Landscape Character Areas (Robertson 2003).
- 2.7.5 A wider landscape study was carried out in 2004 by GGAT to inform the LANDMAP Historic Landscape Aspect (Level 3) for Neath Port Talbot. This resulted in a total of 78 Aspect Areas (Lewis 2004).
- 2.7.6 In 2008 a desktop study of woodlands was carried out in Maesteg by GGAT to inform the 'Better Woodlands for Wales' Management Plan (E006622).
- 2.7.7 In 2012 the RCAHMW commissioned Trysor to undertake an Upland Survey to identify and assess heritage assets in four discrete upland areas of West Glamorgan including Foel Trawsnant which was included in Area 1 (Hall & Sambrook 2012).
- 2.7.8 An Environmental Impact Assessment (EIA) and ASIDOHL was carried out in 2018 by Wood Environment & Infrastructure Solutions Ltd on the proposed Foel Trawsnant Wind Farm that the current proposed power line will be servicing (P2014/0825/ES). The assessment considered ten Scheduled Monuments and the Mynydd Margam Historic Landscape for potential setting effects caused by the wind farm for but none were found to be subject to significant effects.

2.8 Cartographic & Aerial Photographic Evidence

- 2.8.1 The proposed powerline skirts the western edge of the 1842 tithe map of the Parish of Llangonoyd in the County of Glamorgan which indicates that at this time the land was laid to upland pasture with some scattered farmsteads. The apportionment indicates that landowners include Sir Christopher Rice Mansell Talbot of Margam estate and The Earl of Dunraven, although some landholders such as the Cambrian Company and John Homfray indicate industrial investment with the Llynfi Cambrian Ironworks and associated housing present in the valley at Maesteg. There is no tithe map for Margam.
- 2.8.2 The 1877 First Edition Ordnance Survey Map shows a similar picture for the development area with the addition of areas of quarrying e.g. at Garn-wen, presumably workings related to the coal levels at Dyffryn to the east. The 1899 Second Edition shows the Cwmceryn tunnel constructed to convey the Port Talbot railway beneath the mountain. The 1919 Third Edition marks the Ton-Hir Colliery (HA02) with associated finger bar tips and tramway located on the proposed power line just north of the modern B4282 Neath Road. A rifle range is also marked to the east of the colliery with targets within the old Garn-wen quarry (HA45). The 1962 Edition indicates the establishment of the Maesteg Golf Course together with the wide introduction of forestry plantation on Mynydd Margam and Mynydd Bach that has had the effect of obscuring many pre-existing sites and continues to dominate large parts of the landscape today.

- 2.8.3 Aerial photographs (APs) of the development area were sourced from the Central Register of Aerial Photos Wales and were found to be largely in line with the map evidence. The Ton-Hir Colliery tips are particularly clear as are the numerous Scheduled camp sites. One possible unrecorded ringwork is indicated east of Carreg Bica at Fynnon-las, (adjacent to the eastern entrance of the Cwmceryn Railway Tunnel) (SS 83774 90982) and another just west of Hafod Decca (SS 84313 86984), however, both of these fall outside the current study area.
- 2.8.4 The Natural Resources Wales LiDAR 1m digital terrain model (DTM) is incomplete for the study area but reveals the terrain that underlies the existing forestry plantation, particularly the Ton-Hir Colliery tips which appear to be fairly intact. Y Bwlwarcaw hillfort (HA58) is particularly well depicted. The survey does not extend to Caer Blaeny-cwm/ Roman Camp (HA01) and the other sites on the southern part of the proposed power line.

2.9 Site Visit (Plates 1 - 75)

- 2.9.1 A series of walkover surveys were conducted on 8th January 2019, 27th January 2021 and 1st March 2021. The Development Area was photographed from key views.
- 2.9.2 Heritage assets within the Primary (250m radius) Study Area and statutory designated sites within a Secondary (1km radius) Study Area were visited and assessed for indirect and setting effects and key views to and from the development area were photographed. Historic Landscape Character Areas were visited and key views to and from the development area were photographed.
- 2.9.3 The survey was undertaken in good clear weather and strong sunlight.

3 Identified Heritage Assets

3.1 Sites of Archaeological and Historical Interest (Figures 3-8, Plates 1-75)

- 3.1.1 There are 52 heritage assets within the Primary (250m radius) Study Area. Whilst there are no heritage assets directly on the route of the proposed power line, the southern curtilage boundary of Scheduled Monument Caer Blaen-y-cwm/Roman Camp (HA01) does fall in very close proximity at a distance of 20m.
- 3.1.2 For the purposes of the assessment of setting and significance of statutory designated heritage assets a further nine sites have been identified within a 1km radius.
- 3.1.3 The proposed power line crosses into the Mynydd Margam Historic Landscape of Special Historic Interest (HLW(WGI/MGI)2), specifically the three Historic Landscape Character Areas Llangynwyd (HLCA005), Mynydd Margam (HLCA010) and Upper Cwm Kenfig (HLCA013).

Table 3. Identified Heritage Assets

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value
In Primary 250m radius Study Area								
1	GM058, GGAT00759w, NPRN301304	Caer Blaen- Y- Cwm Margam	SS83338 807	Iron Age	Hillfort	Scheduled Monument	GM058	A
2	TW01	Ton-Hir Colliery	SS83704 92050	Post-Medieval	Colliery			C
3	GGAT01078w	Trackways - Penhydd	SS80905 94331	Medieval	Trackway			C
4	GGAT01077w	Heol-y-moch (The Pig's Way)	SS86040 95910	Medieval	Trackway			C
5	GGAT01076w	Road - Margam to Llangynwyd	SS80778 623	Medieval	Road			C
6	GGAT00761w	Llanfugeil Ydd Mound	SS83238 810	Unknown	Mound			B
7	GGAT00762w	Field Boundary, Margam	SS83138 824	Unknown	Field boundary			D
8	GGAT00750w	Rhyd Llechws	SS82014 88679	Bronze Age	Round barrow			B
9	GGAT04666m	Illtud's Chapel In Afan Argoed	SS8493	Medieval	Chapel			B
10	GGAT04545w	Rhyd Blaen-Y- Cwm Entrenchment	SS83250 88260	Unknown	Earthwork			C
11	GGAT04294w	Cwm Goblyn Tramway	SS82952 90561	Post-Medieval	Tramway			C
12	GGAT04175w	Nant-Y-Glo Sheepfold	SS82387 89197	Post-Medieval	Sheep fold			D
13	GGAT05978w	Cwmceryn Tramway	SS83832 91435	Post-Medieval	Tramway			C

14	GGAT05976w, NPRN415076	Cwmcerwyn Tunnel	SS83510 91230	Post- Medieval	Railway Tunnel			B
15	GGAT03900w, NPRN307285	Rhyd Llechws Structure	SS82425 88420	Post- Medieval	Structure			D
16	GGAT03880w	Moel Tonmawr Quarry	SS83687 87466	Post- Medieval	Quarry			D
17	GGAT03881w	Moel Tonmawr Old Quarry	SS82972 87843	Post- Medieval	Quarry			D
18	GGAT03975w, NPRN404869	Rhiw Tor Cymry Battle Site	SS83809 92765	Post- Medieval	Battlefield			C
19	GGAT03912w	Heol Y Moch Boundary Stone II	SS82813 89455	Post- Medieval	Boundary stone			C
20	GGAT03913w	Heol Y Moch Boundary Stone III	SS82867 89293	Post- Medieval	Boundary stone			C
21	GGAT03910w	Heol Y Moch Enclosure	SS82733 89778	Post- Medieval	Enclosure			D
22	GGAT03911w	Heol Y Moch Boundary Stone I	SS82721 89736	Post- Medieval	Boundary stone			C
23	GGAT04001w	Garn Wen Boundary Stone IV	SS83912 93205	Post- Medieval	Boundary stone			C
24	GGAT03998w	Garn Wen Boundary Stone I	SS83809 93433	Post- Medieval	Boundary stone			C
25	GGAT03999w	Garn Wen Boundary Stone II	SS83968 93430	Post- Medieval	Boundary stone			C
26	GGAT04013w	Garn Wen Quarry	SS83941 92700	Post- Medieval	Quarry			C
27	GGAT04014w	Garn Wen Stones	SS83914 92667	Post- Medieval	Cairn			C
28	GGAT04011w	Garn Wen Boundary Stone XIV	SS83810 92794	Post- Medieval	Boundary stone			C
29	GGAT04012w	Garn Wen Boundary Stone XV	SS83857 92751	Post- Medieval	Boundary stone			C
30	GGAT04009w	Garn Wen Boundary Stone XII	SS83824 92949	Post- Medieval	Boundary stone			C
31	GGAT04010w	Garn Wen Boundary Stone XIII	SS83786 92861	Post- Medieval	Boundary stone			C
32	GGAT00710w, NPRN15314	Cefn Yr Argoed 2	SS83679 396	Medieval	Long hut			B
33	GGAT00711w	Carreg Bica (2)	SS83489 123	Bronze Age	Standing stone			B
34	516757	Foel Trawsnant, Level	SS83624 93994	Post Medieval	Level			C
35	516758	Foel Trawsnant, Gully I	SS83624 94024	Post Medieval	Trial mine			C
36	516372	Cae Chwarel, Tramway III	SS83759 92287	Post Medieval	Tramway			C

37	516760	Foel Trawsnant, Quarry I	SS83559 93992	Post Medieval	Quarry			C
38	516762	Foel Trawsnant, Trial Mine Working	SS83583 93972	Post Medieval	Trial mine (possible)			C
39	516759	Foel Trawsnant, Gully III	SS83595 94014	Post Medieval	Trial mine			C
40	516755	Foel Trawsnant, Quarry III	SS83760 94003	Post Medieval	Quarry			C
41	516756	Foel Trawsnant, Quarry II	SS83726 94018	Post Medieval	Quarry			C
42	516761	Foel Trawsnant, Gully II	SS83565 93978	Post Medieval	Trial mine (possible)			C
43	516754	Foel Trawsnant, Quarry IV	SS83776 93997	Post Medieval	Quarry			C
44	24493	Rhyd Blaen-Y-Cwm, Pillow Mound?	SS83138 824	Post Medieval, Medieval	Pillow mound (possible)			D
45	TW02	Rifle Range	SS83951 92241	Post Medieval	Rifle Range			C
46	TW03	Pre-industrial field boundary	SS83749 92302	Post Medieval	Field Boundary			D
47	TW04	Site of quarrying or industrial activity	SS83875 93554	Post Medieval	Industrial site			C
48	TW05	Llyndwr pond	SS82812 88700	unknown	Pond			D
49	TW06	Recumbent memorial stone	SS82870 89614	Modern	Memorial stone			C
50	TW07	Historic field boundary	SS83438 91189	Medieval	Field Boundary			D
51	TW08	Linear east of GM058	SS83459 87983	Earl-Med/ Med	Linear - possibly cross-ridge dyke			C
52	GGAT01435	Port Talbot Railway	SS86859 086	Post-medieval	Railway			C

Designated sites within 1km								
53	GM547, GGAT04017w	Cae'r Mynydd Ventilation Furnace and Mine	SS82797 92645	Post Medieval/M odern	Colliery	Scheduled Monument	GM547	A
54	GM245	Cefn yr Argoed Camp	SS83225 94056	Prehistoric	Enclosure	Scheduled Monument	GM245	A
55	GM057, GGAT00758w	Camp N of Tonmawr	SS82532 86999	Prehistoric	Enclosure	Scheduled Monument	GM057	A
56	GM443	Site of Bodvoc Stone	SS83074 88784	Prehistoric	Ring cairn	Scheduled Monument	GM443	A
57	GM557, GGAT00754w	Twmpath Diwlith Round Barrow	SS83221 88788	Prehistoric	Round barrow	Scheduled Monument	GM557	A
58	GM059, GGAT00116m	Y Bwlwarcu	SS83778 88536	Prehistoric	Hillfort	Scheduled Monument	GM059	A
59	11375	Gilfach-ganol farmhouse	SS84900 87561	Post Medieval	Farmhouse	LB Grade II	11375	B
60	20432	Bee boles and stile in garden wall at Gilfach- uchaf farm	SS84875 87583	Post Medieval	Bee bole	LB Grade II	20432	B
61	22167	Kiln block at former Bryn Brickworks	SS82841 91683	Post Medieval	Industrial brick kiln	LB Grade II	22167	B
Other sites included in the assessment								
62	GM085, GGAT00124m	Llangynwyd Castle	SS85137 88692	Medieval	Castle	Scheduled Monument	GM085	A
63	GGAT02102w	Group of tools, Neath Port Talbot	SS83258 860	Mesolithic	Lithic Scatter			C
64	GGAT00752w	Llyndwr Fawr East	SS82917 88759	Bronze Age	Round Barrow			C
65	GGAT00751w	Llyndwr Fawr Southeast	SS82842 88687	Bronze Age	Round Barrow			C
66	GM056, GGAT00774w	Danish Camp	SS82084 87069	Iron Age	Enclosure	Scheduled Monument	GM056	A
67	GGAT01862.0 m	Foel-y-Dyffryn	SS84189 386	Unknown	Dyke			C
68	GGAT01155w	Circular mound, Mynydd Margam	SS81988 9	Medieval	Beacon			C
69	GGAT03378m	Garn-wen Tramway	SS84352 92549	Post- medieval	Tramway			C
70	GM090, GGAT00755m	Camp 530m E of Tonmawr	SS83086 86208	Iron Age	Enclosure	Scheduled Monument	GM090	A

4 Assessment of Heritage Assets

4.1 Potential Direct Impacts of the Development on Heritage Assets

- 4.1.1 The potential impact of the proposed development on heritage assets has been assessed using the design information provided by Western Power Distribution. The plans are currently at a preliminary stage and therefore a number of assumptions have been made in order to carry out the assessment. The assessment assumes that an H-pole of 10 metres in height could be placed at any point along the proposed route and the route has been assigned a minimal width of 2m.
- 4.1.2 The assessment concluded that the proposed powerline would have no direct impact on known heritage assets. Cwmcerwyn Tunnel (HA14) was assessed for potential direct effects but was found to be at sufficiently depth to avoid any potential risk from groundworks.
- 4.1.3 The proposed powerline would pass in very close proximity to the southern boundary of Caer Blaen-y-cwm/ Roman Camp (HA01) (at a distance of 20m) and protective measures should be taken to ensure that the route of the power line does not intrude on the curtilage of the site.
- 4.1.4 The proposed powerline would have a direct impact on Mynydd Margam Historic Landscape of Special Historic Interest (HLW(WGI/MGI)2), specifically the three Historic Landscape Character Areas Llangynwyd (HLCA005), Mynydd Margam (HLCA010) and Upper Cwm Kenfig (HLCA013). The direct effect on the Historic Landscape has been determined through the ASIDOHL2 process (see section 7).
- 4.1.5 There is the potential for direct impact on unknown buried archaeological deposits in the H pole locations, however, it is likely that forestry activity has already disturbed much of the development area.

4.2 Potential Indirect Impacts of the Development on Heritage Assets

- 4.2.1 For the purposes of the assessment of indirect impacts from the proposed powerline on heritage assets, only assets within a primary (250m radius) study area and statutory designated heritage assets within a secondary (1km radius) study area have been assessed.
- 4.2.2 The assessment concluded that eight heritage assets within the primary (250m radius) could potentially be subject to an indirect impact from the proposed scheme. The most significant of these is Caer Blaen-y-cwm/Roman Camp (HA01) which would have intervisibility with the proposed powerline both from the southern curtilage boundary of the monument where the powerline will pass in close proximity (c.20m), and from the centre of the monument itself where the line will cross the south and west facing outlook of the site, particularly where it crosses the head of Cwm Kenfig. The effect of this indirect impact has been assessed as **Very Slight** as whilst the proposed powerline will be noticeable it will cause little discernible severance of cultural links.

- 4.2.3 The other site of note is Cefn-yr-Argoed 2 House Platform (HA32), located to the northern end of the proposed route of the powerline, which has also been assessed as potentially being subject to a **Very Slight** impact. In addition, there are three quarry sites (HA 40-41,43) and an unrecorded extractive site (HA47) in this vicinity that would also be **Very Slightly** affected. Finally, the Ffordd -y-Gifraith/ Heol-y-moch Way (HA04) and the Penhydd Trackway (HA03) will have some intervisibility with the proposed power line where they cross the proposed route, but these linear features extend well outside the study area and the overall impact of the development is minimal or **'Very Slight'**.
- 4.2.4 The proposed power line would have a potential indirect impact on six Historic Landscape Character Areas within Mynydd Margam Historic Landscape of Special Historic Interest (HLW(WGI/MGI)2). The indirect effects on the Historic Landscape will be determined through the ASIDOHL2 process (see section 7).

Table 4. Assessment of direct and indirect effects on heritage assets

Fig ID	ID	Name	NGR	Period	Type	Designation	Designation ID	Value	Rarity	Documentation/Association	Group Value	Survival/Condition	Direct Effect	Significance of Direct Effect	Indirect Effect	Setting Effect Yes/No
In Primary 250m radius Study Area																
1	GM058, GGAT00759w, NPRN301304	Caer Blaen- Y- Cwm Margam	SS83338807	Iron Age	Hillfort	Scheduled Monument	GM058	A	High	None	Modertate	Near Destroyed	None	None	Very Slight	Yes
2	TW01	Ton-Hir Colliery	SS8370492050	Post-Medieval	Colliery			C	Low	None	Moderate	Near Destroyed	None	None	None	No
3	GGAT01078w	Trackways - Penhydd	SS8090594331	Medieval	Trackway			C	Low	None	Low	Not known	None	None	Very Slight	No
4	GGAT01077w	Heol-Y-Moch (The Pig's Way)	SS8604095910	Medieval	Trackway			C	Low	None	Low	Not known	None	None	Very Slight	No
5	GGAT01076w	Road - Margam To Llangynwyd	SS80778623	Medieval	Road			C	Low	None	Low	Not known	None	None	None	No
6	GGAT00761w	Llanfugeil Ydd Mound	SS83238810	Unknown	Mound			B	Low	None	None	Destroyed	None	None	None	No
7	GGAT00762w	Field Boundary, Margam	SS83138824	Unknown	Field boundary			D	Low	None	Low	Not known	None	None	Very Slight	No
8	GGAT00750w	Rhyd Llechws	SS8201488679	Bronze Age	Round barrow			B	Moderate	None	Moderate	Destroyed	None	None	None	No
9	GGAT04666m	Illtud's Chapel In Afan Argoed	SS8493	Medieval	Chapel			C	Low	Low	Low	Destroyed	None	None	None	No
10	GGAT04545w	Rhyd Blaen-Y- Cwm Entrenchment	SS8325088260	Unknown	Earthwork			C	Moderate	None	Moderate	Not known	None	None	None	No
11	GGAT04294w	Cwm Goblyn Tramway	SS8295290561	Post-Medieval	Tramway			C	Low	Low	Moderate	Not known	None	None	None	No
12	GGAT04175w	Nant-Y-Glo Sheepfold	SS8238789197	Post-Medieval	Sheep fold			D	Low	None	None	Near destroyed	None	None	None	No
13	GGAT05978w	Cwmcerwyn Tramway	SS8383291435	Post-Medieval	Tramway			C	Low	Low	Moderate	Not known	None	None	None	No
14	GGAT05976w, NPRN415076	Cwmcerwyn Tunnel	SS8351091230	Post-Medieval	Railway Tunnel			B	Low	Low	Moderate	Not known	None	None	None	No
15	GGAT03900w, NPRN307285	Rhyd Llechws Structure	SS8242588420	Post-Medieval	Structure			D	Low	None	None	Not known	None	None	None	No
16	GGAT03880w	Moel Tonmawr Quarry	SS8368787466	Post-Medieval	Quarry			D	Low	None	Low	Intact	None	None	None	No
17	GGAT03881w	Moel Tonmawr Old Quarry	SS8297287843	Post-Medieval	Quarry			D	Low	None	Low	Intact	None	None	None	No
18	GGAT03975w, NPRN404869	Rhiw Tor Cymry Battle Site	SS8380992765	UNKNOWN,	Battlefield			C	High	None	None	Destroyed	None	None	None	No
19	GGAT03912w	Heol Y Moch Boundary Stone li	SS8281389455	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
20	GGAT03913w	Heol Y Moch Boundary Stone lii	SS8286789293	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
21	GGAT03910w	Heol Y Moch Enclosure	SS8273389778	Post-Medieval	Enclosure			D	Low	None	None	Not known	None	None	None	No

22	GGAT03911w	Heol Y Moch Boundary Stone I	SS8272189736	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
23	GGAT04001w	Garn Wen Boundary Stone IV	SS8391293205	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
24	GGAT03998w	Garn Wen Boundary Stone I	SS8380993433	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
25	GGAT03999w	Garn Wen Boundary Stone II	SS8396893430	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
26	GGAT04013w	Garn Wen Quarry	SS8394192700	Post-Medieval	Quarry			C	Low	None	High	Intact	None	None	None	No
27	GGAT04014w	Garn Wen Stones	SS8391492667	Post-Medieval	Cairn			C	Low	None	High	Destroyed	None	None	None	No
28	GGAT04011w	Garn Wen Boundary Stone XIV	SS8381092794	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
29	GGAT04012w	Garn Wen Boundary Stone XV	SS8385792751	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
30	GGAT04009w	Garn Wen Boundary Stone XII	SS8382492949	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
31	GGAT04010w	Garn Wen Boundary Stone XIII	SS8378692861	Post-Medieval	Boundary stone			C	Low	None	High	Destroyed	None	None	None	No
32	GGAT00710w, NPRN15314	Cefn Yr Argoed 2	SS83679396	Medieval	Long hut			B	Moderate	None	Low	Damaged	None	None	Very Slight	No
33	GGAT00711w	Carreg Bica (2)	SS83489123	Bronze Age	Standing stone			B	High	None	Low	Destroyed	None	None	None	No
34	NPRN516757	Foel Trawsnant, Level	SS8362493994	Post Medieval	LEVEL			C	Low	None	Low	Near destroyed	None	None	None	No
35	NPRN516758	Foel Trawsnant, Gully I	SS8362494024	Post Medieval	TRIAL MINE			C	Low	None	Low	Near destroyed	None	None	None	No
36	NPRN516372	Cae Chwarel, Tramway III	SS8375992287	Post Medieval	TRAMWAY			C	Low	None	Low	Near destroyed	None	None	None	No
37	NPRN516760	Foel Trawsnant, Quarry I	SS8355993992	Post Medieval	QUARRY			C	Low	None	Low	Near destroyed	None	None	None	No
38	NPRN516762	Foel Trawsnant, Trial Mine Working	SS8358393972	Post Medieval	TRIAL MINE (POSSIBLE)			C	Low	None	Low	Near destroyed	None	None	None	No
39	NPRN516759	Foel Trawsnant, Gully III	SS8359594014	Post Medieval	TRIAL MINE			C	Low	None	Low	Near destroyed	None	None	None	No
40	NPRN516755	Foel Trawsnant, Quarry III	SS8376094003	Post Medieval	QUARRY			C	Low	None	Low	Near destroyed	None	None	Very Slight	No
41	NPRN516756	Foel Trawsnant, Quarry II	SS8372694018	Post Medieval	QUARRY			C	Low	None	Low	Near destroyed	None	None	Very Slight	No
42	NPRN516761	Foel Trawsnant, Gully II	SS8356593978	Post Medieval	TRIAL MINE (POSSIBLE)			C	Low	None	Low	Near destroyed	None	None	None	No
43	NPRN516754	Foel Trawsnant, Quarry IV	SS8377693997	Post Medieval	QUARRY			C	Low	None	Low	Near destroyed	None	None	Very Slight	No
44	NPRN24493	Rhyd Blaen-Y-Cwm, Pillow Mound?	SS83138824	Post Medieval, Medieval	PILLOW MOUND (POSSIBLE)			D	Low	None			None	None	None	No
45	TW02	Rifle Range	SS8395192241	Post Medieval	Rifle range			C	Low	None	Low	Destroyed	None	None	None	No
46	TW03	Pre-industrial field boundary	SS8374992302	Post Medieval	Field Boundary			D	Low	None	Low	Damaged	None	None	None	No

47	TW04	Site of quarrying or industrial activity	SS8387593554	Post Medieval	Industrial site			C	Low	None	Moderate	Near destroyed	None	None	Very Slight	No
48	TW05	Llyndwr pond	SS8281288700	unknown	Pond			D	Low	None	Low	Intact	None	None	None	No
49	TW06	Recumbent memorial stone	SS8287089614	Modern	Memorial stone			C	Low	None	Low	Intact	None	None	None	No
50	TW07	Historic field boundary	SS8343891189	Medieval	Field Boundary			D	Low	None	Low	Damaged	None	None	None	No
51	TW08	Linear east of GM058	SS8345987983	Earl-Med/ Med	Linear - possibly cross-ridge dyke			C	High	None	Moderate	Unknown	None	None	None	No
52	GGAT01435	Port Talbot Railway	SS86859086	Post-medieval	Railway			C	Low	Low	Moderate	Destroyed	None	None	None	No
Designated sites within 1km																
53	GM547, GGAT04017w	Caer'r Mynydd Ventilation Furnace and Mine	SS8279792645	Post Medieval/Modern	Colliery	Scheduled Monument	GM547	A	High	Low	Moderate	Intact	None	None	None	No
54	GM245	Cefn yr Argoed Camp	SS8322594056	Prehistoric	Enclosure	Scheduled Monument	GM245	A	High	None	Moderate	Unknown	None	None	None	No
55	GM057, GGAT00758w	Caer Cwm Philip/ Camp N of Tonmawr	SS8253286999	Prehistoric	Enclosure	Scheduled Monument	GM057	A	High	None	Moderate	Unknown	None	None	None	No
56	GM443	Site of Bodvoc Stone	SS8307488784	Prehistoric	Ring cairn	Scheduled Monument	GM443	A	High	Low	Moderate	Damaged	None	None	None	No
57	GM557, GGAT00754w	Twmpath Diwlith Round Barrow	SS8322188788	Prehistoric	Round barrow	Scheduled Monument	GM557	A	High	None	Moderate	Damaged	None	None	None	No
58	GM059, GGAT00116m	Y Bwlwarcu	SS8377888536	Prehistoric	Hillfort	Scheduled Monument	GM059	A	High	None	Moderate	Damaged	None	None	None	No
59	11375	Gilfach-ganol farmhouse	SS8490087561	Post Medieval	Farmhouse	LB Grade II	11375	B	Low	None	Low	Intact	None	None	None	No
60	20432	Bee boles and stile in garden wall at Gilfach-uchaf farm	SS8487587583	Post Medieval	Bee bole	LB Grade II	20432	B	Moderate	None	Low	Intact	None	None	None	No
61	22167	Kiln block at former Bryn Brickworks	SS8284191683	Post Medieval	Industrial brick kiln	LB Grade II	22167	B	High	None	Low	Damaged	None	None	None	No
Other sites included in the assessment																
62	GM085, GGAT00124m	Llangynwyd Castle	SS8513788692	Medieval	Castle	Scheduled Monument	GM085	A	High	Low	Low	Damaged	None	None	None	No
63	GGAT02102w	Group of tools, Neath Port Talbot	SS83258860	Mesolithic	Lithic Scatter			C	High	None	Low	Moved	None	None	None	No
64	GGAT00752w	Llyndwr Fawr East	SS8291788759	Bronze Age	Round Barrow			C	Moderate	None	Moderate	Damaged	None	None	None	No
65	GGAT00751w	Llyndwr Fawr Southeast	SS8284288687	Bronze Age	Round Barrow			C	Moderate	None	Moderate	Damaged	None	None	None	No
66	GM056, GGAT00774w	Danish Camp	SS8208487069	Iron Age	Enclosure	Scheduled Monument	GM056	A	High	None	Moderate	Unknown	None	None	None	No
67	GGAT01862.0m	Foel-y-Dyffryn	SS84189386	Unknown	Dyke			C	High	None	Moderate	Unknown	None	None	None	No

68	GGAT01155w	Circular mound, Mynydd Margam	SS819889	Medieval	Beacon			C	Moderate	None	Moderate	Damaged	None	None	None	No
69	GGAT03378m	Garn-wen Tramway	SS8435292549	Post-medieval	Tramway			C	Low	None	Low	Unknown	None	None	None	No
70	GM090, GGAT00755m	Camp 530m E of Tonmawr	SS8308686208	Iron Age	Enclosure	Scheduled Monument	GM090	A	High	None	Moderate	Unknown	None	None	None	No

4.2.5 The last column "Setting Effects Y/N" identifies those heritage assets that may have indirect visual impacts to the setting of the monument (Stage 1 as set out in *Setting of Historic Assets in Wales 2017 (The Historic Environment (Wales) Act 2016, Annex 6)*).

4.3 Setting and Significance

4.3.1 Stage 1: Identified Statutory Designated Assets

4.3.2 Potential indirect impacts of the proposed powerline on heritage assets are confined to the impacts upon the setting of International and National value heritage assets (A* and A class), these include Scheduled Ancient Monuments, Registered Landscapes, Parks and Gardens and sometimes Grade I and I* Listed Buildings. Grade II and II* buildings are considered if their setting includes or is included with a Registered Landscape or Park and Garden, as is the case here.

4.3.3 Seven Scheduled Ancient Monuments and three Grade II Listed Buildings have been identified within a secondary (1km radius) study area. The site visits confirmed that only one of these sites, Caer Blaen-y-cwm/Roman Camp (HA01), would have intervisibility with the proposed power line and should be assessed for setting effects, which will be undertaken as part of the ASIDOHL2 (see Section 7).

4.3.4 Through the use of Zone of Theoretical Visibility (ZTV) analysis, six of the seventeen HLCAs within Mynydd Margam Historic Landscape of Special Historic Interest (HLW(WGI/MGI)2) have been identified as being subject to a potential indirect impact from the proposed powerline.

4.3.5 Stage 2 & 3: Defining and Evaluating the Setting and Significance of Heritage Assets

4.3.6 The chapter thus far sets out the context and extent of the identified heritage assets, which contribute to the Stage 1 and 2 assessment of setting and significance. It has defined the value of heritage assets and has assessed the potential direct and indirect effects of the Proposed Scheme, which also contribute to the overall understanding of heritage assets and their setting (Stage 2 assessment of setting and significance).

4.3.7 The assessment of the Cumulative Visual Effect is the culmination of the assessment of value, degree of change and corresponding effects. This is partly a subjective exercise based on the assessor's experience and knowledge.

Table 5. Assessment of significance and setting effects

	Name	Value	Significance values				Type of visual effect/change	Magnitude of Effect	Significance of Effect	Cumulative Visual Effect
			Evidential Value	Historical Value	Aesthetic Value	Communal Value				
SAMGm058, GGAT00759w, NPRN301304, HA01	Caer Blaen-y-cwm/ Roman Camp	A	High	High	Moderate	Moderate	Visual effect	Very Slight	Key views and/ or essential lines of sight from the heritage asset are noticeable resulting in little discernible severance of cultural heritage links	Very Slight

4.3.8 Summary of Significance and Setting

4.3.9 The assessment concluded that there is potential for the proposed powerline to have a **Very Slight** impact on the setting of Caer Blaen-y-cwm/ Roman Camp (HA01). The key views and/ or essential lines of sight from the heritage asset are noticeable resulting in little discernible severance of cultural heritage links.

4.3.10 An assessment of potential landscape effects of the proposed development, in particular the direct and indirect effects to historic landscapes on the Register, have been completed in the ASIDOHL2 below (see Section 7).

5 Mitigation Recommendations

- 5.1.1 The assessment has identified the potential direct and indirect effects of the proposed development together with an assessment of the setting and significance of high value heritage assets. Following the results of the heritage impact assessment the following mitigation strategies are recommended.
- 5.1.2 It is recommended that measures are put in place to ensure that the the proposed powerline does not infringe into the scheduled curtilage of the Caer Blaen-y-cwm/Roman Camp (HA01). An archaeological watching brief should be implemented on the installation of this section of the route to reduce the direct impact of the proposed development on the archaeological resource.
- 5.1.3 It is also recommended that an archaeological watching brief be placed on groundworks during the installation of H-poles positioned on land unaffected by formal forestry trackways in order to identify, record and mitigate any unknown archaeological deposits. It is considered that deposits within forestry trackway areas are very likely to have already been significantly disturbed.
- 5.1.4 The potential indirect visual effects caused by the proposed power line are already softened by the presence of dense forestry plantation in the topographically most prominent sections of the proposed route. No further mitigation can be recommended for these visual effects, which will remain for the duration of its operational lifetime.

6 Assessment of Residual Impacts

- 6.1.1 Provided the mitigation strategy noted in Section 5 above is implemented, and in consultation with Cadw and the archaeological advisors to the LPA, the potential direct impacts to Caer Blaen-y-cwm/ Roman Camp (HA01) can be reduced to '**None**'.
- 6.1.2 An archaeological watching brief on groundworks would reduce the potential direct effects on unknown archaeological deposits to '**None**'.
- 6.1.3 The indirect visual effects caused by the proposed power line, described in Section 4 above will remain for the duration of its operational lifetime.

7 Assessment of the Significance of the Impact of the Development on Historic Landscape Areas (ASIDOHL2)

7.1 Project Background

- 7.1.1 The proposed scheme comprises a proposed power connection line for Foel Trawsnant Windfarm, Neath Port Talbot. The plans include a high voltage power line with a total length of 9.9km (with an underground section of c.940m beneath Maesteg Golf Course) running south from the windfarm out Foel Trawsnant (NGR SS 83754 94105), to Mynydd Margam (NGR SS 82187 88868) where it turns eastwards to its terminal end at Fynon y Gilfach (NGR SS 84178 87439). The installation of the proposed line includes the erection of a number of H-poles along the length of the route. The plans are currently at a preliminary stage and therefore a number of assumptions have been made in order to carry out the assessment. The assessment assumes that an H-pole of 10 metres in height could be placed at any point along the proposed route and the route has been assigned a minimal width of 2m.
- 7.1.2 The proposed power line crosses into the Mynydd Mountain Registered Landscape of Special Historic Interest (PGW(WGI/MGI)2) (Figure 1 & Figure 2) and therefore requires an Assessment of the Significance of the Impact of the Development on the Historic Landscape (ASIDOHL2). Specifically, the proposed line will cross three HLCAs: Llangynwyd (HLCA005), Mynydd Margam (HLCA010) and Upper Cwm Kenfig (HLCA013) which will be assessed for potential direct effects. The Registered Historic Landscape contains a further thirteen HLCAs that will be considered for inclusion in the assessment for indirect visual effects.

7.2 The Register of Historic Landscapes and Historic Landscape Characterisation

- 7.2.1 In 1998, Cadw and the Countryside Council for Wales (now National Resources Wales) with support from the four regional Welsh Archaeological Trusts (WATs), published together with the International Council on Monuments and Sites (ICOMOS UK) the *Register for Landscapes, Parks and Gardens of Special Historic Interest in Wales* (Cadw and ICOMOS 1998). Part 1 deals with *Registered Parks and Gardens*, Part 2.1 *Landscapes of Outstanding Historic Interest* and Part 2.2 *Regional Landscapes of Special Historic Interest*. Cadw then implemented an ambitious programme of Historic Landscape Characterisation in the early 2000s, which was undertaken by the four regional Welsh Archaeological Trusts (WATs). This process further refined the definitions and character of the constituent parts of the individual Historic Landscapes and sub-divided each one into a number of Historic Landscape Character Areas (HLCAs).
- 7.2.2 Cadw note “...the Register is a means of recognising historic landscapes as one of the nation’s most valuable cultural assets, and as special, often fragile and irreplaceable, parts of our heritage”. The *Historic Environment (Wales) Act 2016* provides a statutory duty to maintain the registers and the registers are key factors in the planning process. Any development likely to directly or indirectly (visual) affect a statutory designated heritage asset or high value undesignated asset and its setting will likely require ‘consultation before grant of permission’ under the *Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016*, schedule 4 (1)(i) and (ii) if the proposed development meets and of the following criteria:

- Development likely to affect the site of a Registered Park or Garden or its setting
- Development is within a Registered Historic Landscape that requires an Environmental Impact Assessment and ASIDOHL2.

7.3 Methodology

- 7.3.1 The method of conducting an ASIDOHL2 assessment is set out by Cadw in *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (2nd Edition 2007) (Appendix IV). The assessment utilised the HLCAs as a basic unit of measurement, which can be variable as each HLCA may not be entirely representative of the wider Historic Landscape character and value (e.g. an agricultural character area forming part of an industrial historic landscape). Nevertheless, the HLCAs contribute to the value of the wider historic landscape in ASIDOHL2 terms. The ASIDOHL2 assessment is broken into five stages. Stage 1 is the compilation of contextual data, usually in the form of baseline information for an archaeological desk-based assessment (see above). Stages 2-4 assesses each HLCA for direct and indirect effects by the proposed development and Stage 5 combines the results of Stages 2-4 to produce an assessment of the overall impact on the Historic Landscape. (Cadw 2007, Table 1,15).
- 7.3.2 Heritage assets are categorised according to the only values that are nationally agreed in the Department of Transport/Welsh Office/Scottish Office *Design Manual for Roads and Bridges. Formerly Vol. 11 Section 3 Part 2 (HA 208/07 Cultural Heritage) 2007, amended 2009 (DMRB 2007)*, as amended January 2020 LA 106 Revision 1. Cadw published their Conservation Principles for the sustainable management of the historic environment in Wales 2011. These principles provide the basis upon which Cadw discharges its statutory duties, makes decisions or offers advice about changes to historic assets. Cadw further advise that the Conservation Principles should also be used by others (including owners, developers and other public bodies) to assess the potential impacts of a development proposal on the significance of any historic asset/assets and to assist in decision making where the historic environment is affected by the planning process (PPW 2021).
- 7.3.3 There are four values that need to be considered when assessing significance and these are set out in Cadw's *Conservation Principles for the Sustainable Management of the Historic Environment in Wales*: Evidential value, Historic Value, Aesthetic Value and Communal Value.

8 Assessment

8.1 Registered Landscapes, Parks and Gardens

- 8.1.1 The proposed power line crosses into the Mynydd Mountain Registered Landscape of Special Historic Interest (PGW(WGI/MGI)2) (Figure 1) which is described in the Register as:

“a discrete block of the South Wales uplands situated at the south west fringe of the historical Glamorgan Blaenau, displaying continuity, density and diversity of human occupation from the prehistoric period to the recent past. The area includes: Bronze Age ritual and funerary monuments, large Iron Age hillforts, settlements, enclosures and trackways; a Roman road, a large and important group of Early Christian Inscribed Stone monuments and associations; medieval defensive works; Margam Abbey, later a site for gentry residences, a landscaped park, pleasure gardens and a magnificent Georgian orangery; Second World War defensive installations” (Cadw & ICOMOS p63).

- 8.1.2 Specifically, the proposed line would cross three HLCAs: Llangynwyd (HLCA005), Mynydd Margam (HLCA 010) and Upper Cwm Kenfig (HLCA013), which will be assessed for potential direct effects in Stage 2 of the ASIDOHL2 (Figure 2).
- 8.1.3 The Registered Landscape contains a further thirteen HLCAs that were considered for inclusion in the ASIDOHL2. Zone of theoretical visibility (ZTV) analysis indicated that there was a potential for intervisibility with a total of nine HLCAs however it was considered that any situated further than 1km would be too distant for the proposed power line to cause an indirect effect. As a result, six HLCAs were included in Stage 3 of the ASIDOHL2 for potential indirect effects (Figure 2).
- 8.1.4 No further Historic Landscapes were considered for assessment as they were considered too distant; the nearest being Merthyr Mawr, Kenfig & Margam Burrows (HLW(MGI)1) (5.1km SW) and The Rhondda (HLW(MGI)5) (8km NE).
- 8.1.5 Margam Park Grade I Registered Park & Garden (PGW(Gm)52; HLCA001), lies 1.4km to the SW. ZTV analysis showed that the upper slopes of the Registered Park had potential for some intervisibility with the proposed scheme, however, it was considered that at this distance there would be no indirect impacts and the site was excluded from further assessment.
- 8.1.6 There is one designated site that falls within the development area; Scheduled Ancient Monument (SAM) Caer Blaen-y-cwm/Roman Camp (HA01), which is included in the ASIDOHL2 assessment (Figure 7 & 8).
- 8.1.7 There are a further six SAMs within a secondary (1km radius) study area, three of which fall within the Registered Historic Landscape. These are y Bwlwarcau (HA58), Twmpath Dilwith Round Barrow (HA57) and Site of Bodvoc Stone (HA56). The site walkover concluded that none of these sites had any intervisibility the proposed powerline and they were therefore eliminated from the ASIDOHL2.

8.2 Stage 2: Assessment of Direct Physical Impact on Registered Historic Landscape

- 8.2.1 The development area applied to the proposed power line (with an assumed width of 2m applied along its full length) has a total area of 1.78ha which is spread across three Historic Landscape Character Areas (HLCAs) (Figures 1-2).
- 8.2.2 The proposed development has a potential absolute direct impact on Llangynwyd (HLCA005) of 0.06ha of a total area of 705.27ha which is equal to 0.01%. Mynydd Margam (HLCA010) would be subject to an absolute direct impact of 0.88ha of a total area of 1641.62ha which is equal to 0.05%. Finally Upper Cwm Kenfig (HLCA013) would be subject to an absolute direct impact of 0.13ha of 95.83ha which is equal to 0.13%. In total the absolute direct impact of the development on the Registered Historic Landscape as a whole is 1.07ha of a total 3233.57ha which is equal to 0.03%.
- 8.2.3 The Stage 2 assessment of potential absolute direct impact (physical land loss) and of relative direct impact (loss of character) on each HLCA are outlined in Table 6 below.

Table 6. ASIDOHL2 Stage 2: Assessment of Direct Physical Impacts on Historic Landscape Character Areas

Assessment of Direct Physical Impact on Historic Character Area Llangynwyd (HLCA005)				
(a) Absolute Impact (Loss of Area)			Magnitude and Score	
0.06ha of a total area of 705.27ha = 0.01%.			Very Slight - 1	
(b) Relative and Landscape Impacts (Loss of known characteristics or elements) and scores				
Element/ % of loss	Category	Magnitude	Landscape Value (c)	Landscape Visual Effect
<1% loss of upland agricultural landscape	C - 2	Very Slight -1	Very Low - 1	Very Slightly Reduced - 1
Summary of the Magnitude of Direct Physical Impact on (HLCA005)				
Score			Grading	
6			Slight	

Assessment of Direct Physical Impact on Historic Character Area Mynydd Margam (HLCA010)				
(a) Absolute Impact (Loss of Area)			Magnitude and Score	
0.88ha of a total area of 1641.62ha = 0.05%			Very Slight - 1	
(b) Relative and Landscape Impacts (Loss of known characteristics or elements) and scores				
Element/ % of loss	Category	Magnitude	Landscape Value (c)	Landscape Visual Effect
<1% of extensive 20 th century forestry plantation	C - 2	Very Slight -1	Very Low - 1	Very Slightly Reduced – 1
<1% of formerly open mountain and enclosed land	C - 2	Very Slight -1	Very Low - 1	Very Slightly Reduced – 1
Summary of the Magnitude of Direct Physical Impact on HLCA010				
Score			Grading	
6			Slight	

Assessment of Direct Physical Impact on Historic Character Area Upper Cwm Kenfig (HLCA013)				
(a) Absolute Impact (Loss of Area)			Magnitude and Score	
0.13ha of a total area of 95.83ha = 0.14%			Very Slight - 1	
(b) Relative and Landscape Impacts (Loss of known characteristics or elements) and scores				
Element/ % of loss	Category	Magnitude	Landscape Value (c)	Landscape Visual Effect
<1% multi period and multi function upland landscape	B-3	Very Slight - 1	Very High - 6	Very Slightly Reduced – 1
Summary of the Magnitude of Direct Physical Impact on HLCA013				
Score			Grading	
12			Moderate	

Summary of Overall Direct Physical Impacts on Historic Landscape Character Areas		
HLCA	Score	Grading
HLCA005	6	Slight
HLCA010	6	Slight
HLCA013	12	Moderate

8.3 Stage 3: Assessment of Indirect Impact on Registered Historic Landscape

- 8.3.1 Stage 3 describes and quantifies indirect impacts of the development on theoretically and physically visible Registered Landscapes, individual HLCAs and/ or HLCAs connected by setting to HLCAs in the development area. Indirect impacts are sub-divided into two potential impacts; Indirect Physical impacts and Indirect (Non-Physical) Visual impacts.
- 8.3.2 Physical impacts can result from an increased risk of exposure, increased management needs, the severance or fragmentation of related elements, frustration or cessation of historic land-use practices and the frustration of access leading to decreased opportunities for education and enjoyment of the amenity elements (Cadw 2007, 20, i-v).
- 8.3.3 Visual impacts (non-physical) can occur as a result of impacts to elements of an HLCA from which the development can be seen (views to and from) or obstructed (direct line of site); the creation of inappropriate visual connections and finally the visual impact of the development area itself in relation to the existing historic character of the HLCA when considering its form and appearance (Cadw 2007, 21, i-v).
- 8.3.4 The Magnitude of Indirect Impacts has been assessed using site visits, contour maps, aerial photographs and taking into consideration existing surface features such as forestry and built environment using Digital Surface Models (DSM) generated by LiDAR. Indirect Visual Effects have been assessed utilising the criteria set out above in accordance with ASIDOHL2 guidelines.
- 8.3.5 Indirect Physical Impacts (a)
- 8.3.6 Based on the present assessment it is considered that the proposed development will have no permanent indirect physical impact on any of the statutory designated, landscapes, sites and monuments noted above. As a result, the first part of Stage 3, (a), has not been carried out. No physical change from and increased risk of exposure, increased management needs, the severance or fragmentation of related elements, frustration or cessation of historic land-use practices and the frustration of access leading to decreased opportunities for education and enjoyment of the amenity elements will occur (Cadw 2007, 20, i-v).
- 8.3.7 Indirect (non-physical) Visual Impacts (b)
- 8.3.8 The indirect visual impacts to sites that lie within the proposed development area and primary (250m radius) buffer area have been assessed above (Table 4). A secondary (1km radius) study area was also applied to identify potential impacts upon the **setting** of Internationally and Nationally important heritage assets (Value A* and A), these include Scheduled Ancient Monuments, Registered Landscapes, Parks & Gardens and Grade I and II* Listed Buildings and sometimes Grade II Listed Buildings (if situated within a Registered Landscape or Park & Garden).
- 8.3.9 A single Scheduled Ancient Monument (SAM) Caer Blaen-y-cwm/Roman Camp (HA01) was considered to be at risk of an Indirect (Non-Physical) Visual Impact from the proposed power line (Figures 7-8). A further four SAMs within the Registered Historic Landscape were considered for assessment but the site walkover established that there was no intervisibility with these sites due to forestry plantation tree cover and/ or topography.

8.3.10 Indirect Visual Impact to HLCAs were assessed using site visits, contour maps, aerial photographs and taking into consideration existing surface features such as forestry and built environment using Digital Surface Models (DSM) generated by LiDAR. Zone of Theoretical Visibility (ZTV) analysis carried out on a worst case scenario assumption (10m height along full length of the route) indicated that a total of nine HLCAs theoretically had intervisibility with the proposed power line. However, following site visits and considering the actual small scale of the proposed development a 1km limit on intervisibility assessment was considered sufficient. This reduced the number of potentially affected HLCAs to six:

- HLCA005 Llangynwyd
- HLCA010 Mynydd Margam
- HLCA 011 Waun-y-Gilfach
- HLCA013 Upper Cwm Kenfig
- HLCA014 Moel Ton Mawr
- HLCA015 Upper Park

8.3.11 The following HLCA 'key characteristics' are extracted from the Mynydd Margam Historic Landscape Characterisation (Robertson 2003).

8.3.12 Llangynwyd (HLCA005)

Important diverse multi-period relict archaeological landscape, including: pre-historic and medieval settlement with associated field systems; prehistoric enclosures (upland agricultural landscape features); medieval military/defensive feature; post-medieval vernacular buildings; important well-documented historic associations; small, but important nucleated settlement with medieval (or earlier) origins, centred on medieval church and cemetery; dispersed scatter of settlement throughout the surrounding area; Ancient woodland.

8.3.13 Mynydd Margam Forest (HLCA 010)

Extensive 20th century forestry plantation (Ancient and other broad-leafed woodland); formerly open mountain and enclosed land; former monastic land: grange and chapel; relict multi-period archaeological landscape: prehistoric, medieval, and post-medieval settlement (loose dispersed settlement pattern) and fields, prehistoric funerary and ritual with a prehistoric defensive element; prehistoric, medieval and post-medieval communications corridor; accumulation of blanket peat with environmental potential; industrial archaeological features.

8.3.14 Waun-y-Gilfach (HLCA011)

20th century forestry plantation; former unenclosed 'Waun'; footpaths and tracks.

8.3.15 Upper Cwm Kenfig (HLCA013)

Multi-period and multi-functional upland landscape with important relict archaeology: prehistoric and medieval settlement/fields, prehistoric funerary and ritual landscape, prehistoric enclosures (upland agricultural landscape features); accumulation of blanket peat with environmental potential; important prehistoric and medieval communication corridor.

8.3.16 Moel Ton Mawr (HLCA014)

20th century forestry plantation on former open unenclosed mountain; similar to HLCA 010; relict archaeology: funerary and ritual; communication features; accumulation of blanket peat with environmental potential.

8.3.17 Upper Park and Ton-y-grugos (HLCA015)

Enclosed upland grazing: large regular enclosures; distinctive field boundaries; relict archaeology: prehistoric, medieval and post-medieval settlement/fields; prehistoric enclosures (upland agricultural landscape features); buried archaeology: parchmarks.

Table 7. ASIDOHL2 Stage 3(b): Assessment of Indirect (non-physical) Impacts on Historic Character Areas												
Impacts to...											Total Scores	
HLCA	Views to/from Element Partially Altered	Magnitude & Score	Visual Connections between Related Elements Occluded/ Obstructed	Magnitude & Score	(Inappropriate) Visual Connections between Elements not intended to be inter-visible	Magnitude & Score	Development Form (scale, distribution of features)	Magnitude & Score	Development Appearance (size, shape, colour of features)	Magnitude & Score	Assessment Score (Average)	Overall Magnitude of Indirect Impacts on 28 Point Scale $(3(a)+3(b)) \times 28 \div 20$
HLCA005	C - 2	Very Slight - 1	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	1.4	2 – Very Slight
HLCA010	C - 2	Very Slight - 1	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	1.4	2 – Very Slight
HLCA011	C - 2	Very Slight - 1	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	1.4	2 – Very Slight
HLCA013	A - 4	Slight - 2	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	2	3 – Very Slight
HLCA014	C - 2	Very Slight - 1	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	1.4	2 – Very Slight
HLCA015	A - 4	Very Slight - 1	None	0	None	0	1	Very Slight - 1	1	Very Slight - 1	1.8	3 – Very Slight
Combined Assessment Score and Overall Magnitude of Indirect (non-physical) Visual Impacts on HLCAs											1.57	2 - Very Slight

Note: Indirect Visual Effects (Magnitude and Score) have been assessed based on professional judgement utilising the criteria set out in Section 1.4 above

8.4 Stage 4: Evaluation of Relative Importance

8.4.1 Stage 4 evaluates the relative importance of parts and elements (sites, monuments and landscapes) of HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to:

- The whole of the HLCA(s) concerned, and or;
- The whole of the Registered Historic Landscape, followed by;
- An evaluation of the relative importance of the HLCA(s) concerned with the national context.

8.4.2 Stage 4 should then be completed with a determination of the average, overall value of all the HLCAs (or part thereof) affected (Cadw 2007, 23-28).

8.4.3 The criteria for determining the relative importance or value of HLCAs (and their constituent elements or parts) in Stage 4, steps (a), (b) and (c) are as follows (Cadw 2007, 24-5):

- Rarity
- Representativeness
- Documentation
- Group Value
- Survival
- Condition
- Coherence
- Integrity
- Potential
- Amenity
- Associations

8.4.4 As noted above, the proposed development area totals 1.78ha and crosses three Historic Landscape Character Areas (HLCAs). The potential absolute direct impact on Llangynwyd (HLCA005) is 0.06ha of a total area of 705.27ha which is equal to 0.01%. Mynydd Margam (HLCA010) would be subject to an absolute direct impact of 0.88ha of a total area of 1641.62ha which is equal to 0.05%. Finally Upper Cwm Kenfig (HLCA013) would be subject to an absolute direct impact of 0.13ha of 95.83ha which is equal to 0.13%. In total the absolute direct impact of the development on the Registered Historic Landscape as a whole is 1.07ha of a total 3233.57ha which is equal to 0.03%.

8.4.5 A further three HLCAs have been identified as being subject to an indirect effect (see Stage 3); these are. These will be considered for the relative importance of parts or elements of HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development.

8.4.6 HLCA005 Llangynwyd

Evaluation of the Relative Importance of the HLCA						
Criteria ↓	Value →	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential				✓		
Amenity					✓	
Associations				✓		
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity		✓				
Representativeness					✓	
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential				✓		
Amenity					✓	
Associations				✓		
(c) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential				✓		
Amenity					✓	
Associations				✓		
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
Total(a) = 27	29	27	50.30		50 -	
Total(a)/55x100=49.09	Total(b)/55x100=52.73	Total(c)/55x100=49.09			Considerable	

8.4.7 HLCA010 Mynydd Margam Forest

Evaluation of the Relative Importance of the HLCA						
Criteria	Value	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence					✓	
Integrity					✓	
Potential				✓		
Amenity				✓		
Associations						✓
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity				✓		
Representativeness						✓
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence					✓	
Integrity					✓	
Potential				✓		
Amenity				✓		
Associations						✓
(c) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value				✓		
Survival				✓		
Condition				✓		
Coherence					✓	
Integrity					✓	
Potential				✓		
Amenity				✓		
Associations						✓
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
24	24	25	44.24		44 - Considerable	
Total(a)/55x100=43.64	Total(b)/55x100=43.64	Total(c)/55x100=45.45				

8.4.8 HLCA011 Waun-y-Gilfach

Evaluation of the Relative Importance of the HLCA						
Criteria ↓	Value →	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity						
Representativeness						
Documentation						
Group Value						
Survival						
Condition						
Coherence						
Integrity						
Potential						
Amenity						
Associations						
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity				✓		
Representativeness					✓	
Documentation						✓
Group Value						✓
Survival				✓		
Condition				✓		
Coherence					✓	
Integrity						✓
Potential						✓
Amenity					✓	
Associations						✓
(c) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value						✓
Survival				✓		
Condition				✓		
Coherence					✓	
Integrity						✓
Potential						✓
Amenity					✓	
Associations						✓
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
-	26 Total(b)/55x100=47.27	19 Total(c)/55x100= 34.55	40.91		41 - Considerable	

8.4.9 HLCA013 Upper Cwm Kenfig

Evaluation of the Relative Importance of the HLCA						
Criteria ↓	Value →	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity					✓	
Representativeness					✓	
Documentation						✓
Group Value					✓	
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential			✓			
Amenity				✓		
Associations						✓
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity			✓			
Representativeness				✓		
Documentation						✓
Group Value			✓			
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential			✓			
Amenity				✓		
Associations						✓
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity				✓		
Representativeness				✓		
Documentation						✓
Group Value			✓			
Survival				✓		
Condition				✓		
Coherence				✓		
Integrity				✓		
Potential			✓			
Amenity				✓		
Associations						✓
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
27	32	31	54.54		55 - Considerable	
Total(a)/55x100=49.09	Total(b)/55x100=58.18	Total(c)/55x100=56.36				

8.4.10 HLCA014 Moel Ton Mawr

Evaluation of the Relative Importance of the HLCA						
Criteria ↓	Value →	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity						
Representativeness						
Documentation						
Group Value						
Survival						
Condition						
Coherence						
Integrity						
Potential						
Amenity						
Associations						
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity					✓	
Representativeness					✓	
Documentation					✓	
Group Value						✓
Survival					✓	
Condition				✓		
Coherence					✓	
Integrity					✓	
Potential					✓	
Amenity				✓		
Associations						✓
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity					✓	
Representativeness					✓	
Documentation					✓	
Group Value						✓
Survival					✓	
Condition				✓		
Coherence					✓	
Integrity					✓	
Potential					✓	
Amenity				✓		
Associations						✓
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
-	22 Total(b)/55x100=40	22 Total(c)/55x100=40	40		40 - Considerable	

8.4.11 HLCA015 Upper Park & Ton-y-Grugos

Evaluation of the Relative Importance of the HLCA						
Criteria ↓	Value →	V High/ V Good (5)	High/ Good (4)	Mod/ Med (3)	Low (2)	V Low/ Poor (1)
(a) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the Historic Landscape Character Area						
Rarity						
Representativeness						
Documentation						
Group Value						
Survival						
Condition						
Coherence						
Integrity						
Potential						
Amenity						
Associations						
(b) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the whole of the Historic Landscape on the Register						
Rarity			✓			
Representativeness			✓			
Documentation						✓
Group Value				✓		
Survival				✓		
Condition			✓			
Coherence				✓		
Integrity				✓		
Potential			✓			
Amenity					✓	
Associations						✓
(c) HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development in relation to the relative importance of the HLCA(s) concerned within the national context						
Rarity				✓		
Representativeness			✓			
Documentation						✓
Group Value				✓		
Survival				✓		
Condition			✓			
Coherence				✓		
Integrity				✓		
Potential			✓			
Amenity					✓	
Associations						✓
Overall Evaluation Scores						
(a)	(b)	(c)	Equation Score		Overall Score	
-	34 Total(b)/55x100=61.82	33 Total(c)/55x100=60	60.91		61 - High	

Table 8. Overall Evaluation Scores for Historic Landscape Character Areas Affected by the Development	
HLCA	Overall Value
HLCA005	50 - Considerable
HLCA010	44 - Considerable
HLCA011	41 - Considerable
HLCA013	55 - Considerable
HLCA014	40 - Considerable
HLCA015	61 - High
Average Evaluated Landscape Value in Relation to the Development	
Overall Total Value	Grade
48.5	49 - Considerable

8.5 Stage 5: Assessment of Overall Significance of Impact

8.5.1 The following stage combines the results of Stages 2 to 4 to produce an ‘assessment of the overall significance of the impact of development and the effect that altering the Historic Character Area(s) concerned has on the whole of the Historic Landscape area on the Register (Cadw 2007, 28). The effect of the development on each Historic Landscape Character Area (HLCA) is scored and the value assessed in relation to the likely loss and consequent reduction in value of the Historic Landscape on the Register. The results are set out in the following table.

Table 9. Summary of the Overall Significance of the Impact of Development on Landscapes of Historic Interest				
HLCA	Value of Historic Character Area (based on stage 4 results)	Impact of Development (Based on stage 2 and 3 results)	Reduction of value of the Historic Landscape Area on Register	Overall Significance of Impact
HLCA005	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical of this or other historic landscape areas on the Register Score: 5	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. Score: 1	Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. Score: 1	1 – Very Low
HLCA010	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical of this or other historic landscape areas on the Register Score: 4	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. Score: 1	Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. Score: 1	1 – Very Low
HLCA011	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical of this or other historic landscape areas on the Register Score: 4	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. Score: 1	Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. Score: 1	1 – Very Low
HLCA013	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion	Very Low Development impact on key elements is such that the value of the historic	1 – Very Low

	of this or other historic landscape areas on the Register Score: 5	causing negligible changes to elements and their values. Score: 1	landscape area on the Register remains essentially unchanged. Score: 1	
HLCA014	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical of this or other historic landscape areas on the Register Score: 4	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. Score: 1	Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. Score: 1	1 – Very Low
HLCA015	Medium Key elements of varying intrinsic importance and/or condition and/or group value and/or generally typical of this or other historic landscape areas on the Register Score: 6	Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. Score: 1	Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. Score: 1	1 – Very Low

8.6 ASIDOHL2 Concluding Statement

- 8.6.1 Black Mountains Archaeology Ltd was commissioned by Western Power Distribution to carry out an Archaeological Desk-based Assessment and an Assessment of the Significance of the Impact of the Development on the Historic Landscape (ASIDOHL2) for a proposed power connection line for Foel Trawsnant Windfarm, Neath Port Talbot (Figures 1-8).
- 8.6.2 The proposed plans include a high voltage power line with a total length of 9.9km (with an underground section of c.940m beneath Maesteg Golf Course) running south from the windfarm out Foel Trawsnant (NGR SS 83754 94105), to Mynydd Margam (NGR SS 82187 88868) where it turns eastwards to its terminal end at Fynon y Gilfach (NGR SS 84178 87439). The installation of the proposed line includes the erection of a number of H-poles along the length of the route.
- 8.6.3 The plans are currently at a preliminary stage and therefore a number of assumptions have been made in order to carry out the assessment. The assessment assumes that an H-pole of 10 metres in height could be placed at any point along the above ground section of the proposed route and the route has been assigned a theoretical width of 2m. Zone of Theoretical Visibility (ZTV) analysis (using Lidar 2m DSM) was carried out based on these assumptions.
- 8.6.4 The ASIDOHL2 process identified a single landscape for assessment; Mynydd Margam Registered Landscape of Special Historic Interest (PGW(WGI/MGI)2) which would be crossed by the proposed power line. The Historic Landscape is described in the Register as:
- “a discrete block of the South Wales uplands situated at the south west fringe of the historical Glamorgan Blaenau, displaying continuity, density and diversity of human occupation from the prehistoric period to the recent past. The area includes: Bronze Age ritual and funerary monuments, large Iron Age hillforts, settlements, enclosures and trackways; a Roman road, a large and important group of Early Christian Inscribed Stone monuments and associations; medieval defensive works; Margam Abbey, later a site for gentry residences, a landscaped park, pleasure gardens and a magnificent Georgian orangery; Second World War defensive installations”* (Cadw & ICOMOS p63).
- 8.6.5 The remaining landscapes on the Register were discounted as being too distant. The closest landscapes are Merthyr Mawr, Kenfig & Margam Burrows (HLW(MGI)1) (5.1km SW) and The Rhondda (HLW(MGI)5) (8km NE).
- 8.6.6 Stage 2 of the ASIDOHL2 process identified the potential for the proposed development to have a direct impact on three HLCAs. The magnitude of direct effect was assessed as **Slight** for both Mynydd Margam (HLCA 010) and Llangynwyd (HLCA005) and **Moderate** for Upper Cwm Kenfig (HLCA013). Together this direct impact affects 0.03% of the Mynydd Margam Registered Historic Landscape as a whole.
- 8.6.7 The ASIDOHL2 process identified a further three HLCAs as being potentially affect (indirectly) by the proposed development. These HLCAs are Waun-y-Gilfach (HLCA011), Moel Ton Mawr (HLCA014) and Upper Park & Ton-y-Grugos (HLCA015).

- 8.6.8 Based on the present assessment it is considered that there will be no permanent indirect physical impact on any statutory designated landscapes, sites and monuments noted above. As a result, the first part of Stage 3 (a) was not carried out. No physical change from and increased risk of exposure, increased management needs, the severance or fragmentation of related elements, frustration or cessation of historic land-use practices and the frustration of access leading to decreased opportunities for education and enjoyment of the amenity elements will occur (Cadw 2007, 20, i-v).
- 8.6.9 Stage 3(b) assessed all six HLCAs for the potential for indirect (non-physical) Visual Impact. All six HLCAs, together with Caer Blaen-y-cwm/Roman Camp (HA01), were assessed as being subject to a '**Very Slight**' impact.
- 8.6.10 The relative importance of parts or elements of HLCAs which may be directly or indirectly, wholly or partially, affected by the proposed development were considered in Stage 4. The remaining overall (combined) averaged landscape value was assessed as **Considerable**.
- 8.6.11 The final (Stage 5) ASIDOHL2 assessment process identified the assessment of the overall significance of the impact of development and the effect that altering the Historic Landscape Character Area(s) (HLCA) concerned has on the whole Historic Landscape area on the Register (Cadw 2007, 28).
- 8.6.12 The effect of the development on each HLCA was scored and the value assessed in relation to the likely loss and consequent reduction in value of the HLCA on the Register. The results indicated that the summary of overall significance of the impact of development on the historic landscape is **Very Low for all HLCAs**. The development impact on key elements is such that value of the historic landscape on the Register remains essentially unchanged.

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10 Appendices

10.1 Appendix I Figures

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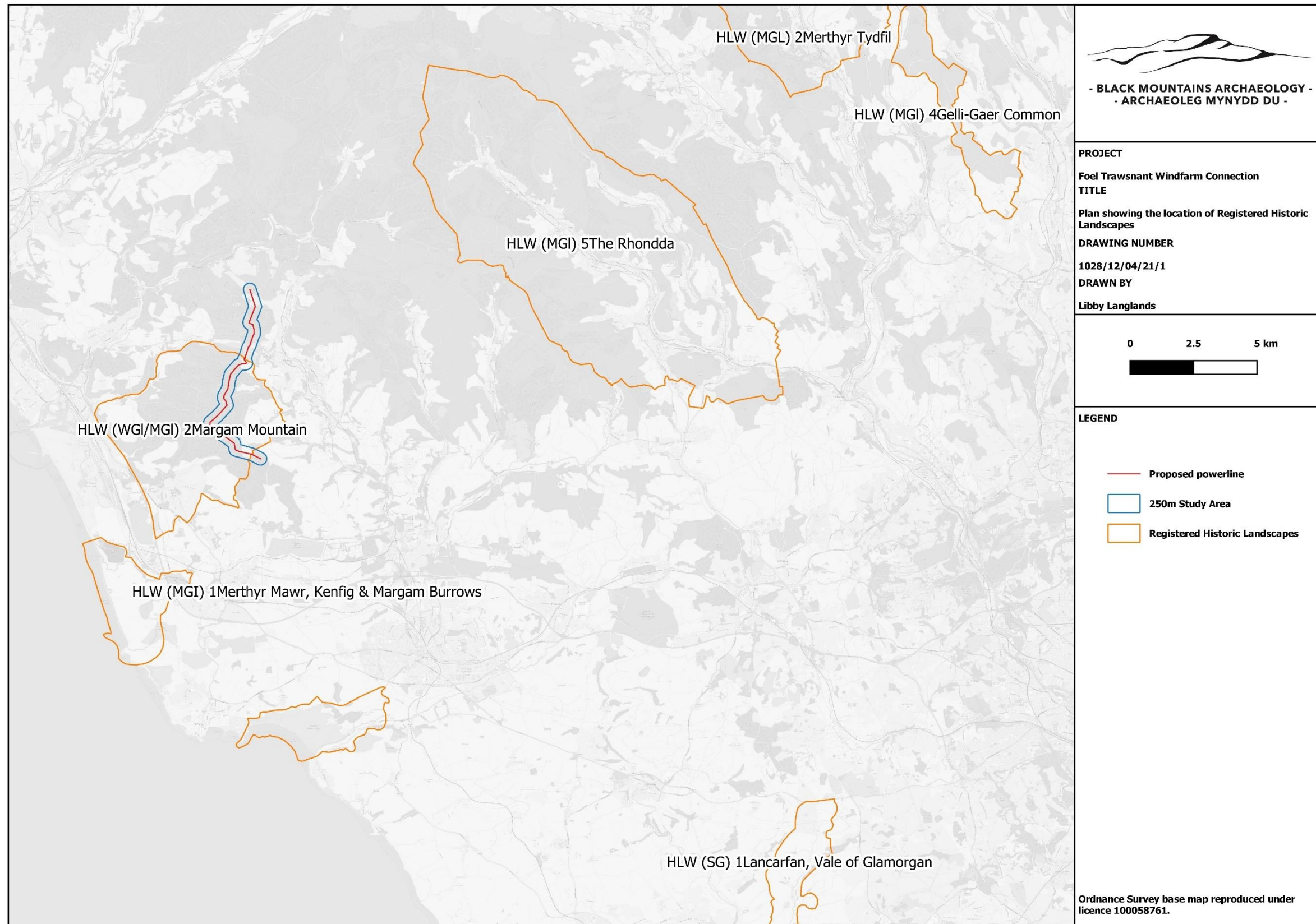


Figure 1. Plan showing the location of Registered Historic Landscapes

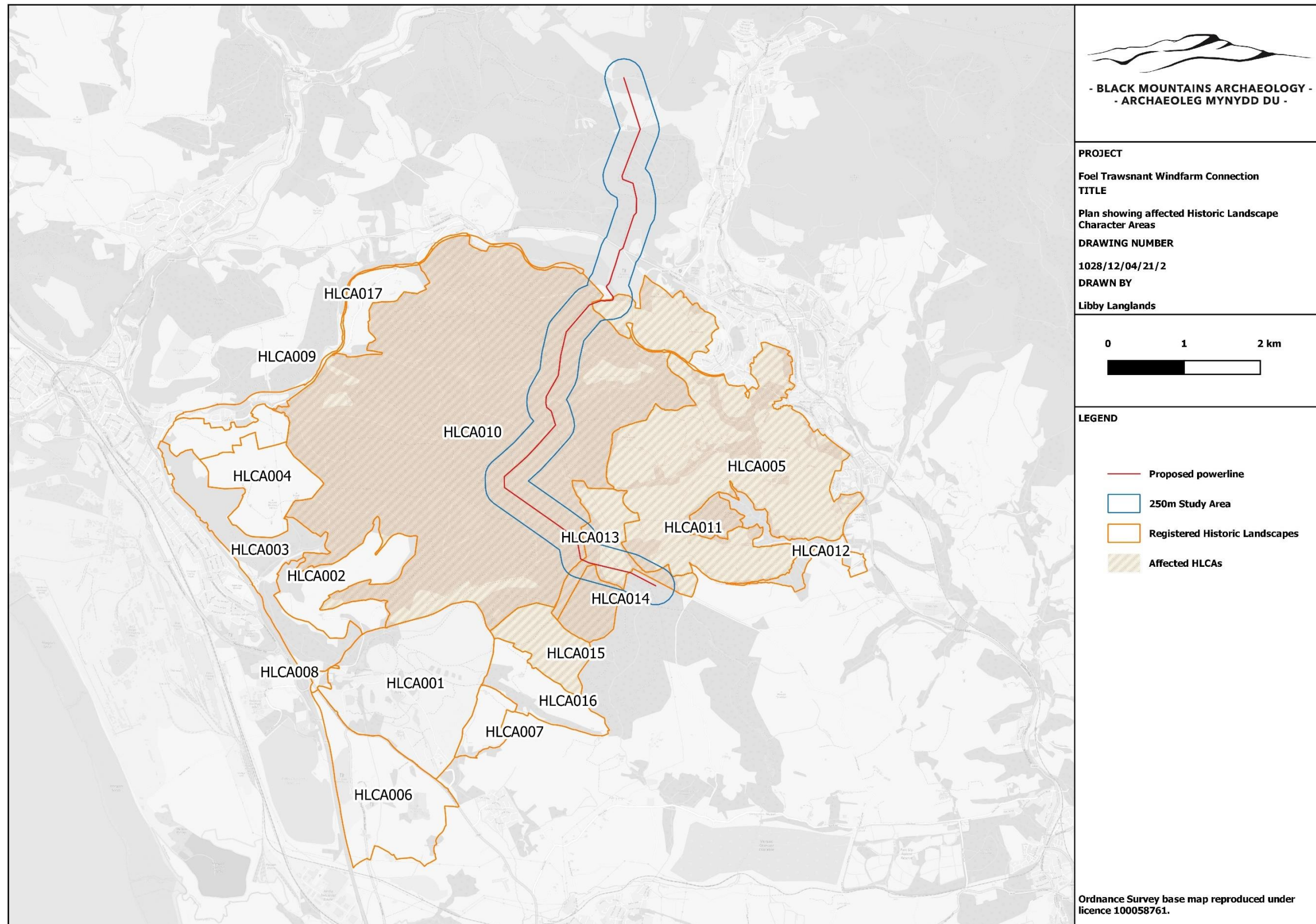


Figure 2. Plan showing affected Historic Landscape Character Areas

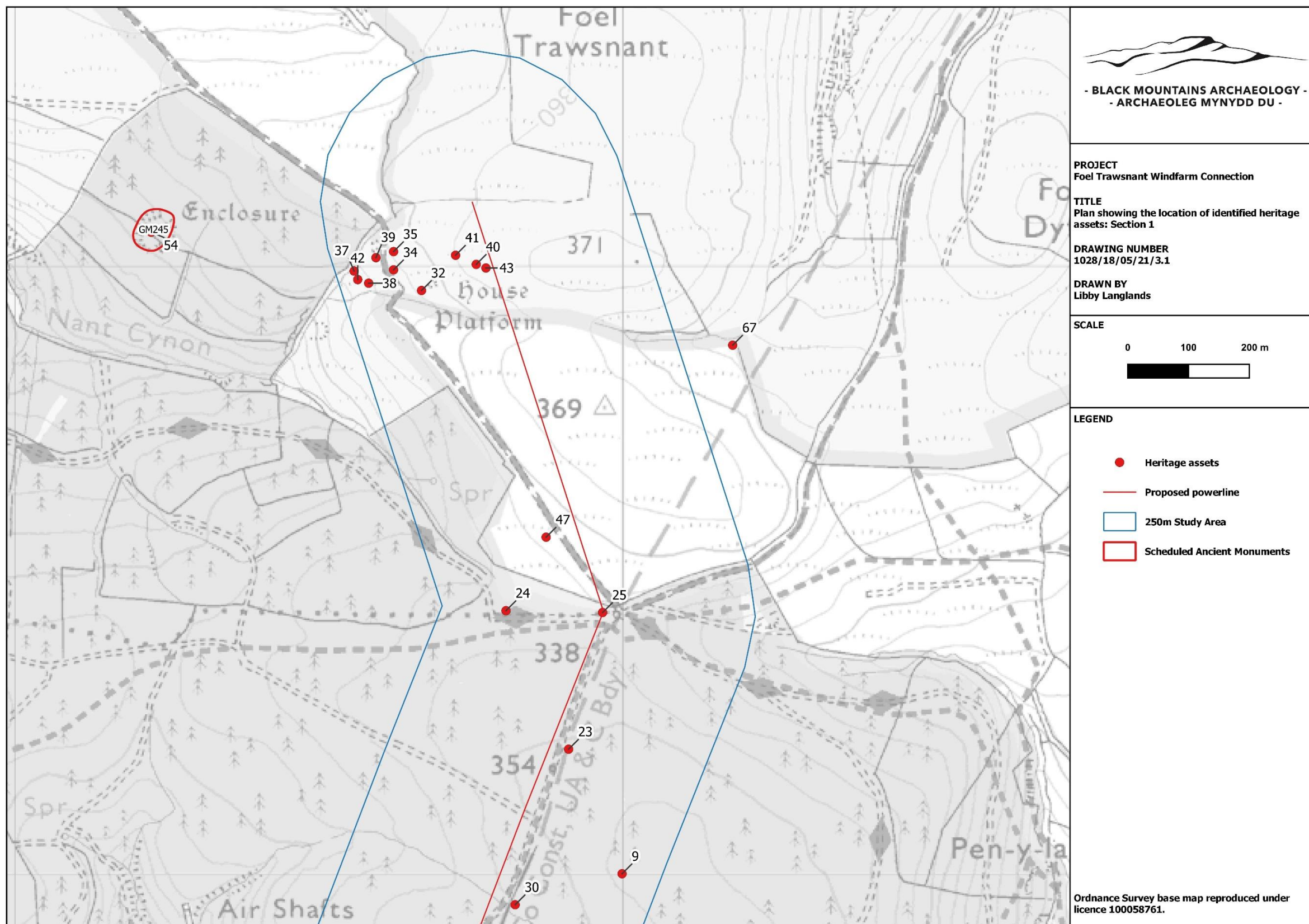


Figure 3. Plan showing the location of Identified Heritage Assets: Section 1

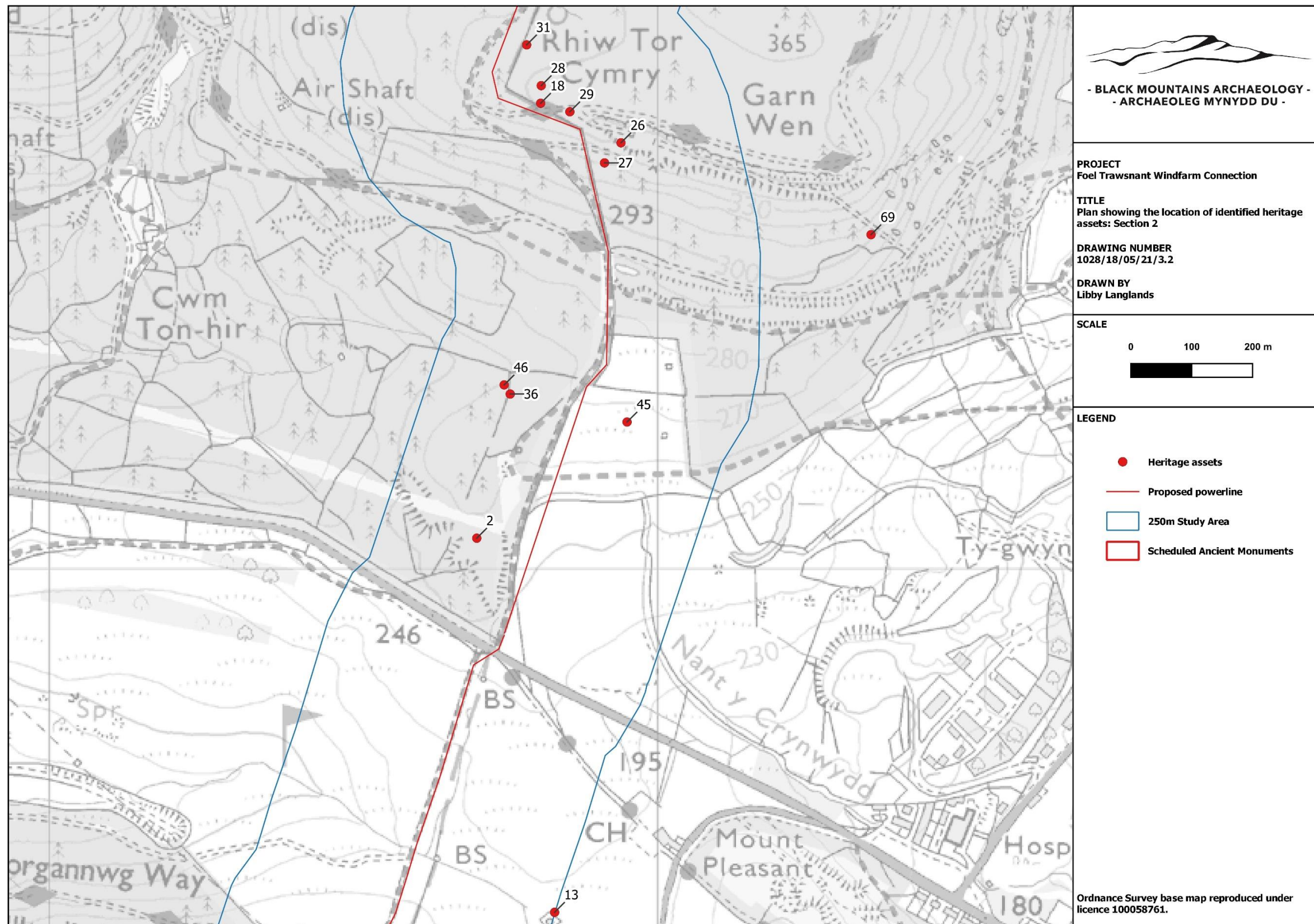


Figure 4: Plan showing the location of Identified Heritage Assets: Section 2

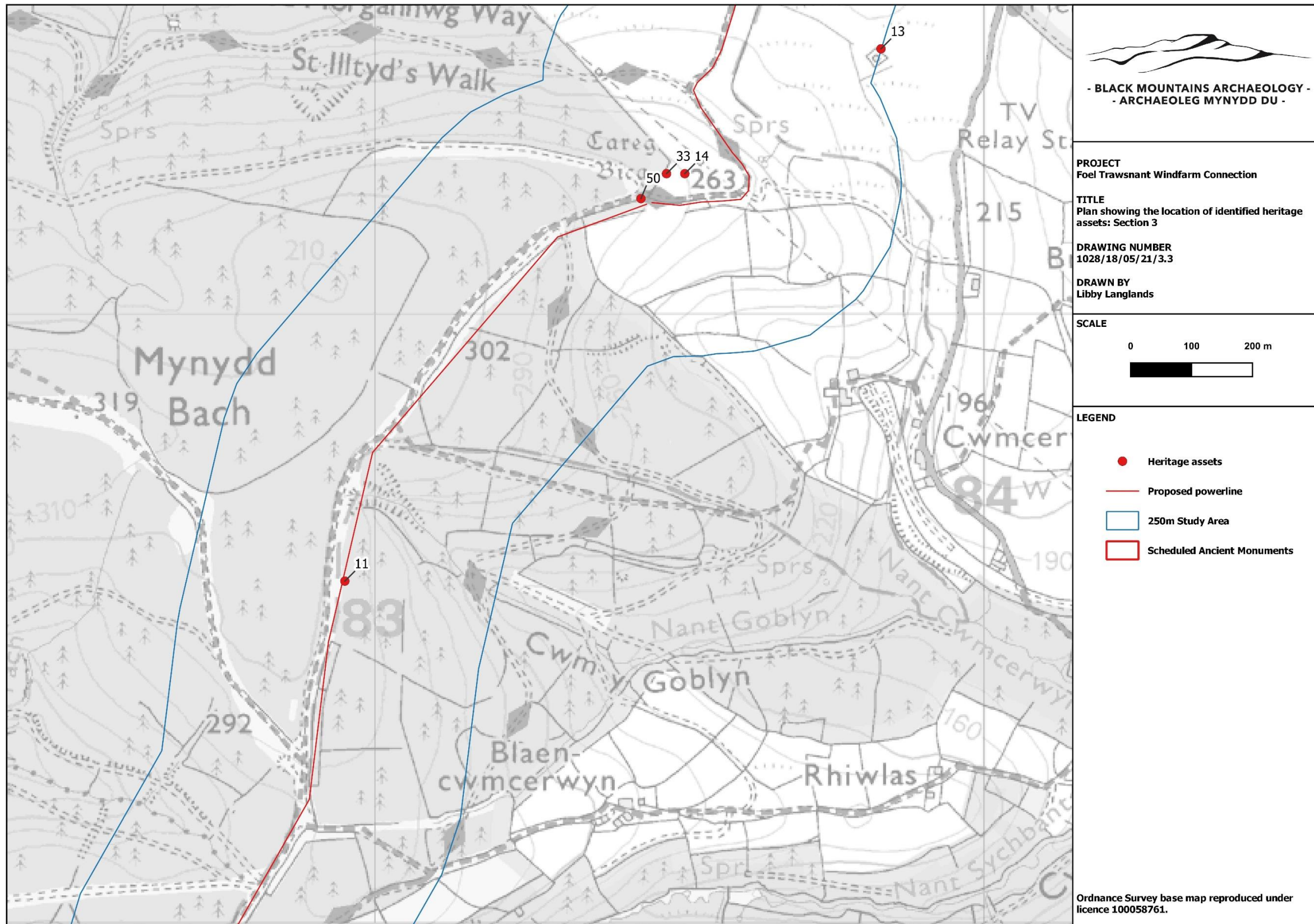


Figure 5. Plan showing the location of Identified Heritage Assets: Section 3

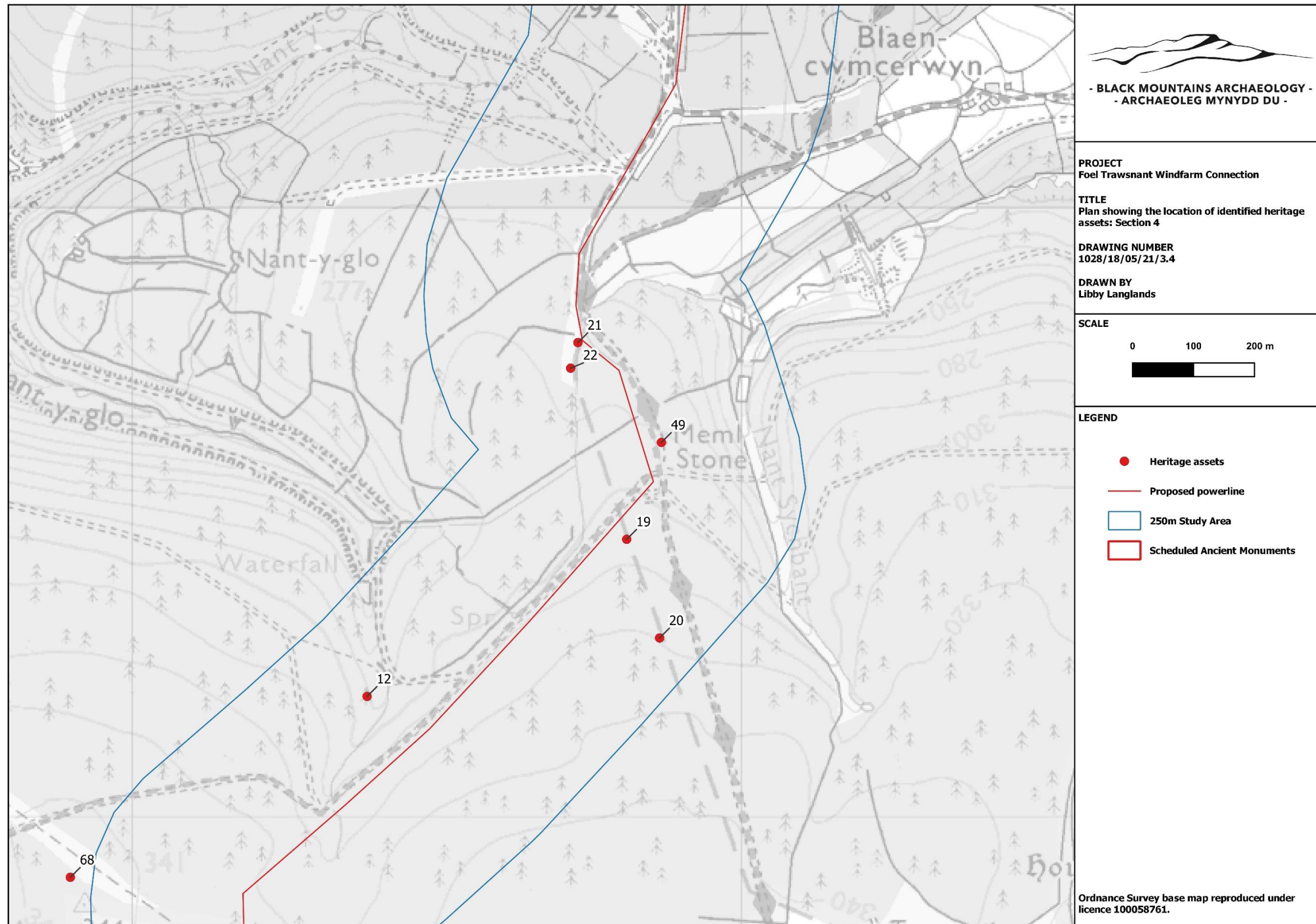


Figure 6. Plan showing the location of Identified Heritage Assets: Section 4

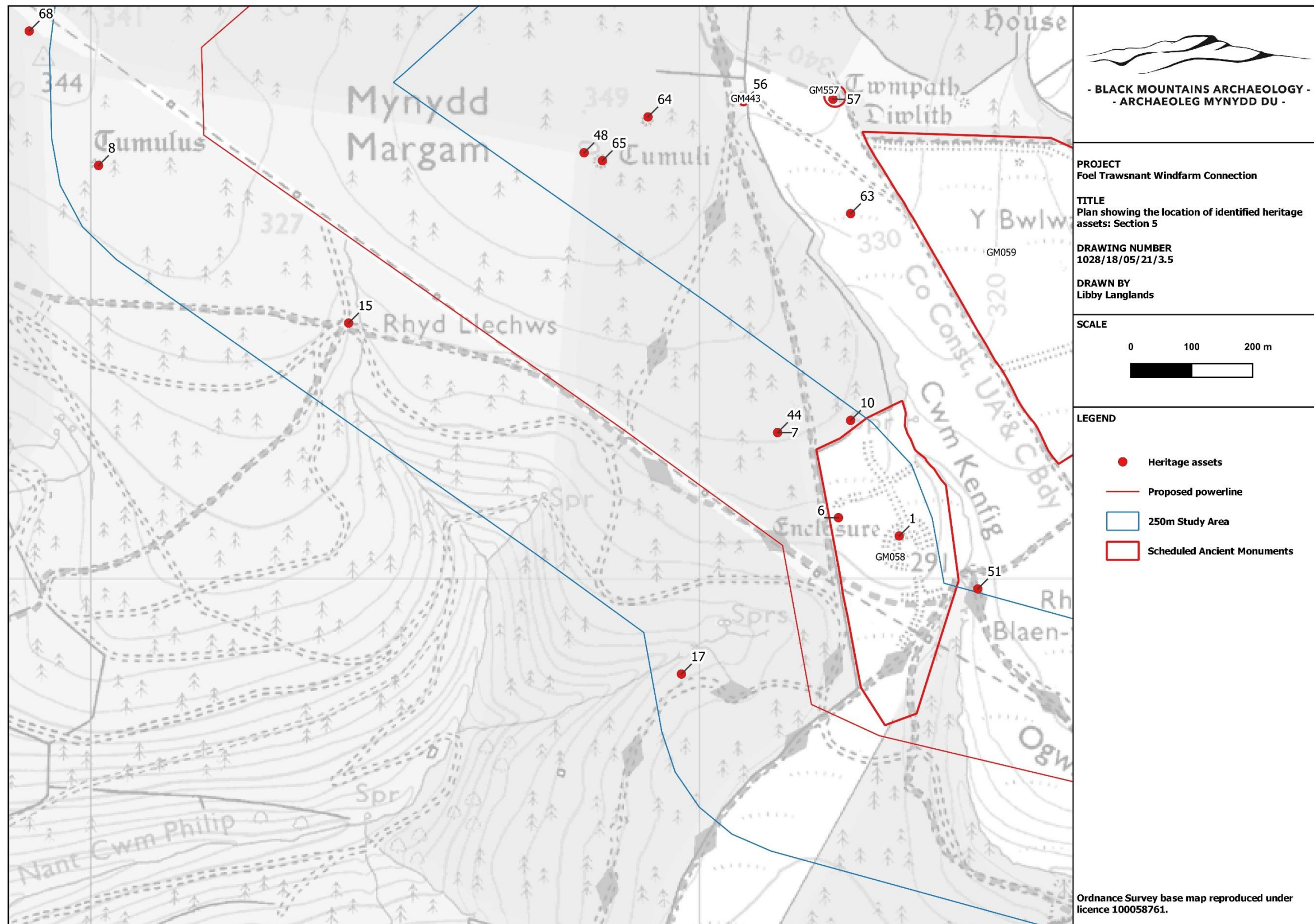


Figure 7. Plan showing the location of Identified Heritage Assets: Section 5

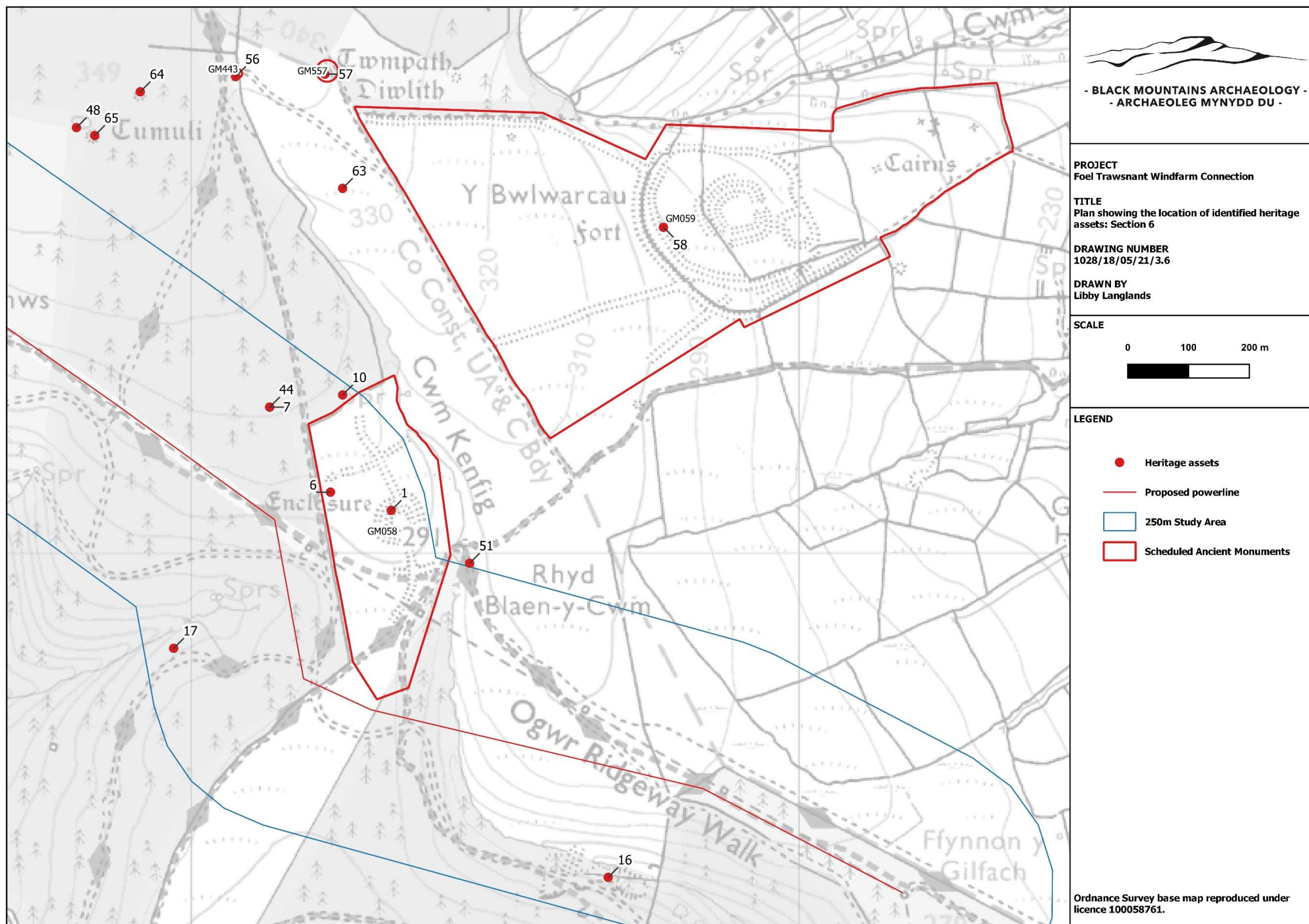


Figure 8. Plan showing the location of Identified Heritage Assets: Section 6

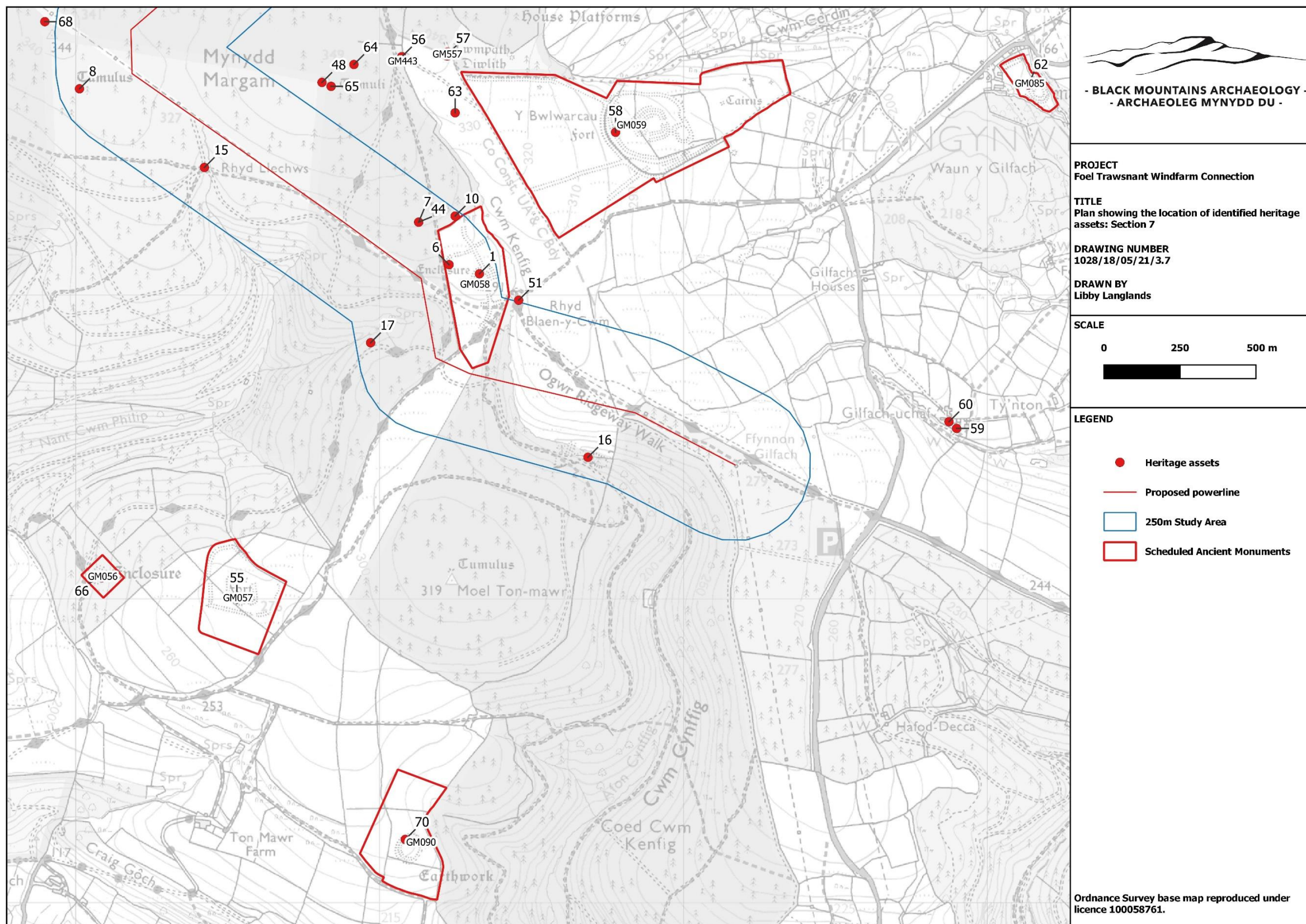


Figure 9. Plan showing the location of Identified Heritage Assets: Section 7

10.2 Appendix II Aerial Photographs

10.2.1 The following is a list of the aerial photographs with coverage of the Study Area held by the Central Registry of Air Photography for Wales (CRAPW). The images largely followed the chronology of historic maps.

Table 10. Aerial photographic search results

WO no	Sortie No	Date	Ph type	Comment
1146	CPE/UK/1871	04/12/46	B&W	
1147	CPE/UK/1871	04/12/46	B&W	
1148	CPE/UK/1871	04/12/46	B&W	
1149	CPE/UK/1871	04/12/46	B&W	
2157	CPE/UK/1871	04/12/46	B&W	
2158	CPE/UK/1871	04/12/46	B&W	
2159	CPE/UK/1871	04/12/46	B&W	
3148	CPE/UK/1871	04/12/46	B&W	Shows Camps SAMGm057 and SAMGm056
3149	CPE/UK/1871	04/12/46	B&W	Shows Roman Camp SAMGm058 and Camp SAMGm057
3150	CPE/UK/1871	04/12/46	B&W	Shows Y Bwlwarcau SAMGm059 and Roman Camp SAMGm058
1110	CPE/UK/1997	13/04/47	B&W	Shows possible enclosure – unrecorded
1111	CPE/UK/1997	13/04/47	B&W	Shows possible enclosure – unrecorded
1112	CPE/UK/1997	13/04/47	B&W	Shows possible enclosure – unrecorded
1113	CPE/UK/1997	13/04/47	B&W	Shows Camp SAMGm057
2111	CPE/UK/1997	13/04/47	B&W	
2112	CPE/UK/1997	13/04/47	B&W	
2113	CPE/UK/1997	13/04/47	B&W	
2114	CPE/UK/1997	13/04/47	B&W	
3111	CPE/UK/1997	13/04/47	B&W	Shows Y Bwlwarcau SAMGm059
3112	CPE/UK/1997	13/04/47	B&W	Shows Y Bwlwarcau SAMGm059 and Roman Camp SAMGm058
3113	CPE/UK/1997	13/04/47	B&W	Shows Roman Camp SAMGm058
3114	CPE/UK/1997	13/04/47	B&W	
3115	CPE/UK/1997	13/04/47	B&W	Possible enclosure – unrecorded
4111	CPE/UK/1997	13/04/47	B&W	Shows Ton-Hir Colliery tips and railway tunnel
4112	CPE/UK/1997	13/04/47	B&W	Shows Ton-Hir Colliery tips and industrial remains poss SAMGm547
4113	CPE/UK/1997	13/04/47	B&W	Tips of Bryn Navigation Colliery
4223	540/525	05/06/51	B&W	
4224	540/525	05/06/51	B&W	Extensive tips presumably related to Maesteg
4225	540/525	05/06/51	B&W	
4226	540/525	05/06/51	B&W	
4227	540/525	05/06/51	B&W	
6202	OS/62/14	14/04/62	B&W	Possibly Ringwork at tunnel entrance – not recorded
006	OS/62/14	14/04/62	B&W	Shows all scheduled camps and ringwork mentioned above
0049	6954		B&W	

176	13/RAF/5767	19/05/80	B&W	
105	Ministry of Ag 8311/170		B&W	
115	Ministry of Ag 8311/170		B&W	
116	Ministry of Ag 8311/170		B&W	
166	Geonex 9139/6491	8/8/91	Col	
003	Geonex 9139/7991	19/8/91	Col	

10.3 Appendix III Plates

Caer Blaen-y-cwm/ Roman Camp (HA01)



Plate 1. East facing aerial view of Caer Blaen-y-cwm/ Roman Camp (HA01).



Plate 2. Wide aerial view facing south across Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 3. South west facing aerial view across Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 4. East facing aerial view of Caer Blaen-y-cwm/ Roman Camp (HA01) showing linear features in field behind. The mid-horizon ridge forms the western curtilage of Y Bwlwarcu (HA58).



Plate 5. Wide south west facing aerial view over Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 6. North west facing view of Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.

Terrestrial view of Caer Blaen-y-cwm/ Roman Camp (SAMGm058)



Plate 7. South facing terrestrial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 8. South facing terrestrial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 9. West facing terrestrial view terrestrial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.

High altitude aerial views from Caer Blaen-y-cwm/ Roman Camp (HA01)

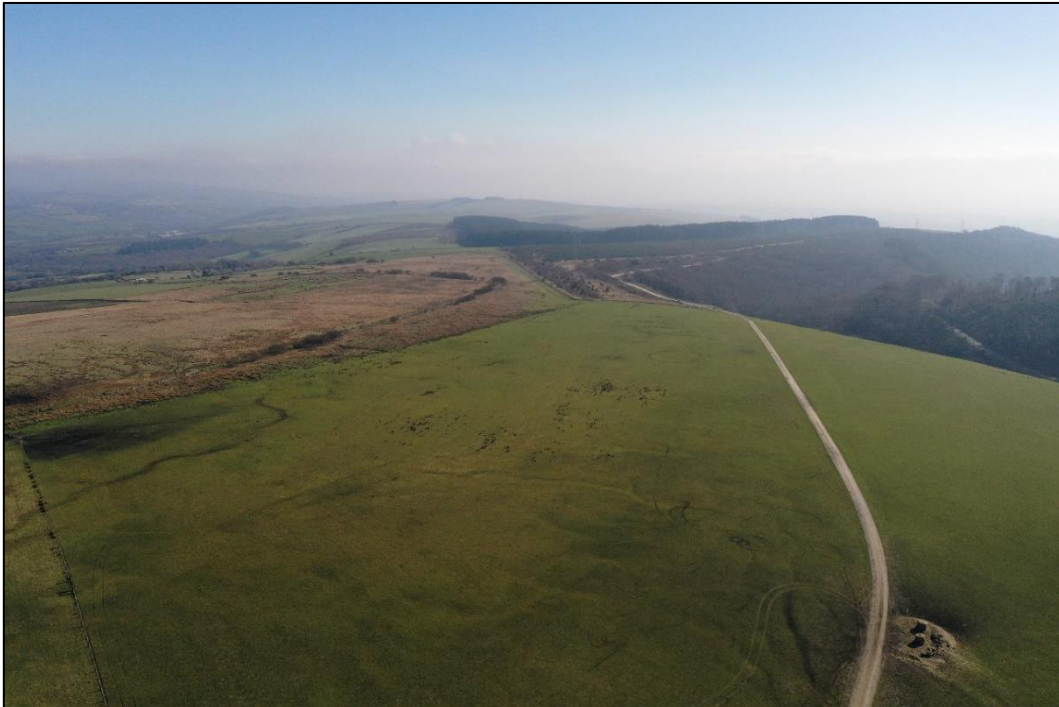


Plate 10. South east facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards south eastern end of proposed route of power line.



Plate 11. South facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards Cwm Kenfig and the proposed route of the power line.



Plate 12. South west facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 13. West facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 14. West facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.



Plate 15. North west facing high altitude aerial view from Caer Blaen-y-cwm/ Roman Camp (HA01) towards proposed route of power line.

Southern curtilage boundary of Caer Blaen-y-cwm/ Roman Camp (HA01) from location of proposed power line



Plate 16. North west facing view along proposed power line route with the curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) in the field to the right.



Plate 17. South east facing view along proposed route of power line with the curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) in the field to the left.



Plate 18. East facing view along proposed route of power line with the curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) in the field to the left and ahead.



Plate 19. East facing view of curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) from proposed route of power line.



Plate 20. North facing view of curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) from proposed route of power line.



Plate 21. North west facing view of curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) from proposed route of power line.



Plate 22. South west facing view from southern curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) towards the proposed route of the power line.



Plate 23. View from southern curtilage of Caer Blaen-y-cwm/ Roman Camp (HA01) towards the proposed route of the power line.

New Linear (HA51) East of Caer Blaen-y-cwm/ Roman Camp (HA01)



Plate 24. East facing view of linear features (HA51) identified east of Caer Blaen-y-cwm/ Roman Camp (HA01).



Plate 25. East facing view of linear features identified east of Caer Blaen-y-cwm/ Roman Camp (HA01).



Plate 26. West facing view of linear features identified east of Caer Blaen-y-cwm/ Roman Camp (HA01).



Plate 27. NE facing view up track towards Y Bwlwarcu (HA58).

Site of Bodvoc Stone (HA56) and Twmpath Dilwith (HA57)



Plate 28. East facing view of Site of Bodvoc Stone (HA56) with Twmpath Dilwith (HA57) in the centre distance.



Plate 29. West facing view of Site of Bodvoc Stone (HA56) towards the proposed development.



Plate 30. North facing view of Site of Bodvoc Stone (HA56).



Plate 31. East facing view of Twmpath Dilwith (HA57).



Plate 32. West facing view from Twmpath Dilwith (HA57) towards the proposed development.

Bronze Age Barrows



Plate 33. South west facing view of Llyndwr Fawr East Round Barrow (HA64) towards proposed development.



Plate 34. South west facing view of Llyndwr Fawr Southeast (HA65) towards proposed development.



Plate 35. Northwest facing view of Llyndwr-fawr pond (HA48).



Plate 36. North facing view of Cairn/ Beacon (HA68) and Mynydd Margam Trig Point (GGAT03885).



Plate 37. South facing view of Cairn/ Beacon (HA68) and Mynydd Margam Trig Point (GGAT03885).



Plate 38. Detailed view of Mynydd Margam Trig Point (GGAT03885) set onto cairn/ beacon (HA68).



Plate 39. North east facing view of Site of Rhyd Llechwys Round Barrow (HA08) towards proposed development.

Cefn yr Argoed 2 platform house (HA32) and extractive features on Foel Trawsnant



Plate 40. West facing view of Cefn yr Argoed 2 platform house (HA32).



Plate 41. W facing view of Cefn yr Argoed 2 platform house (HA32).



Plate 42. East facing view of Foel Trawnant platform house (HA32) (towards development area).



Plate 43. West facing view of Foel Trawsnant platform house (HA32).



Plate 44. East facing view of Foel Trawsnant Quarry II (HA41).



Plate 45. North facing view of Foel Trawsnant Quarry III (HA40).



Plate 46. North west facing view of Trawsnant Quarry IV (HA43).



Plate 47. General east facing view towards the development area across Foel Trawsnant.



Plate 48. Site of extractive activity on Foel Trawsnant (HA47).



Plate 49. Concrete machine base with fixing bolts, possibly for winding gear, on site of extractive activity on Foel Trawsnant (SW of track) (HA47).



Plate 50. Remains of concrete structure with fixing bolts and steel brackets, possibly related to winding gear, on site of extractive activity on Foel Trawsnant (NE of track) (HA47).



Plate 51. Spoil tip on site of extractive activity on Foel Trawsnant (HA47).

Ton-hir Colliery complex



Plate 52. East facing view of a possible pond feature on site of Ton-hir Colliery complex (HA02)



Plate 53. South facing view of possible pond feature on site of Ton-hir Colliery complex (HA02).



Plate 54. Un-recorded pre-industrial field boundary west of Ton-hir Colliery complex (HA02).



Plate 55. Un-recorded pre-industrial field boundary west of Ton-hir Colliery complex (HA02).



Plate 56. Air shaft on site of Ton-hir Colliery complex (HA02).



Plate 57. Possible pond feature on site of Ton-hir Colliery complex (HA02).



Plate 58. Detailed view of possible pond feature within Ton-hir colliery complex (HA02).

Carreg Bica Standing Stone (Site of) (GGAT00711w)



Plate 59. Modern pile of boulders adjacent to site of Carreg Bica Standing Stone (HA33).



Plate 60. Recumbent stone in field adjacent to site of Carreg Bica Standing Stone (HA33).



Plate 61. Historic field boundary (HA50) observed within field adjacent to site of Carreg Bica Standing Stone (HA33).

Forestry track including site of post-medieval boundary stones



Plate 62. North facing view of the plantation track that lies parallel to the route of the proposed development.



Plate 63. Modern recumbent memorial stone (HA49) on forestry path adjacent to proposed power line route.

Garn-wen Quarries



Plate 64. Northeast facing view of quarrying on site of Garn-wen Quarry (HA26) .



Plate 65. South west facing view across Garn-wen Quarry and towards the proposed development.



Plate 66. West facing view from proposed development towards Mynydd Margam Registered Historic Landscape.



Plate 67. South facing view from the proposed development towards Mynydd Margam Registered Historic Landscape.



Plate 68. South east facing view from the proposed development towards Mynydd Margam Registered Historic Landscape.



Plate 69. East facing view of modern quarrying on Garn-wen.



Plate 70. East facing view towards Garn-wen Quarry (HA26) and site of Garn-wen Stones (HA27).



Plate 71. West facing view towards proposed development from site of Garn-wen Quarry (HA26) and site of Garn-wen Stones (HA27).



Plate 72. South facing view from Garn-wen Quarry (HA26) towards site of Rifle Range (HA45).



Plate 73. West facing view towards footpath leading from Garn-wen Quarry (HA26).



Plate 74. South facing view from proposed development to Rhyd Llechws structure (HA15).



Plate 75. South west facing view towards Moel Ton Mawr Quarry (HA16).

10.4 Appendix IV Cadw. 2007. Guide to the Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process. Revised 2nd Edition including Revisions to the Assessment Process (ASIDOHL2)



- BLACK MOUNTAINS ARCHAEOLOGY -
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GUIDE TO GOOD PRACTICE ON USING
THE REGISTER OF LANDSCAPES OF
HISTORIC INTEREST IN WALES IN THE
PLANNING AND DEVELOPMENT PROCESS

REVISED (2ND) EDITION INCLUDING REVISIONS TO THE
ASSESSMENT PROCESS (ASIDOHL2)



Cyngor Cefn Gwlad Cymru
Countryside Council for Wales



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Cadw, Welsh Assembly Government, Plas Carew, Unit 5/7 Cefn Coed, Parc Nantgarw, Cardiff CF15 7QQ. Tel 01433 33 6600

Countryside Council for Wales, Maes-y-Ffynnon, Penrhosgarnedd, Banor, Gwynedd LL57 2DW. Ffôn 01248385500

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Cover photograph: View east towards Angle bay in the Milford Haven historic landscape, with Angle village and its medieval strip fields (centre right) and Chapel Bay Fort (centre left) overlooking the coast (© RCAHMW).

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GUIDE TO GOOD PRACTICE ON USING THE REGISTER OF LANDSCAPES OF HISTORIC INTEREST IN WALES IN THE PLANNING AND DEVELOPMENT PROCESS

This Guide to Good Practice relates to the non-statutory *Register of Landscapes of Historic Interest in Wales*. The Register's principal sponsors, Cadw and the Countryside Council for Wales, have prepared it with the assistance of the four Welsh Archaeological Trusts. The Guide is non-statutory and advisory only. It is intended to assist local planning authorities to decide how much weight to give to information in the Register when determining planning applications. It is also intended to assist others involved in the planning and development process in Wales, particularly developers preparing Environmental Impact Assessment statements, to bring forward plans and proposals that are likely to have the least possible adverse impact on historic landscape areas on the Register.

The Guide comes in two sections. The first, 'Planning for Historic Landscapes', describes the background to the Register, the follow-up programme of Historic Landscape Characterization in the areas identified on it, the general principles underpinning the identification and conservation of historic landscapes, and the suggested use of the Register within the planning process and other assessment decision procedures not promoted through the Town and Country Planning Acts. The second section of the guide consists of a Technical Annex that sets out a staged process for assessing the significance of the impact of development on historic landscape areas on the Register (ASIDOHL2). It is recommended that assessments be routinely undertaken in the circumstances described above and in accordance with the suggested use of the Register described in the Guide.

Note on the Revised (2nd) Edition

The experience gained since the publication of the first edition of the Guide in 2003 has necessitated the publication of a revised, second edition, containing amendments and improvements. Users of the Guide have also contributed a number of helpful suggestions that have been incorporated. The principal changes are to be found in the formulae and grading systems used in Stages 2–4 of the ASIDOHL process described in the Technical Annex in the second section of the Guide. To differentiate this from that in the first edition, this will now be known as ASIDOHL2. The changes have been introduced to ensure that development impacts are treated more fairly and consistently, because there were anomalies present in some of

the formulae and score ranges used in the first version of the process. The structure of the ASIDOHL process and the body of the text, however, remain essentially unchanged. The planning and development process, to which the advice in the Guide applies, also remains largely unchanged. The first section of the Guide, on Planning and Historic Landscapes, therefore, contains only minor changes and amendments to bring that section up to date.

The sponsors are pleased that in the four years since the first appearance of the Guide in 2003, the ASIDOHL process has become increasingly recognized and accepted as a useful tool in Environmental Impact Assessments (EIA). However, experience shows that misunderstandings can still arise later on in the planning process after Environmental Statements have been completed, for example when planning applications or appeals have

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become subject to Public Inquiries. These could have been avoided had more use been made of the advice available from the sponsors on the scope of the ASIDOHL assessments. The sponsors feel that their advice is best sought at the beginning of the planning process before an ASIDOHL assessment is commissioned (for example at the scoping stage in an EIA). This would ensure that agreement is reached on the nature and range of the impacts that should be considered in the assessment; which and how many Historic Character Areas should be taken into account, and whether there are any special elements or characteristics within them of which particular note should be taken.

The test by which the sponsors judge an ASIDOHL2 assessment when giving their advice to planning authorities is that it should contain sufficient information for the 'responsible authority', in the case of EIA, or an

Inspector in the case of a Public Inquiry, to come to a balanced view in determining the planning application or appeal concerned. This relates not only to the appropriate range of impacts and Historic Character Areas being identified at the start of the ASIDOHL process, but also to the provision of sufficient written justification for scores given in the various stages of the process as an assessment is compiled. The onus, therefore, is on developers to ensure that the sponsors consider the ASIDOHL assessment satisfies this test. The sponsors accept that further advice may be needed concerning particular stages or points in the ASIDOHL process as assessments are compiled, and reference is made to this in the Technical Annex. This or any other advice concerning the Guide can be sought at any time from the contacts listed in the Appendix.

LANDSCAPE AREAS



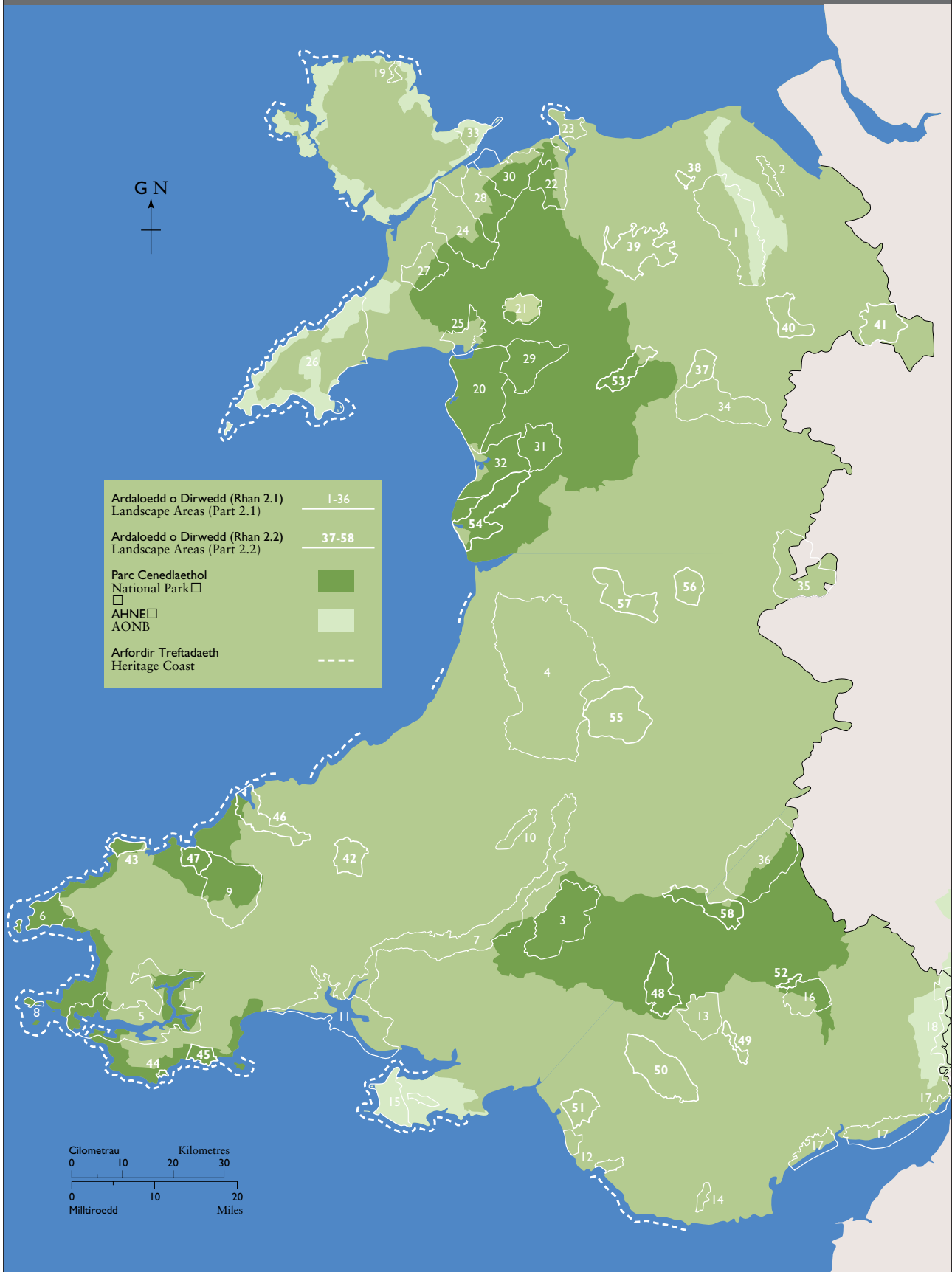
View across archaeological excavations in advance of developments at Parc Bryn Cegin, Llandygai, near Bangor, in the Ogwen Valley historic landscape. Behind can be seen the Llandygai Industrial Estate, where archaeological excavations in advance of its construction, in 1966–67, revealed important evidence of occupation and ceremonial activities dating back to the Neolithic period (© RCAHMW).

- | | |
|---|--|
| 1. Vale of Clwyd HLW (C) 1 | 1. Dyffryn Clwyd HLW (C) 1 |
| 2. Holywell Common and Halkyn Mountain HLW (C) 2 | 2. Comin Treffynnon a Mynydd Helygain HLW (C) 2 |
| 3. Black Mountain and Mynydd Myddfai HLW (D) 1 | 3. Y Mynydd Du a Mynydd Myddfai HLW (D) 1 |
| 4. Upland Ceredigion HLW (D) 2 | 4. Ucheldir Ceredigion HLW (D) 2 |
| 5. Milford Haven Waterway HLW (D) 3 | 5. Moryd Aberdaugleddau HLW (D) 3 |
| 6. St Davids Peninsula and Ramsey Island HLW (D) 4 | 6. Penrhyn Tyddewi ac Ynys Dewi HLW (D) 4 |
| 7. Tywi Valley HLW (D) 5 | 7. Dyffryn Tywi HLW (D) 5 |
| 8. Skomer Island HLW (D) 6 | 8. Ynys Selyf HLW (D) 6 |
| 9. Preseli HLW (D) 7 | 9. Preseli HLW (D) 7 |
| 10. Dolaucothi HLW (D) 8 | 10. Dolaucothi HLW (D) 8 |
| 11. Taf and Tywi Estuary HLW (D) 9 | 11. Aber Afonydd Taf a Thywi HLW (D) 9 |
| 12. Merthyr Mawr, Kenfig and Margam Burrows HLW (MGI) 1 | 12. Twyni Merthyr Mawr, Cynffig a Margam HLW (MGI) 1 |
| 13. Merthyr Tydfil HLW (MGI) 2 | 13. Merthyr Tudful HLW (MGI) 2 |
| 14. Llanarfarn, Vale of Glamorgan HLW (SGI) 1 | 14. Llanarfarn, Bro Morgannwg HLW (SGI) 1 |
| 15. Gower HLW (WGI) 1 | 15. Gŵyr HLW (WGI) 1 |
| 16. Blaenavon HLW (Gt) 1 | 16. Blaenafon HLW (Gt) 1 |
| 17. Gwent Levels HLW (Gt) 2 | 17. Gwastadeddau Gwent HLW (Gt) 2 |
| 18. Lower Wye Valley HLW (Gt) 3 | 18. Pen Isaf Dyffryn Gwy HLW (Gt) 3 |
| 19. Amlwch and Parys Mountain HLW (Gw) 1 | 19. Amlwch a Mynydd Parys HLW (Gw) 1 |
| 20. Ardudwy HLW (Gw) 2 | 20. Ardudwy HLW (Gw) 2 |
| 21. Blaenau Ffestiniog HLW (Gw) 3 | 21. Blaenau Ffestiniog HLW (Gw) 3 |
| 22. Lower Conwy Valley HLW (Gw) 4 | 22. Pen Isaf Dyffryn Conwy HLW (Gw) 4 |
| 23. Creuddyn and Conwy HLW (Gw) 5 | 23. Creuddyn a Chonwy HLW (Gw) 5 |
| 24. Dinorwig HLW (Gw) 6 | 24. Dinorwig HLW (Gw) 6 |
| 25. Aberglaslyn HLW (Gw) 7 | 25. Aberglaslyn HLW (Gw) 7 |
| 26. Lleyn and Bardsey Island HLW (Gw) 8 | 26. Llŷn ac Ynys Enlli HLW (Gw) 8 |
| 27. Nantlle Valley HLW (Gw) 9 | 27. Dyffryn Nantlle HLW (Gw) 9 |
| 28. Ogwen Valley HLW (Gw) 10 | 28. Dyffryn Ogwen HLW (Gw) 10 |
| 29. Trawsfynydd Basin and Cwm Prysor HLW (Gw) 11 | 29. Bro Trawsfynydd a Chwm Prysor HLW (Gw) 11 |
| 30. North Arllechwedd HLW (Gw) 12 | 30. Gogledd Arllechwedd HLW (Gw) 12 |
| 31. Vale of Dolgellau HLW (Gw) 13 | 31. Bro Dolgellau HLW (Gw) 13 |
| 32. Mawddach HLW (Gw) 14 | 32. Mawddach HLW (Gw) 14 |
| 33. Penmon HLW (Gw) 15 | 33. Penmon HLW (Gw) 15 |
| 34. Tanat Valley HLW (P/C) 1 | 34. Dyffryn Tanad HLW (P/C) 1 |
| 35. Vale of Montgomery HLW (P) 2 | 35. Bro Tefaldwyn HLW (P) 2 |
| 36. Middle Wye Valley HLW (P) 3 | 36. Canol Dyffryn Gwy HLW (P) 3 |
| 37. Berwyn HLW (C) 3 | 37. Y Berwyn HLW (C) 3 |
| 38. Lower Elwy Valley HLW (C) 4 | 38. Pen Isaf Dyffryn Elwy HLW (C) 4 |
| 39. Denbigh Moors HLW (C) 5 | 39. Mynydd Hiraethog HLW (C) 5 |
| 40. Vale of Llangollen and Eglwyseg HLW (C) 6 | 40. Dyffryn Llangollen ac Eglwyseg HLW (C) 6 |
| 41. Maelor HLW (C) 7 | 41. Maelor Saesneg HLW (C) 7 |
| 42. Drefach and Felindre HLW (D) 10 | 42. Dre-fach a Felindre HLW (D) 10 |
| 43. Pen Caer: Garn Fawr and Strumble Head HLW (D) 11 | 43. Pen Caer: Garn Fawr a Phen Strwmwll HLW (D) 11 |
| 44. Stackpole Warren HLW (D) 12 | 44. Cwningar Ystagwll HLW (D) 12 |
| 45. Manorbier HLW (D) 13 | 45. Maenorbŷr HLW (D) 13 |
| 46. Lower Teifi Valley HLW (D) 14 | 46. Pen Isaf Dyffryn Teifi HLW (D) 14 |
| 47. Newport and Carningli HLW (D) 15 | 47. Trefdraeth a Charningli HLW (D) 15 |
| 48. East Fforest Fawr and Mynydd-y-glôg HLW (MGI) 3 | 48. Dwyrain Fforest Fawr a Mynydd-y-glôg HLW (MGI) 3 |
| 49. Gelli-gaer Common HLW (MGI) 4 | 49. Gwaun Gelli-gaer HLW (MGI) 4 |
| 50. The Rhondda HLW (MGI) 5 | 50. Y Rhondda HLW (MGI) 5 |
| 51. Margam Mountain HLW (WGI/MGI) 2 | 51. Mynydd Margam HLW (WGI/MGI) 2 |
| 52. Clydach Gorge HLW (Gt) 4 | 52. Cwm Clydach HLW (Gt) 4 |
| 53. Bala and Bala Lakesides HLW (Gw) 16 | 53. Y Bala a Glannau Tegid HLW (Gw) 16 |
| 54. Dysynni Valley HLW (Gw) 17 | 54. Dyffryn Dysynni HLW (Gw) 17 |
| 55. Elan Valley HLW (P) 4 | 55. Cwm Elan HLW (P) 4 |
| 56. Caersws Basin HLW (P) 5 | 56. Bro Caersŵs HLW (P) 5 |
| 57. Clywedog Valley HLW (P) 6 | 57. Dyffryn Clywedog HLW (P) 6 |
| 58. Middle Usk Valley: Brecon and Llangorse HLW (P) 7 | 58. Canol Dyffryn Wysg: Aberhonddu a Llan-gors HLW (P) 7 |

THE LANDSCAPE AREAS AND LOCAL AUTHORITIES



THE LANDSCAPE AREAS, NATIONAL PARKS,
 AREAS OF OUTSTANDING NATURAL BEAUTY AND HERITAGE COASTS



PLANNING FOR HISTORIC LANDSCAPES



An aerial view of the lagoons and reedbeds of the Gwent Levels Wetland Reserve created to replace habitats lost when the Cardiff Bay Barrage was constructed. The reserve has been successfully integrated into the pattern of the Gwent Levels historic landscape (© RCAHMW).

1.0 Background to the Register of Landscapes of Historic Interest in Wales

1.1 The whole of the Welsh landscape can be said to be historic, with human activity often having been at the heart of its creation. The nature of its terrain, the stewardship exercised over the centuries by generations of landowners and farmers, along with only limited intensive cultivation and urbanization, have produced ideal conditions that have favoured the survival of much of the historic character of the Welsh landscape. However, since the beginning of the twentieth century, the scale and pace of change has intensified, and as we enter the twenty-first century, the historic character of the landscape is increasingly under pressure from a variety of new changes as older features are renewed or replaced, or when new features, often with very different characteristics, have to be introduced to meet modern needs.

1.2 Against this background and to be better informed about how to accommodate necessary change in a way that is sensitive to the historic character of landscape, Cadw, the Countryside Council for Wales (CCW) and the International Council on Monuments and Sites (ICOMOS UK) decided to collaborate to produce the Register of Landscapes of Historic Interest in Wales as a means of identifying, and to provide information on, the most important and best-surviving historic landscapes in Wales. The Royal Commission on the Ancient and Historical Monuments of Wales, the four Welsh Archaeological Trusts and the Welsh local authorities also collaborated in the project.

1.3 The Register has been issued in two parts, covering thirty-six 'outstanding' and twenty-two 'special' historic landscape areas, and forms Part 2 of the wider exercise to compile an overall Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales. For the purpose of this Guide, therefore, the term 'historic landscape' refers to an area identified on the *Register of Landscapes of Outstanding Historic Interest in Wales* (published as Part 2.1, by Cadw, in 1998, ISBN 1 85760 007 X), or on the *Register of Landscapes of Special Historic Interest in Wales* (published as Part 2.2, by Cadw, in 2001, ISBN 1 85760 187 4). The Guide does not deal with Part 1 of the Register, which is concerned with historic parks and gardens.

1.4 It is hoped that the greater account that has been taken of historic landscapes generally since the Register, and then the Guide, were first published, can be sustained in landscape planning, management, conservation, enhancement and interpretation, and in providing opportunities for access and recreation. In raising awareness of the historic significance and importance of the Welsh environment overall, use of the Register and this Guide should also encourage everyone

concerned to give greater weight to historic landscape issues alongside the more traditional and long-established conservation issues.

1.5 At the same time, the Register recognizes that landscapes are dynamic, living systems fashioned to meet current, mainly economic, needs and that what exists today is largely a created landscape, produced through human endeavour since the beginning of farming in this country. Landscapes, therefore, will continue to change, and need to change, so the intention is not to fossilize them, or to prevent them from being altered, but rather to manage them in ways that will allow the key historic elements or characteristics from the past to be retained while still meeting modern needs.

1.6 All landscape areas identified on the Register are of national importance in the Welsh context. The difference between the landscapes of outstanding historic interest featured in Part 2.1, and the landscapes of special historic interest featured in Part 2.2, therefore, is one of degree, and not quality of historic interest. The distinction was established by expert consensus following the scoring thresholds set for the selection of areas to be included on the Register. The scoring thresholds were verified by field assessments and are described in detail in the introduction to the Register. In summary, the distinction is intended to reflect the fact that the landscapes of special historic interest are generally smaller in size and have fewer selection criteria against which they could be justified, compared to the landscapes of outstanding historic interest. The distinction, however, should not cause the former to be considered of less value than the latter, and so far as the advice on the use of the Register is concerned, both categories should be treated in the same way.

1.7 Further information on the background to the creation of the Register, its methodology and its role, can be found in the introduction to Part 2.1, with a supplement of additional, updated information included in the introduction to Part 2.2.

1.8 Cadw has also published a more general guide to historic landscapes intended to raise awareness of their existence and importance amongst a wider audience (*Caring for Historic Landscapes*, Cardiff, 2003).

2.0 Suggested use of the Register within the planning and development process

2.1 This Guide and the following Technical Annex are primarily aimed at the assessment of individual projects and the development control process. They do not specifically apply to the assessment of development plans and the Strategic Environmental Assessment of plans and programmes, for example, Unitary or Local Development Plans,

Transport Plans, the Trunk Road Programme, and so on; nevertheless, such plans and programmes should acknowledge and make reference to the principles involved and the need to consider historic landscape issues. The Guide and Technical Annex do not, at this stage, address the issue of longer-term, cumulative impact of development or change in historic landscapes. This would require a process of strategic, long-term assessment and monitoring, enabling pressures, stresses and risks to be identified and, ultimately, the establishment of indicators and ‘limits of acceptability’ and ‘most favoured status’ of the landscape areas on the Register. The sponsoring bodies hope that this Guide and Technical Annex will be used as a tool to start and underpin that process.

2.2 Advice on listed buildings and conservation areas in the planning process is given in Welsh Office Circulars 61/96 *Planning and the Historic Environment: Historic Buildings and Conservation Areas* and 1/98 *Planning and The Historic Environment: Directions by the Secretary of State for Wales*; and in Welsh Assembly Government *Planning Policy Wales*, March 2002, paragraphs 6.5.7 to 6.5.13 and paragraphs 6.5.14 to 6.5.21. Listed buildings and conservation areas often form integral elements, or sometimes, key characteristics, in historic landscapes. However, the advice in this Guide does not affect or alter the provisions of these documents, which should continue to be applied to listed buildings and conservation areas within historic landscape areas on the Register.

2.3 Advice on the role of World Heritage Sites in the planning process is given in Welsh Office Circular 61/96 *Planning and the Historic Environment: Historic Buildings and Conservation Areas*, paragraphs 13, 14 and 15; and in Welsh Assembly Government *Planning Policy Wales*, March 2002, paragraphs 6.5.22. Most World Heritage Sites in Wales are within historic landscapes; however, the advice in this Guide does not affect or alter the provision of these documents, which should continue to be applied to the World Heritage Sites within historic landscape areas on the Register.

2.4 Advice on the role of archaeology in the planning process is given in Welsh Office Circular 60/96 *Planning and the Historic Environment: Archaeology*, and in Welsh Assembly Government *Planning Policy Wales*, March 2002, paragraphs 6.5.1 to 6.5.6. Archaeological sites often form integral elements, or sometimes, key characteristics, in historic landscapes. However, the advice in this Guide does not affect or alter the provisions of these documents, which should continue to be applied to archaeological sites within historic landscape areas on the Register.

2.5 Information on how the Register may be used is set out, in detail, in its introduction, with a supplement of additional,

updated information included in the introduction to Part 2.2. It is important, however, to emphasize that the Register does not impose statutory controls and areas on it are not ‘designated’. The latest guidance given to planning authorities on the use of the Register is set out in Welsh Assembly Government *Planning Policy Wales*, March 2002, paragraph 6.5.23 which states:

‘Information on the landscapes on the second part of the Register should also be taken into account by local planning authorities in preparing UDPs and emerging Local Development Plans, and in considering the implications of developments which are of such a scale that they would have more than local impact on an area on the Register.’

2.6 Such developments should be considered on a case-by-case basis, but generally may be defined as, but are not confined to:

- major communications schemes (road, rail, sea, air, or inland waterway);
- quarrying and opencast mining;
- major settlement;
- major leisure developments;
- large-scale industrial, processing, manufacturing or commercial expansion;
- large-scale landfill and reclamation, waste disposal or recycling schemes;
- major drainage, coastal defence and flood prevention works;
- power generation, storage and distribution projects;
- major water abstraction, treatment or supply schemes;
- other similar, large-scale infrastructure projects;
- afforestation or other extensive agricultural land use changes;
- intensive agriculture or aquaculture projects.

2.7 Information on the Register should also be taken into account when considering developments that are not in themselves large-scale or extensive, but are of a radical nature and likely to cause unacceptable change when considered in relation to the nature and quality of the existing key historic elements or characteristics in the landscape area on the Register.

2.8 Certain types of developments require Environmental Impact Assessment (EIA) to be undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999–SI 1999 No 293 (EIA Regulations). Guidance on the application of the EIA Regulations in Wales is given in Welsh Office Circular 11/99 *Environmental Impact Assessment*. EIA Regulations Schedule 4 (as reproduced in Circular 11/99, p. 47, Annex C) sets out the information to be included in an Environmental Statement, section 3 of which requires:

‘A description of the aspects of the environment likely to be significantly affected by the development... including the architectural and archaeological heritage, and landscape.’

This includes the historic landscape areas on the Register.

2.9 With rare exception all developments of the type listed in 2.6 will *de facto* require EIA because of their nature and scale. In other cases, each development will be considered for EIA on its own merits, and the more environmentally sensitive the location, the more likely it is that the effects will be significant and will require EIA. The fact that a location occurs within a historic landscape area on the Register should be considered as increasing its overall environmental sensitivity and, consequently, the necessity for EIA as required in EIA Regulations Schedule 3 in respect of ‘landscapes of historical, cultural or archaeological significance’ (Circular 11/99, p. 46, Criterion 2 (c) (viii)). Planning or other competent authorities should take this into account when screening applications to determine the need for EIA with, if required, advice from Cadw, CCW and the Welsh Archaeological Trusts.

2.10 In the light of the Rochdale ruling (High Court: *Crown v. Rochdale Metropolitan Borough Council, 7/5/1999*), when EIA is required, fixed development within a historic landscape area on the Register requires a meaningful assessment process that is identified when the EIA is scoped. When EIA is required for a development within a historic landscape area on the Register, therefore, planning or other competent authorities in agreeing the scope of works should require assessors to use the methodology set out in the Technical Annex for assessing the significance of the impacts of the proposal on the historic landscape area.

2.11 Where EIA is not necessary, it is a matter for the discretion of the planning or other competent authority to determine the level of an Assessment of the Significance of the Impact of Development on Historic Landscape areas on the Register (ASIDOHL2) it considers desirable when considering a development proposal which is of such a scale, or of a radical nature, that it is likely to have more than local impact on an area on the Register. A particular development may be considered to require the full ASIDOHL2 process outlined in the Technical Annex or, alternatively, the nature of the development may require the application of only part of the ASIDOHL2 process. Detailed advice should be obtained from Cadw, CCW and the Welsh Archaeological Trusts.

2.12 Whereas the advice in this Guide and Technical Annex is designed to assist the process of establishing interests and assessing the significance of impacts,

it does not provide options for the consideration of any mitigation or positive benefits that may be offered through the restoration or enhancement of elements. These issues should be separately assessed, preferably relying on the results of a completed ASIDOHL2 exercise (see Technical Annex, ‘Mitigation’, p. 30).

3.0 The Historic Landscape Characterization programme

3.1 In parallel with the creation of the Register, Cadw and the Welsh Archaeological Trusts are undertaking a follow-up programme of Historic Landscape Characterization in Wales. The programme gathers together more detailed information about each area on the Register, and it is designed to cater for a variety of needs, but primarily to provide information for landscape conservation and management as, for example, may be required in the Tir Gofal agri-environment scheme.

3.2 Information is gathered in such a way as to be compatible and interchangeable with the historic landscape aspect in CCW’s *LANDMAP* programme, so that the results of a characterization study can be directly fed into a *LANDMAP* exercise and vice versa. In so far as this Guide is concerned, information from characterization should always be used for an ASIDOHL2, as set out in the Technical Annex to this Guide.

3.3 CCW, University College, Dublin and Brady Shipman Martin, Dublin, working in partnership, with funds from the INTERREG II European Regional Aid Fund, have produced a *Guide to Best Practice in Seascape Assessment* (The Marine Institute, Dublin, 2001). Seascapes assessment takes account of historical and cultural issues and it is intended that assessment studies will eventually be available for the whole of the Welsh coastline. Organizations or individuals undertaking ASIDOHL2 in coastal areas should contact CCW for details of the latest seascape information available. Also relevant in this context is the *Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report* (Report by Enviros Consulting for the Department of Trade and Industry, 2005).

4.0 How Historic Character Areas are identified

4.1 The characterization process divides each landscape area on the Register into a number of smaller, more discrete, geographical areas of broadly consistent historic character called ‘Historic Character Areas’. These areas are defined according to their key historic elements or characteristics, for example, an area might be physically characterized by

a particular form of historic settlement or land use pattern, or it might have distinctive historic buildings, archaeological sites or traditional field boundaries, or it might contain important ancient habitats, and so on. Alternatively, an area might not have any strongly definitive physical characteristics, but instead it might have significant historic documentary evidence relating to it, or have important historic associations, and so on.

4.2 All of these elements or characteristics can occur either singly or in combination. In some cases, an area might be characterized by a range of elements that are not necessarily similar, but together demonstrate a particular land use theme or process; for example, defence, industry, communications, land enclosure, landscape planning or ornamentation, and so on. One theme may be dominant or several might have been at work at the same, or at different times. Grouping elements and characteristics together under land use themes greatly increases our capacity to understand the historical development of the landscape. The understanding we gain is a key characteristic in its own right and one of the principles that underpins the identification of historic landscapes (section 6.2).

5.0 Getting information on Historic Landscape Characterization and Historic Character Areas

5.1 The characterization programme is progressing towards coverage of all areas on the Register. Its results are available on the Welsh Archaeological Trusts' websites, as well as in paper volumes available for inspection at the offices of the Welsh Archaeological Trusts and Cadw. Relevant addresses are given in the Appendix.

5.2 In the few historic landscape areas on the Register where characterization reports are not yet available, and where an ASIDOHL2 is required, it is recommended that an ASIDOHL2 should be undertaken in relation to 'Provisional Historic Character Areas'. Provisional Historic Character Areas are identified during the preparation of characterization reports and the Welsh Archaeological Trusts can supply details of these. Where characterization reports are not yet available, but a *LANDMAP* exercise has been undertaken, the Level 4 'historic landscape aspect areas' identified in *LANDMAP* may qualify as Provisional Historic Character Areas, subject to the endorsement of the Trust concerned. Where Provisional Historic Character Areas have not yet been identified, the Trusts can advise on a suitable methodology, or can be commissioned to identify Provisional Historic Character Areas as a prerequisite for an ASIDOHL2.

6.0 Key principles underpinning the identification of historic landscapes

6.1 This Guide and the advice in it have to be considered in the context of the three key principles underpinning the identification of historic landscape areas on the Register, namely:

6.2 The Register promotes the conservation of the key characteristics of historic landscapes as those landscapes evolve. While the Register recognizes that historic landscapes must inevitably evolve to meet the needs of the people who sustain and live in them, it is hoped that this can be achieved with the fullest possible regard for the conservation of their key historic characteristics. Here, the term 'characteristics' is taken in the broadest sense. It includes not only the physical elements of the past that survive, like individual sites, monuments or other features noted in section 4.0, but also the spaces in between and the resulting patterns formed in the landscape. The survival and appreciation of these spatial characteristics is crucial because, like the land use themes identified during characterization, they greatly increase our capacity to understand how individual sites or monuments functioned and how they were related physically, visually and through time. How much and how well we are able to understand and appreciate the historical meaning and significance of the landscape is a key characteristic in its own right. This ties in with the second principle.

6.3 The conservation of historic landscapes is about ensuring the transfer of maximum historic meaning and value when contemplating landscape change. Our capacity to understand and appreciate the historical development of the landscape should not be thwarted by inappropriate or insensitive change. This carries with it the need to assess the potential effects of a development, in terms of any lasting alteration it will cause, in relation to the whole of the historic landscape on the Register, not just the elements or characteristics directly affected in the 'footprint' area. This ties in with the third principle.

6.4 Key historic characteristics within historic landscapes, like historic buildings or archaeological sites, are irreplaceable. Their removal, loss, degradation, fragmentation, or dislocation cannot be mitigated in the same way as a habitat or a natural feature might be restored or recreated. The effects of direct, physical impacts are irreversible, but equally damaging, indirect impacts can occur through the severance or disruption of the functional or visual connections between elements, or

through the consequential degradation of the visual or other amenity of elements, or through a combination of these factors. This relates back to the second principle because, through indirect impacts, developments can have an adverse effect on the amenity and value of the landscape well beyond the site of the development itself. Piecemeal development over time can have an equally adverse effect resulting from a cumulation, or a combination of direct and indirect impacts.

7.0 Guidance on determining landscape edges and on the status of recent elements or characteristics in the landscape areas on the Register

7.1 It is widely accepted that it is difficult to determine precise edges to landscapes. Although landscapes are real in the sense that they are made up of solid objects and spaces, they are also subjective and their extents as humanly perceived, will invariably involve a degree of individual opinion or expediency. Towards the limits of any given area of interest in a landscape, therefore, the question can always be asked whether a particular element is included or excluded. These constraints apply to the landscape areas on the Register.

7.2 In order to assist planning authorities and others who require more precision in their work, this section gives guidance about determining the edges of the landscape areas on the Register, the edges of the Historic Character Areas identified by characterization and the relationship between the two.

7.3 A pragmatic and common sense approach was adopted for determining the broad extents of the landscape areas on the Register. The methodology is explained in detail in the introduction to the Register (Part 2.1, pp. xxx–xxxii, ‘Defining the areas’). In summary, the nature of the historic interest concerned determined the extent of the landscape areas on the Register and, in many cases, because of Wales’s varied topography, the landscape areas coincided with the physical limits of natural features like mountains, valleys, basins, promontories and so on.

7.4 By their very nature and much smaller scale, the edges of Historic Character Areas will be drawn to coincide with the geographical or physical limits of their characteristics. In most cases, this will have the effect of producing precise edges that can be shown as hard lines on maps. However, these should not be taken as representing the edges of the landscape areas on the Register.

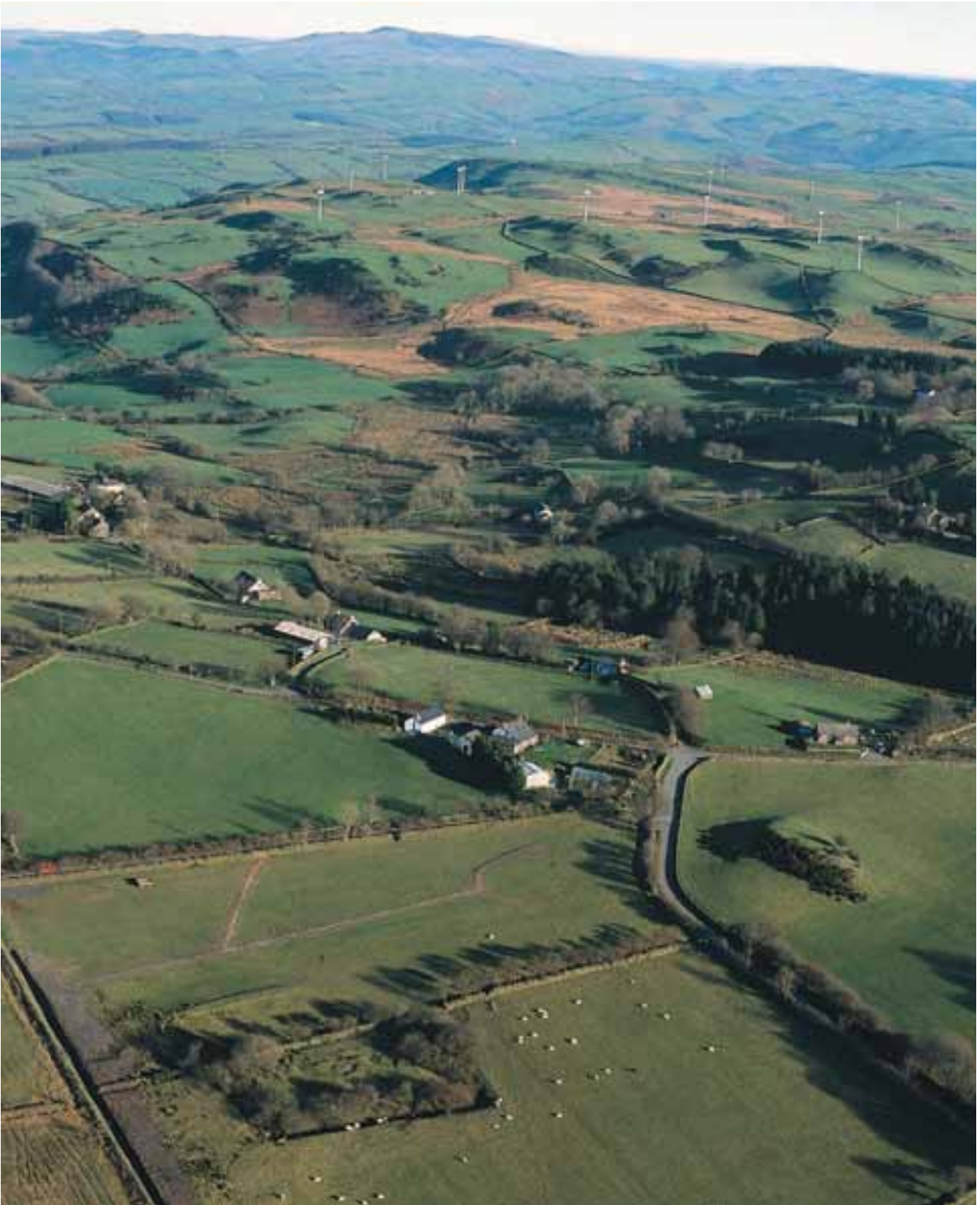
7.5 Although there may appear to be a coincidence in their edges, the characterization programme has shown that in some landscape areas on the Register, particularly those identified under Criterion 3 — Historic diversity/ Multiperiod, Historic Character Area edges can fall outside the extent of the landscape area on the Register. This is because Historic Character Areas are identified at a much smaller scale and at a much greater level of detail than was possible for the landscape areas on the Register, and where there is a great degree of diversity, edges can be drawn at a number of places depending on which characteristic is selected as being the most dominant.

7.6 In order to resolve this potential ambiguity, the following guidance is offered. In planning terms, the status of the Register is non-statutory, and this includes information from characterization that is intended to support the Register. The extent of the landscape areas on the Register and Historic Character Areas are, therefore, indicative and advisory only.

7.7 It will be a matter for the planning or other competent authority undertaking an EIA, or the Public Inquiry Inspector concerned, to determine where a precise edge should be drawn. All the evidence available in the Register, the relevant characterization report and any relevant work done subsequently should be carefully considered and weighed against the nature and extent of the proposed development and its predicted impact on the landscape area on the Register. The guiding principle is that where drawn edges are required, they should be as consistent as possible with the maintenance of those historic elements or characteristics that demonstrate the outstanding or special interest of the landscape area on the Register.

7.8 Another potential ambiguity or misunderstanding can arise over the presence in landscape areas on the Register of recent elements or characteristics that may be of little, if any, historic interest. As excluding these elements or characteristics would have been impossible and rather meaningless in landscape terms, the Register adopted a pragmatic approach by assuming that ‘history started yesterday’ (Part 2.1, p. xxii, ‘Criteria for landscapes of outstanding or special historic interest’). While this assumption may be theoretically correct, it is not really helpful in planning terms. Reference to recent elements or characteristics in landscape areas on the Register, therefore, should not be interpreted as placing undue weight on their intrinsic importance, but rather as focusing on their wider role in contributing to landscape diversity and continuity over a much longer time span. It will, therefore, be a matter for the planning or other competent authority undertaking an EIA, or the Public Inquiry Inspector concerned, to decide on a case-by-case basis what emphasis to place on the contribution made by recent elements or characteristics to the landscape areas on the Register.

TECHNICAL ANNEX



Windfarms, like this one at Llangwryfon in the Upland Ceredigion Historic Landscape, are one of the types of development within an area on the Register requiring an ASIDOHL2 assessment. The Trefenter medieval moated site, which is a scheduled ancient monument, can be seen in the foreground (© RCAHMW).

THE ASIDOHL2 PROCESS: A STAGED PROCESS FOR THE ASSESSMENT OF THE SIGNIFICANCE OF THE IMPACT OF DEVELOPMENT ON HISTORIC LANDSCAPE AREAS ON THE REGISTER OF LANDSCAPES OF HISTORIC INTEREST IN WALES

Introduction

The staged process recommended in this Technical Annex for the assessment of the significance of the impact of development on historic landscape areas on the Register (ASIDOHL2), is intended to be used by archaeologists with historic landscape expertise or for landscape practitioners familiar with landscape approaches to the historic environment.

Guidance on the application of the process and on the technical steps involved should be sought in the first instance from the Welsh Archaeological Trusts. They will also be able to advise on the latest revisions and provide, through their websites, blank proformas of the tables used at each stage of the assessment process.

It is intended that the process will continue to be regularly updated to reflect practical experience gained.

To this end, the sponsoring bodies would welcome any comments or suggestions on its operation.

In most cases, an assessment can be primarily based on a desk-top study and analysis of all the relevant information, supported by site visit(s) (including, where necessary, fieldwork to establish the 'Provisional Historic Character Areas' noted in section 5.2) and the production of a written report. These guidelines apply to these cases only. In all other cases where, for example, substantial departures from the guidelines may be required, it is recommended that any changes and variations are discussed and agreed in advance with Cadw, CCW and the curatorial section of the relevant Welsh Archaeological Trust.

Taking the Historic Character Areas derived from the characterization programme as the 'building blocks' of the historic landscape areas on the Register, it is recommended that the ASIDOHL2 process and report should be structured into five main stages:

TABLE 1

ASSESSMENT OF THE SIGNIFICANCE OF THE IMPACT OF DEVELOPMENT ON HISTORIC LANDSCAPE AREAS ON THE REGISTER OF LANDSCAPES OF HISTORIC INTEREST IN WALES — ASIDOHL2

SUMMARY OF STAGES

STAGE 1	Compilation of an introduction of essential, contextual information.
STAGE 2	Description and quantification of the direct, physical impacts of development on the Historic Character Area(s) affected.
STAGE 3	Description and quantification of the indirect impacts of development on the Historic Character Area(s) affected.
STAGE 4	Evaluation of the relative importance of the Historic Character Area(s) (or part(s) thereof) directly and/or indirectly affected by development in relation to: <ul style="list-style-type: none"> (a) the whole of the Historic Character Area(s) concerned, and/or (b) the whole of the historic landscape area on the Register, followed by (c) an evaluation of the relative importance of the Historic Character Area(s) concerned in the national context, and a determination of the average overall value of all the Historic Character Areas (or parts thereof) affected.
STAGE 5	Assessment of the overall significance of impact of development, and the effects that altering the Historic Character Area(s) concerned has on the whole of the historic landscape area on the Register.

STAGE 1 Contextual information

The first stage of the ASIDOHL2 process is to gather essential, contextual information that should provide and form the introduction to the report. This information should include:

- (a) A brief summary description of the development, with a map at the appropriate scale showing its location in relation to the historic landscape area on the Register.
- (b) A statement about the context in which the ASIDOHL2 is being done, for example, as part of EIA, a feasibility study for development, as part of evidence to be presented at a Public Inquiry etc.
- (c) If relevant, a brief summary of the planning history of the site (details of any previous permissions, appeals etc.).
- (d) References to any related assessments, for example, a *LANDMAP* study, an archaeological assessment under the provisions of Welsh Office Circular 60/96, EIA, or a previous assessment etc.
- (e) A summary of the national, regional and local planning policies in relation to historic landscapes in the development area (Welsh Assembly Government planning guidance, Unitary Development Plans, emerging Local Development Plans, etc.)
- (f) In the relevant cases, an indication of the provisional status of any Historic Character Areas (see section 5.2).
- (g) An indication of the confidence levels of the data upon which the ASIDOHL2 is based and any resulting limits assigned to impact predictions, either because of techniques used or because of the limits of information available, timing or personnel used, inability to gain access to the land or data involved, and whether there are any contingent, or other, liabilities, issues of confidentiality, copyright relating to the data etc.
- (h) A statement on the qualifications and experience of the person(s) responsible for undertaking the ASIDOHL2 and a full declaration of the nature of any contractor–client relationships.
- (i) A description of the process used, work undertaken, the area over which impacts have been assessed, sources consulted, site visits etc., and an indication of the ASIDOHL2 stages undertaken.

Copies of the historic landscape citation in the Register, the descriptions of the Historic Character Area(s) affected and any other relevant supporting information, maps, photographs etc. should normally be included as appendices to the ASIDOHL2 report.

STAGE 2 Assessment of direct, physical impacts of development

The second stage of the ASIDOHL2 process and report should describe and, as far as possible, quantify the direct, physical impacts of the development on the Historic Character Area(s) affected using the following framework.

A map should be provided at the appropriate scale showing the precise location and extent of the development, including any preliminary site works or supporting infrastructure necessary, in relation to the Historic Character Area(s) directly affected.

Where there are large amounts of information or clarity is an issue, supplementary map(s) can be provided to show the location of Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, Parks and Gardens of Special Historic Interest, and any other coincident statutory, nature conservation or landscape designations; the location of any known, non-scheduled archaeological sites and monuments, non-listed historic buildings or structures; traditional boundaries, or any other key historic elements or characteristics identified in the characterization report. Wherever possible, the Primary Record Numbers (PRNs) assigned in the regional Historic Environment Records maintained by the Welsh Archaeological Trusts, should be quoted. (The distinction between elements and characteristics is not critical. In the context of an ASIDOHL2 exercise and its constituent stages, they are not mutually exclusive and reference is drawn to the definitions set out in sections 4.1, 4.2 and 6.2.) Direct, physical impacts should be described and quantified in three ways, namely:

(a) In absolute terms

This should be expressed as a statement indicating the actual percentage or proportion of the surface area of the Historic Character Area that is directly affected, for example, ‘55% (or just over half) of the area of Historic Character Area X will be permanently lost or removed by development.’ (In some cases, the percentage surface area affected could be greater than the physical extent of the development if, for example, a construction land-take greater in area than, or separate from, the development site is required for extensive preliminary site works, ancillary developments or supporting infrastructures.)

(b) In relative terms

This should be expressed with statements indicating the percentages or proportions of the known resource (i.e. the key elements or characteristics identified by characterization) that will be permanently lost or removed by development, for example, ‘In Historic Character Area X, 25% (or a quarter) of, for example, the number of known archaeological sites;

the extent of historic land use or pattern in area A; the length of linear feature B, and so on, will be permanently lost or removed by development.

In both (a) and (b), the overall magnitude of direct, physical impacts should be graded as:

TABLE 2

ASIDOHL2 STAGE 2: GRADES OF DIRECT PHYSICAL IMPACTS

75–100%	permanently lost or removed	Very Severe;
50–74%	permanently lost or removed	Severe;
30–49%	permanently lost or removed	Considerable;
15–29%	permanently lost or removed	Moderate;
5–14%	permanently lost or removed	Slight;
0–4%	permanently lost or removed	Very Slight.

The intrinsic importance or status of each element or characteristic affected should also be assessed and briefly described and recorded using the categories adopted by the Welsh Archaeological Trusts, namely:

Category A Sites and Monuments of National Importance

This includes Scheduled Ancient Monuments (SAMs), Grade I and II* (and some Grade II) Listed Buildings and sites of similar quality, i.e. those which would meet the requirements for scheduling or listing at the top two grades. There is a presumption in favour of preservation of all such sites and their settings should they come under threat. Such sites might include those that survive principally as buried remains.

Category B Sites and Monuments of Regional Importance

This includes sites that would fulfil the criteria for listing at Grade II (if a building), but not for scheduling (if a relict archaeological site). Nevertheless, such sites are of particular importance within a regional context and, if threatened, should ideally be preserved in situ, although complete excavation and/or recording may be an acceptable alternative. Most sites of archaeological and/or historical interest will fall within this category.

Category C Sites / Features of Local Importance

This category includes components of the historic environment (such as walls, gateposts, tracks etc.) that help define local distinctiveness and character. They may not be of sufficient importance to justify a recommendation for preservation if threatened, but they nevertheless have an interest and

importance in their local context.

Category D Minor and Damaged Sites / Features

This category includes sites / features which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category. Rapid recording, either before or during destruction, is usually sufficient for this category of site.

Category U Sites / Features Needing Further Investigation

Sites / features whose character, importance or location is undetermined are placed in this category. They include buried sites and known underground features identified from archival evidence and retrospective map analysis, sites with no defined physical presence such as find spots, sites noted but not accurately located in antiquarian references, sites known only from place-name evidence and other sites reported at the specified location, but cannot be verified by archaeological fieldwork. They will require further work before they can be allocated to Categories A–C.

Where large areas are involved, or where there is a high concentration of elements as, for example, in industrial or urban areas, it is suggested that groups of similar, or related, elements are brought together and considered as a single element or characteristic, provided this is clearly stated in the report. The emphasis should be on Category A and B and closely linked, or groups of, Category C sites.

(c) In landscape terms

As well as the intrinsic importance or value recorded in step (b), account should also be taken of the extrinsic importance of elements or characteristics within the landscape of the Historic Character Area. Extrinsic importance reflects the contribution the individual element or characteristic makes to the value of the Historic Character Area as a whole. The Historic Character Area will have a value in excess of the combined values of the individual elements or characteristics that make it up, on the basis that ‘the sum of the whole is greater than the sum of the individual parts’. Elements or characteristics need not necessarily be similar, and may even be quite diverse, but as part of a landscape, they will have a measure of extrinsic, as well as of intrinsic, importance.

Extrinsic importance is not to be confused with the ‘Group Value’ of closely related elements or characteristics in Historic Character Areas where a single land use theme or process is dominant. Group value relates to mainly functional links and interconnections that occur between individual elements, and will depend on how well the links have survived.

Examples would be groups consisting of elements with a similar morphology, chronology and function (e.g. a cairnfield), or of elements with a dissimilar morphology, but sharing a clear past interconnectivity (e.g. an ironworks and its related water management system, adits/levels/ mineshaft, tramroad/railway, waste tips and perhaps also workers' housing).

Clearly, the distinction between 'Extrinsic Importance' and 'Group Value' will to some extent depend on the scale and level of detail at which (a) elements or characteristics and (b) Historic Character Areas have been identified. However, in this stage of the ASIDOHL2 process, the emphasis should be on determining the extrinsic, or landscape value of elements or characteristics, whether or not they are individually made up of groups of smaller-scale features that have a high, intrinsic group value. However, high intrinsic group value may well enhance an element's extrinsic, or landscape importance overall, especially in areas with a high density of related features.

The extrinsic, or landscape importance of the elements identified should be graded as 'Very High'; 'High'; 'Considerable'; 'Medium'; 'Low', or 'Very Low'; together with an indication of the type of group to which it belongs, for instance, as in the examples given above.

The effect the development would have on the extrinsic importance of the element or characteristic as a whole should then be assessed. This should reflect what effects the loss of element X (or part thereof) would be on the landscape of Historic Character Area Y where X is found. In other words, by how much does the loss of X diminish the value of Y as a landscape? Effects should be graded as a 'Landscape Value' that is 'Lost'; 'Substantially Reduced'; 'Considerably Reduced'; 'Moderately Reduced'; 'Slightly Reduced', or 'Very Slightly Reduced'.

In order to determine the overall magnitude of direct, physical impacts on a Historic Character Area, and for the results to be transparent and meaningful for planning and development purposes, impact magnitudes should be weighed up with element sensitivity (i.e. an element's intrinsic and extrinsic importance or status), using the following scoring system:

TABLE 3
ASIDOHL2 STAGE 2: DIRECT PHYSICAL IMPACTS – GRADES AND SCORES
IMPACTS AND ELEMENT SENSITIVITY SCORE

Direct physical impacts – absolute	
Very Severe	6
Severe	5
Considerable	4
Moderate	3
Slight	2
Very Slight	1
Direct physical impacts – relative	
Very Severe	6
Severe	5
Considerable	4
Moderate	3
Slight	2
Very Slight	1
Site category	
A	4
B	3
C	2
D	1
U	1
Direct physical impacts – landscape value	
Very High	6
High	5
Considerable	4
Medium	3
Low	2
Very Low	1
Landscape value effect	
Lost	6
Substantially Reduced	5
Considerably Reduced	4
Moderately Reduced	3
Slightly Reduced	2
Very Slightly Reduced	1

The results for each Historic Character Area affected could be summarized in a table, for example:

TABLE 4

ASIDOHL2 STAGE 2: ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA X

ABSOLUTE IMPACT (LOSS OF AREA)
 48 ha, 55% area

MAGNITUDE & SCORE
 Severe – 5

RELATIVE AND LANDSCAPE IMPACTS (LOSS OF KNOWN ELEMENTS OR CHARACTERISTICS) & SCORES

ELEMENT / % LOSS	CATEGORY	MAGNITUDE	LANDSCAPE VALUE	LANDSCAPE VALUE EFFECT
Tramway R – 0.3km length, 15%	B – 3	Moderate – 3	High – part of quarry complex G – 5	Slightly Reduced – 2
Field System Y – 2.3 ha, 85%	C – 2	Very Severe – 6	High – part of settlement cluster P – 5	Substantially Reduced – 5
Hut Platforms A – 4 sites, 30%	A – 4	Considerable – 4	Medium – part of settlement R – 3	Moderately Reduced – 3
Crop-mark complex B – 1.0 ha, 65%	A (SAM) – 4	Severe – 5	High – part of ritual complex T – 5	Lost – 6
Ancient Woodland C – 0.3 ha, 3%	B – 3	Very Slight – 1	Very low – 1	Very Slightly Reduced – 1

Template available at www.cadw.wales.gov.uk

The scores for each element (i.e. Status [Category] + Magnitude + Landscape Value + Landscape Value Effect) are added up to produce a combined total. This figure is then divided by the number of elements identified, in order to obtain an average figure. In the example shown above this would be:

$$(3+3+5+2) + (2+6+5+5) + (4+4+3+3) + (4+5+5+6) + (3+1+1+1)$$

Divided by 5 = 14.2

This average score is then added to the score for the magnitude of absolute impact, which in this case is 5:

$$14.2 + 5 = 19.2, \text{ rounded off to the nearest whole number} = 19$$

On a 28-point scale, which is the maximum possible, this figure provides a measure of the overall magnitude of direct, physical impacts on Historic Character Area X. Scores are then graded according to the following scale:

TABLE 5

ASIDOHL2 STAGE 2: OVERALL MAGNITUDE OF DIRECT PHYSICAL IMPACTS

SCORE	GRADING
24–28	Very Severe
19–23	Severe
14–18	Considerable
9–13	Moderate
4–8	Slight
0–3	Very Slight

In the example shown, therefore, a score of 19 equates with a ‘Severe’ overall magnitude of direct, physical impact on Historic Character Area X.

STAGE 3 Assessment of indirect impacts of development

Clearly, a finite area of land will be directly and physically affected by a development, but a much greater area will be indirectly affected through the fragmentation of Historic Character Areas, visual intrusion and encroachment that could devalue the historic landscape area on the Register as a whole. The importance of ‘setting’ is a well-established criterion in the assessment of the significance of impact of development on Scheduled Ancient Monuments and Listed Buildings, and the same criterion should be applied to Historic Character Areas and to historic landscape areas on the Register.

There is no statutory definition of setting, but it could be considered as having two principal dimensions. Firstly, there is the immediate or essential setting which, in the case of a building, would be the ancillary land used with it or the curtilage. Secondly, there is the wider setting that, in the case of a building, may or may not be legally attached to it, may or may not be used with it, and is often part of the built environment or part of the countryside. Settings may not be as easily defined for field monuments, but it may be possible to make reasonable inferences based on archaeological, or historical, information. Setting should not be interpreted too narrowly, and for the purposes of this process, impacts on settings will be categorized as ‘indirect’ impacts.

The third part of the ASIDOHL2 report should, therefore, describe and quantify as objectively as possible the indirect impacts of the development on all Historic Character Areas affected.

Indirect impacts can be categorized as being mainly physical or visual in nature.

(a) Indirect, physical impacts

These can occur to elements in a Historic Character Area

as a result of one, or a combination, of the following factors:

- (i) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements, during or consequent to development.
- (ii) Related to (i), the likelihood of increased management needs to maintain elements as, for example, through altered habitats, water levels, increased erosion, new access provision etc., during or consequent to development.
- (iii) The severance, fragmentation, dislocation or alteration of the functional connections between related elements, for example, a field system becomes ‘severed’ from its parent farmstead by an intervening development. This includes ‘severance’ from related elements in adjacent, or other, geographically removed but still functionally linked, Historic Character Areas, which large-scale developments might cause in archaeologically or historically complex landscapes.
- (iv) The frustration or cessation of historic land use practices, for example, it becomes more difficult or impossible to manage an area in a traditional manner as a result of development.
- (v) The frustration of access leading to decreased opportunities for education, understanding or enjoying the amenity of elements, during or consequent to development.

Each category of indirect, physical impact identified should be described and an assessment made of its severity, based on professional judgement, and graded as follows: ‘Very Severe’; ‘Severe’; ‘Considerable’; ‘Moderate’; ‘Slight’, or ‘Very Slight’. In order to determine the overall magnitude of indirect, physical impacts on a Historic Character Area, impact magnitudes should be weighed up with element sensitivity (i.e. an element’s intrinsic importance or status), using the same grades and scores as for Stage 2 (i.e. the first three ranges in Table 3, p. 18).

The results for each Historic Character Area affected could be summarized in a table, for example:

TABLE 6

ASIDOHL2 STAGE 3: ASSESSMENT OF INDIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA Y

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Increased risk of erosion to element J	B – 3	Moderate – 3
Increased management needs for element K	C – 2	Slight – 2
Functional connection between elements J & K disrupted	A – 4	Severe – 5
Traditional land use of area L ceased	A – 4	Very Severe – 6
Amenity value of element M reduced	C – 2	Moderate – 3

The scores for each element (i.e. Status + Magnitude) are added up to produce a combined total. This figure is then divided by the number of elements identified in order to obtain an average figure. In the example shown above, this would be:

$$(3+3) + (2+2) + (4+5) + (4+6) + (2+3)$$

Divided by 5 = 6.8

This average score will be required at the end of Stage 3 in order to calculate the overall magnitude of indirect impacts on the Historic Character Area.

(b) Indirect (non-physical) visual impacts

These can occur to elements as a result of one, or a combination, of the following factors:

(i) Visual impacts on elements from which a development can be seen (considered up to its maximum height). The impact might be on 'views to' or 'views from' these elements, and it should be assessed with reference to key historic viewpoints and essential settings. These should be considered in relation to a site's original character and function, as well as to the vantage points and visual experience of a visitor today.

Determining these aspects in relation to field monuments can be difficult, especially where the key historic viewpoints and essential settings recognized today may be different to those that were important to the original builders or inhabitants of a site. However, it might be possible to make reasonable assumptions on the basis of what is known archaeologically, or historically, about how certain types of monuments originally functioned, or were regarded. Key viewpoints should also include those that subsequently became adopted as such, for example, the historic, artistic, viewpoints of a site, or those that were deliberately created as features in historic parks and gardens.

(ii) Impact on the visual connections between related elements, by occlusion, obstruction, etc., for example, an essential line of sight between historically linked defensive sites will become blocked or impaired by an intervening development.

(iii) Conversely, the creation of inappropriate visual connections between elements not intended to be inter-visible originally, by the removal of intervening structures, barriers, shelters, screening or ground.

(iv) Visual impact of the development itself in relation to the existing historic character of the area considering:

- its form — the scale, number, density, massing, distribution etc., and if appropriate, the movement of its constituent features;
- its appearance — the size, shape, colour, fabric etc. of its constituent features.

This section is aimed at assessing to what extent the development constitutes a visual intrusion or encroachment, and to what extent that affects the area's historic character.

NOTE: The Landscape Institute and the Institute of Environmental Management and Assessment have jointly published *Guidelines for Landscape and Visual Impacts Assessment* (E. & F. N. Spon Press, London, 2002, second edition). This may usefully be consulted; however, software packages are now available that can make use of OS digital data to produce 360-degree view-shed analysis, 3-D virtual representations and so on (e.g. Vertical Mapper for MapInfo; Visual Nature Studio 2 etc.). In complicated cases, or where the development is on a very large scale, it may be necessary to use the services of a professional landscape architect to undertake a full visual impacts assessment.

Each type of indirect, visual impact identified should be described using maps, figures, diagrams, elevations and photographs (photo montages may be particularly useful) as necessary. Assessment should be generally confined to the key elements identified during characterization within the affected area(s), i.e. Category A and B sites and closely linked, or groups of, Category C sites (as defined in Stage 2 above), with an assessment of the severity of impact based on professional judgement, and graded as follows: 'Very Severe'; 'Severe'; 'Considerable'; 'Moderate'; 'Slight', or 'Very Slight'. Development form and appearance should be similarly graded.

In order to determine the overall magnitude of the indirect, visual impacts on a Historic Character Area, impact magnitudes should be weighed up with element sensitivity (i.e. an element's intrinsic importance or status), using the same grades and scores as for Stage 2 (i.e. the first three ranges in Table 3, p. 18). Development form and appearance are graded in relation to the average value of element sensitivity for the Historic Character Area.

The results for each Historic Character Area affected could be summarized in a table, for example:

TABLE 7

ASIDOHL2 STAGE 3: ASSESSMENT OF INDIRECT, VISUAL IMPACTS ON HISTORIC CHARACTER AREA Y

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Views to element N partially blocked	A – 4	Slight – 2
Views from element P disrupted	B – 3	Severe – 5
Small-scale change to essential settings of element R	A – 4	Slight – 2
Visual connection between elements T and S occluded	B – 3	Very Severe – 6
Development form	3.5*	Severe – 5
Development appearance	3.5*	Moderate – 3

*Average value of element sensitivity – $(4+3+4+3) \div 4 = 3.5$

The scores for each element (i.e. Category + Magnitude) are added up to produce a combined total. This figure is then divided by the total number of elements identified, including development form and appearance, in order to obtain an average figure. In the example shown above, this would be:

$$(4+2) + (3+5) + (4+2) + (3+6) + (3.5+5) + (3.5+3)$$

Divided by 6 = 7.33

This average score is then added to the score for the indirect, physical impacts, which in the calculation on p. 21 came to 6.8:

$$7.33 + 6.8 = 14.13$$

This figure is on a scale of 1–20, which is made up of the 10 maximum possible average scores for indirect, physical impacts and the 10 maximum possible average scores for indirect, visual impacts. Unfortunately, this scale cannot conveniently be divided into six whole number ranges as is the case with the 28-point scale used in Stage 2 (Table 5, p. 19). To overcome this difficulty, the average score is simply multiplied by 28 and then divided by 20, to convert it to the 28-point scale.

The calculation is as follows:

$$14.13 \times 28$$

Divided by 20 = 19.78, rounded off to the nearest whole number = 20

This score provides a measure of the overall magnitude of indirect (physical and visual) impacts on the Historic Character Area, which is then graded according to the same scale as used in Stage 2, namely:

TABLE 8

ASIDOHL2 STAGE 3: OVERALL MAGNITUDE OF INDIRECT IMPACTS

SCORE	GRADING
24–28	Very Severe
19–23	Severe
14–18	Considerable
9–13	Moderate
4–8	Slight
0–3	Very Slight

In the examples shown, therefore, a score of 20 equates with a ‘Severe’ overall magnitude of indirect, physical impact on Historic Character Area Y.

The types of indirect impacts described above are by no means exhaustive, and there may be others specific to particular kinds of development that should also be taken into account and assessed. Each impact identified should be described and quantified as objectively as possible, with written descriptions supported by diagrams or photographs, particularly for visual impacts. Where accurate quantification is impossible, a professional judgement should be given.

Because there is the potential for the full range of indirect impacts not to be recognized and for some of the Historic Character Areas affected to be missed and not taken into account, it is strongly recommended that all the impacts and areas are identified and agreed in advance with Cadw, CCW and the curatorial section of the relevant Welsh Archaeological Trust.

STAGE 4 Evaluation of relative importance

The fourth stage of the ASIDOHL2 process and report should evaluate the relative importance of the Historic Character Area(s) (or part(s) thereof) directly and/or indirectly affected by development in relation to:

- (a) the whole of the Historic Character Area(s) concerned, and/or
 - (b) the whole of the historic landscape area on the Register;
- followed by,
- (c) an evaluation of the relative importance of the Historic Character Area(s) concerned in the national context.

Stage 4 should then be completed with a determination of the average, overall value of all the Historic Character Areas (or part(s) thereof) affected.

Which evaluation steps have to be done and how much input is required will depend on the scale of the development in relation to the nature and extent of the affected Historic Character Area(s) and the historic landscape area on the Register. For example, if a development directly affects an entire Historic Character Area, then only evaluation steps (b) and (c) need to be done. The complexity of the Historic Character Area(s) in terms of the variety of characteristics and numbers of elements affected will also influence the amount of input required.

In cases where both steps (a) and (b) have to be done, evaluating relative importance is necessary because it may well be that the relative importance of an element within the Historic Character Area differs from its relative importance within the overall historic landscape area on the Register. For example, a particular element could be abundant and fairly representative of the Historic Character Area as a whole, but might be quite rare in relation to the whole of the historic landscape area on the Register. Clearly, if an entire Historic Character Area is directly affected with the complete loss of all its constituent elements, then step (a) would not apply.

It is likely that evaluation scores (see 'Guidance on Evaluation' below) could be influenced by a number of factors. The relative size and number of Historic Character Areas within the historic landscape area on the Register, and the number of Historic Character Areas affected in relation to the total number of Historic Character Areas within the historic landscape area on the Register, could all have some bearing on the values determined.

Where the historic landscape area on the Register is very large and diverse, it may be difficult to reach an accurate assessment of value without undertaking extra work that may be beyond the scope of an ASIDOHL2. Under these circumstances, evaluation might be made simpler and easier by 'breaking up' particularly large historic landscape areas on the Register into a number of smaller areas comprising groups of Historic Character Areas. These smaller areas could be identified on the basis of the Register's selection criteria, topographical units or particular land use themes etc. Conversely, where a group of small, tightly drawn Historic Character Areas occurs as, for example, in an industrial or urban area, then for evaluation purposes, the group can be considered as a single Historic Character Area. Whatever means is chosen for the particular case concerned, this should be clearly explained and justified in the ASIDOHL2 report.

With regard to evaluation step (c), 'national context' should be taken to refer to the historic landscape areas on the Register, not the whole of Wales. Although all historic landscapes on the Register are of national importance, being either of outstanding or of special historic interest, some component Historic Character Areas may be of even greater significance, because of the range or the quality of the elements they contain, the presence of designated elements within them, their relationship with other Historic Character Areas, their status as a key component in the historic landscape area on the Register, or because of a combination of these factors. Generally, these Historic Character Areas will be pre-eminent and easily recognized, for example, they might be within a World Heritage Site or they might contain a large well-known monument in state care, Listed Building or Scheduled Ancient Monument and its settings, or a historic park or garden etc.

Evaluation step (c) should not be regarded as downgrading of certain areas: it is simply acknowledging that within a landscape that is all of national importance, some areas, elements or characteristics may well be of greater value than others. It should therefore be possible to determine Historic Character Area value as being somewhere in the range between what might be considered to be the 'baseline' value of the whole historic landscape area on the Register (i.e a value on a par with their nationally important status) and the even higher value of the most significant or pre-eminent Historic Character Area(s) within the same historic landscape area.

Guidance on Evaluation

This section gives a list of criteria that may be applied in evaluation steps (a)–(c), although depending on individual circumstances, not all criteria will be universally applicable (Welsh Office Circular 60/96, *Planning and the Historic Environment: Archaeology*, p. 15, Annex 3, 'Secretary of State's Criteria for Scheduling Ancient Monuments').

However, because some Scheduled Ancient Monument (SAM) criteria are more relevant to sites than to landscapes, not all SAM criteria will be applicable to all the evaluation steps. For the same reason, not all SAM criteria will be applicable to all historic characteristics, or Historic Character Areas affected. As there are no hard and fast rules, it will be a matter of professional judgement as to which criteria to select and to apply. Further advice may be sought from Cadw, CCW and the Welsh Archaeological Trusts.

With respect to the evaluation of individual criteria, in most cases, the different grades of values will have to be qualitative as few, if any, national data sets exist to enable quantitative grades of values to be determined. This will be particularly true for evaluation step (c). There may also be cases where the ranges or the grades of values suggested below will require adjustment to reflect local conditions such as, for example, high numbers of elements present, etc. The ranges or grades of values selected will have to be based on professional judgement and justified in the ASIDOHL2 report.

The SAM-based evaluation criteria set out below are derived from criteria applied in a historic landscape assessment of part of the Gwent Levels landscape of outstanding historic interest (Welsh Office, M4 Relief Road Magor to Castleton — Stage 2 Assessment, Draft Report for Consultation by Ove Arup and Partners, April 1998/Amended October 1998, Appendix 2 — *The Historic Landscape* by S. Rippon), and from work by the Gwynedd Archaeological Trust.

N.B. Depending on which evaluation step is being undertaken, ‘elements’ include ‘characteristics’, and ‘landscape’ includes ‘Historic Character Area’ in the following list.

Criteria for determining relative importance or value in Stage 4, steps (a), (b) and (c)

Rarity in terms of period or date, and as a component of the landscape. This should be assessed in relation to what survives today, since elements of a once common type of landscape may now be rare.

Very High	sole survivor of its type in the landscape;
High	only two or three similar historic elements in the landscape;
Moderate	fewer than five broadly similar elements in the landscape;
Low	more than five broadly similar elements in the landscape;
None	commonplace throughout the landscape.

Representativeness should also be considered, in that an example of a landscape that is common can still be of national importance if, in the light of other criteria, it contains a particularly representative range of elements.

Very High	contains all the elements that characterize the landscape;
High	contains most of the elements that characterize the landscape;
Moderate	contains about half of the elements that characterize the landscape;
Low	contains some of the elements that characterize the landscape;
None	sole example of the element and, therefore, not representative.

Documentation The survival of documentation that increases our understanding of a landscape will raise its importance, though this is difficult to quantify owing to the extremely varied nature of documentary material. Therefore, a professional judgment is given based on the actual amount or importance of material and its academic value.

Very High	complete documentary record, or exceptionally important sources available;
High	a considerable quantity of relevant material, or highly important sources available;
Moderate	some relevant material, or moderately important sources available;
Low	little relevant material, or only modestly important sources available;
None	no relevant material available.

Group Value relates to the diversity (or similarity) of elements including their structural and functional coherence. To some extent, the group value of individual elements will have been taken into account in Stage 2, where the links between closely related elements as, for example, between the separate features that make up a quarrying or mining site, can enhance the intrinsic or landscape value of an element or characteristic. At Stage 4, the group value relationship is usually wider and more likely to be between whole groups of related elements as, for example, in a quarrying or mining complex that includes the associated settlements, transport systems as well as the processing sites etc. Clearly, there will be instances within Historic Character Areas in which elements or groups are linked to others not directly affected by development, or situated in adjoining Historic Character Areas. ‘Group Value’ is also likely to be more applicable to areas identified under the Register’s first and second selection criteria, namely, ‘Intensively developed or extensively remodelled’ or ‘Period’ landscapes.

Very High	contains six or more linked elements or groups;
High	contains four or five linked elements or groups;
Medium	contains three or four linked elements or groups;
Low	contains two or three linked elements or groups;
None	i.e. a single or any number of unlinked elements or groups.

Survival relates to the degree of survival of elements in the landscape. In instances where the original extent or numbers are known (for example, traditional field boundaries for which there may be detailed mapped evidence), it may be possible to measure this quantitatively.

- Very Good more than 80% of elements surviving;
- Good between 60% and 79% of elements surviving;
- Moderate Between 40% and 59% of elements surviving;
- Fair Between 20% and 39% of elements surviving;
- Poor Under 20% of elements surviving.

Condition relates to the condition of elements in the landscape.

- Very Good elements surviving in very good condition for their class;
- Good elements surviving in good or above average condition for their class;
- Moderate elements surviving in moderate or average condition for their class;
- Fair elements surviving in fair or below average condition for their class;
- Poor elements surviving in poor condition for their class.

Coherence relates to how well the historic meaning and significance of the landscape is articulated by the historic themes, that is the historical processes and patterns that have created the individual elements within it. It may well be that historical processes and patterns have been maintained, or continue, so that the landscape retains much of its original function, thus enhancing its coherence. Clearly discernible or dominant themes can increase the coherence and importance of a landscape.

- Very High dominant historic theme(s) present — landscape retaining its original function;
- High dominant historic theme(s) present — landscape of high articulation, but original function has ceased;
- Moderate historic theme(s) present, — landscape of moderate articulation;
- Low historic theme(s) present, but weak — landscape of low articulation;
- Very Low historic theme(s) suppressed by later changes.

Integrity The importance of a landscape may be enhanced by its integrity that relates to the survival of its original character or form. The resulting visibility and legibility of the landscape's component elements will enhance its amenity value. Greater visibility and legibility generally increase the potential for the historic landscape to be easily understood by the non-specialist.

- Very High elements retaining their original character, highly visible and easily understood;
- High elements retaining much of their original character, visible and fairly easily understood;

- Moderate elements retaining some of their original character, visible, but not easily understood;
- Low elements not readily visible and difficult to understand;
- Very Low elements hardly visible and very difficult to understand.

Potential relates to the potential within the landscape for future historic landscape study and analysis.

- Very High wide-ranging scope for future historic landscape study and analysis;
- High considerable scope for future historic landscape study and analysis;
- Moderate some scope for future historic landscape study and analysis;
- Low little scope for future historic landscape study and analysis;
- Very Low very little scope for future historic landscape study and analysis.

Amenity relates to the potential value of elements to be developed as a public educational and recreational amenity.

- Very High wide-ranging scope for elements to be developed as a public educational and recreational amenity;
- High considerable scope for elements to be developed as a public educational and recreational amenity;
- Moderate some scope for elements to be developed as a public educational and recreational amenity;
- Low little scope for elements to be developed as a public educational and recreational amenity;
- Very Low very little scope for elements to be developed as a public educational and recreational amenity.

Associations A landscape or an area or element within it might have important historic associations with, for example, particular institutions, cultural figures, movements or events etc. Often, however, there are no physical remains, or it may be difficult to tie an association to a particular place, feature or element, with only documentary or oral sources available. Owing to the complex nature of associations, therefore, they are impossible to quantify, so an assessment is made based upon professional judgement.

- Very High a highly significant, authentic and nationally well-known association(s);
- High a significant, authentic and regionally well-known association(s);
- Moderate an authentic, but less significant, perhaps locally well-known association(s);
- Low unauthenticated or a little known association(s);
- None no known association(s).

The evaluation of steps (a) and (b) should comprise written statements and justifications for the values ascribed to each criterion, followed by a concluding statement for either step (a) or (b). The statement should reflect the general level of values across all criteria, and note any particularly significant ‘Highs’ or ‘Lows’.

The evaluation of step (c) should comprise written statements and justifications for the values ascribed to each criterion, followed by a concluding statement. The statement should reflect the general level of values across all criteria, and note any particularly significant ‘High’ or ‘Low’ scores.

Evaluation results for steps (a) and (b) could be summarized in a table, for example:

TABLE 9

ASIDOHL2 STAGE 4: EVALUATION OF THE RELATIVE IMPORTANCE OF THE PART OF HISTORIC CHARACTER AREA X DIRECTLY AND/OR INDIRECTLY AFFECTED BY DEVELOPMENT

VALUE:	V HIGH/ V GOOD	HIGH/ GOOD	MOD/ MED	LOW	V LOW/ POOR	V HIGH/ V GOOD	HIGH/ GOOD	MOD/ MED	LOW	V LOW/ POOR
in relation to:	(a) WHOLE OF HISTORIC CHARACTER AREA					(b) WHOLE OF HISTORIC LANDSCAPE AREA ON THE REGISTER				
CRITERION:										
RARITY	✓						✓			
REPRESENTATIVENESS		✓						✓		
DOCUMENTATION				✓					✓	
GROUP VALUE		✓					✓			
SURVIVAL		✓						✓		
CONDITION	✓					✓				
COHERENCE		✓						✓		
INTEGRITY	✓					✓				
POTENTIAL			✓					✓		
AMENITY		✓						✓		
ASSOCIATIONS				✓					✓	

Template available at www.cadw.wales.gov.uk

Evaluation results for step (c) could be summarized in a table, for example:

TABLE 10

ASIDOHL2 STAGE 4: EVALUATION OF THE RELATIVE IMPORTANCE IN THE NATIONAL CONTEXT, OF THE HISTORIC CHARACTER AREAS DIRECTLY AND/OR INDIRECTLY AFFECTED BY DEVELOPMENT

VALUE:	V HIGH/ V GOOD	HIGH/ GOOD	MOD/ MED	LOW	V LOW/ POOR	V HIGH/ V GOOD	HIGH/ GOOD	MOD/ MED	LOW	V LOW/ POOR
in relation to:	HISTORIC CHARACTER AREA X					HISTORIC CHARACTER AREA Y				
CRITERION:										
RARITY	✓						✓			
REPRESENTATIVENESS				✓				✓		
DOCUMENTATION		✓							✓	
GROUP VALUE			✓			✓				
SURVIVAL		✓					✓			
CONDITION		✓					✓			
COHERENCE			✓				✓			
INTEGRITY			✓					✓		
POTENTIAL	✓					✓				
AMENITY				✓				✓		✓
ASSOCIATIONS				✓						

Template available at www.cadw.wales.gov.uk

Criteria values in steps (a), (b) and (c) should be scored as follows:

TABLE 11

ASIDOHL2 STAGE 4: EVALUATION SCORES

CRITERION VALUE	SCORE
Very High / Good	5
High / Good	4
Moderate / Medium	3
Low	2
Very Low / Poor	1

In the examples (Tables 9 and 10 above), therefore, the relative importance, at the steps indicated, of Historic Character Areas X and Y would be:

Table 9, Historic Character Area X at step (a) –

$(3 \times \text{V High @ } 5) + (5 \times \text{High @ } 4) + (1 \times \text{Medium @ } 3) + (2 \times \text{Low @ } 2) = 42$ out of a possible maximum of 55 (i.e. $11 \times \text{V High @ } 5$)

and at step (b) –

$(2 \times \text{V High @ } 5) + (2 \times \text{High @ } 4) + (5 \times \text{Medium @ } 3) + (2 \times \text{Low @ } 2) = 37$ on the same scale.

Table 10, Historic Character Area X at step (c), i.e. its value in the national context –

$$(2 \times \text{V High @ } 5) + (3 \times \text{High @ } 4) + (3 \times \text{Medium @ } 3) + (3 \times \text{Low @ } 2) = 37 \text{ on the same scale;}$$

and for Historic Character Area Y at the same step –

$$(2 \times \text{V High @ } 5) + (4 \times \text{High @ } 4) + (3 \times \text{Medium @ } 3) + (1 \times \text{Low @ } 2) + (1 \times \text{V Low / Poor @ } 1) = 38 \text{ on the same scale.}$$

If ten, rather than the maximum of eleven, criteria had been applied, then the maximum score would have been 50 (i.e. 10 x V High @ 5); and in the case of nine criteria – 45 (i.e. 9 x V High @ 5); eight criteria – 40, and so on.

The final part of Stage 4 is to determine the average, overall value of all the Historic Character Areas (or part(s) thereof) affected.

This is done by combining the scores of steps (a), (b) and (c) together (or just (b) and (c) if (a) has not been applied). However, because of the disparity between score ranges that can result from different numbers of criteria being applied, the scores have to be converted to a scale of 1–100, which in the case of Historic Character Areas X and Y above would be as follows:

$$\text{Historic Character Area X at step (a): } (42 \div 55) \times 100 = 76.36$$

$$\text{Historic Character Area X at step (b): } (37 \div 55) \times 100 = 67.27$$

$$\text{Historic Character Area X at step (c): } (37 \div 55) \times 100 = 67.27$$

$$\text{Historic Character Area Y at step (c) = } (38 \div 55) \times 100 = 69.09$$

The average, overall value of all the areas (and parts thereof), affected in this example, on a scale of 1–100 would, therefore, be:

$$(76.36 + 67.27 + 67.27 + 69.09) \div 4 = 69.99, \text{ rounded off to the nearest whole number, i.e. } 70.$$

In a real case, the total number of areas (and parts thereof) affected could be considerably higher than the four hypothetical areas used in the examples above.

This average, overall value, or combined evaluation figure for Stage 4 would then be graded as follows:

TABLE 12

ASIDOHL2 STAGE 4: GRADES OF OVERALL VALUE

80–100	Very High
60–79	High
40–59	Considerable
20–39	Moderate
5–19	Low
0–4	Very Low

STAGE 5 Assessment of overall significance of impact

Once the direct and indirect impacts of development have been described and, as far as possible, quantified, in Stages 2 and 3, and the relative and the average overall values of the area(s) affected established in Stage 4, the fifth and final stage of the ASIDOHL2 process can be undertaken. This final stage should combine the results of Stages 2 to 4 to produce an assessment of the overall significance of the impact of development and the effect that altering the Historic Character Area(s) concerned has on the whole of the historic landscape area on the Register. This is determined by separately setting out and scoring the value of each of the Historic Character Areas affected in relation to the effect caused by the development and the consequent reduction in value of the historic landscape area on the Register, using the following model:

TABLE 13

ASIDOHL2 STAGE 5: SUMMARY OF THE OVERALL SIGNIFICANCE OF THE IMPACT OF DEVELOPMENT ON LANDSCAPE OF HISTORIC INTEREST ‘A’

VALUE OF HISTORIC CHARACTER AREA (based on STAGE 4 results)	IMPACT OF DEVELOPMENT (based on STAGES 2 & 3 results)	REDUCTION OF VALUE OF THE HISTORIC LANDSCAPE AREA ON REGISTER
<p>Very High Key elements of very high intrinsic importance and/or condition and/or group value, and/or not found elsewhere in this or other historic landscape areas on the Register. SCORE: 9 or 10</p>	<p>Very High Critical land loss and consequent fragmentation and/or visual intrusion causing key elements to be removed or so changed that detailed descriptions no longer apply, and/or amenity value is totally lost. SCORE: 9 or 10</p>	<p>Very High Development impact on key elements is such that the overall value of the historic landscape area on the Register is diminished to the point that its future inclusion on the Register may need to be reviewed. SCORE: 9 or 10</p>
<p>High Key elements of high intrinsic importance and/or condition and/or group value, and/or uncommon elsewhere in this or other historic landscape areas on the Register. SCORE: 7 or 8</p>	<p>High Substantial land loss and consequent fragmentation and/or visual intrusion causing key elements to be removed or changed so that group value and /or coherence and/or integrity are significantly diminished, and/or amenity value greatly reduced. SCORE: 7 or 8</p>	<p>High Development impact on key elements is such that the overall value of the historic landscape area on the Register is significantly reduced. SCORE: 7 or 8</p>
<p>Medium Key elements of varying intrinsic importance and/or condition and/or group value, and /or generally typical of this or other historic landscape areas on the Register. SCORE: 4, 5 or 6</p>	<p>Medium Moderate land loss and consequent fragmentation and/or visual intrusion causing some key elements to be removed or changed so that group value and/or coherence and /or integrity are diminished, and/or amenity value reduced. SCORE: 4, 5 or 6</p>	<p>Medium Development impact on key elements is such that there is some, but still appreciable, reduction in the overall value of the historic landscape area on the Register. SCORE: 4, 5 or 6</p>
<p>Low Key elements of low to moderate importance and/or condition and/or group value, and/or of generally low significance in this or other historic landscape areas on the Register. SCORE: 2 or 3</p>	<p>Low Slight land loss and consequent fragmentation and/or visual intrusion causing limited numbers of key elements to be removed or changed so that group value and/or coherence and/or integrity are slightly diminished, and/or amenity value slightly reduced. SCORE: 2 or 3</p>	<p>Low Development impact on key elements is such that there is slight reduction in the overall value of the historic landscape area on the Register. SCORE: 2 or 3</p>
<p>Very Low Elements untypical of the historic landscape area on the Register and/or changed through modern development. SCORE: 1</p>	<p>Very Low Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values. SCORE: 1</p>	<p>Very Low Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged. SCORE: 1</p>
<p>Total score for Historic Character Area:</p>	<p>Overall significance of impact for Historic Character Area:</p>	

In a real case, the Historic Character Areas and their key elements or characteristics should be named, with short statements justifying the values and scores given, based on the key results from Stages 2 to 4. However, the table should neither be too long nor complicated; its purpose is to provide an essential concluding summary and digest of the whole ASIDOHL2 process, as well as setting out the overall significance of impact of development on a landscape area on the Register.

Although scoring has been used extensively in Stages 2, 3 and 4, it is not recommended that the scores from these stages are directly combined or ‘converted’ to determine the final scores in this table. Rather, this should be a matter of professional interpretation and judgement, based on carefully weighing up all the scores in the preceding Stages, noting averages as well as any significant ‘Highs’ or ‘Lows’.

Excepting errors, it is generally expected that all parties using the results of an ASIDOHL2, including at a Public Inquiry, should be able to agree on the results of Stages 2 to 4, with any latitude for re-interpretation of results confined to Stage 5.

The score for the overall significance of impact of development on the historic landscape area, as calculated for each Historic Character Area listed in Table 13, is graded as follows:

TABLE 14

ASIDOHL2 STAGE 5: OVERALL SIGNIFICANCE OF IMPACT

SCORE	GRADING
26–30	Very Severe
21–25	Severe
16–20	Fairly Severe
10–15	Moderate
4–9	Slight
0–3	Very Slight

The score and grade are entered into the last row in Table 13, p. 29 and the procedure repeated for every Historic Character Area affected. Scores should not be combined and averaged out for all the Historic Character Areas affected, but they should be shown separately, to allow developers, planning authorities or Public Inquiry Inspectors to guide development into those Historic Character Areas where the least reduction in the value of the historic landscape area on the Register is caused.

Mitigation

In Stage 5, ASIDOHL2 sets out to determine the gross (absolute) impact of development on a landscape area on the Register. It is critically important to establish this, as unlike a habitat or other forms of amenity, historic landscapes are a finite and irreplaceable resource. This is not intended to ignore or downgrade the fact that a development can offer mitigation or provide positive benefits that can be weighed up against the gross impact to achieve a lesser net (relative) impact on the historic landscape. Mitigation or positive benefits, advantages, improvements or amelioration that a development claims to offer in terms of conservation work, improving access and increasing opportunities for study, research etc., should be described, qualified and quantified in a separate section at the end of Stage 5. It will then be a matter for the planning authority or Public Inquiry Inspector concerned to determine what weight they should be given.

ASIDOHL2 Concluding Statement

The ASIDOHL2 report should be completed with a concluding statement drawing all the salient points together in a description that qualifies and quantifies the overall significance of impact of development on the historic landscape as accurately and as objectively as possible. This statement should reflect the range of impacts calculated for the individual Historic Character Areas in Table 13, p. 29, as well as a professional judgement as to how much the development would change our capacity to understand and appreciate the landscape’s historical meaning and significance, and thereby its overall value in line with the scores in the right hand column of Table 13, p. 29. The statement should also include any other important, or overriding, fact that was not, or could not be, mentioned or accounted for in the ASIDOHL2 process, for example, an extant planning permission for a similar development in an adjacent Historic Character Area.

The Concluding Statement will be a key part of the ASIDOHL2 report, to which most reference will be made, particularly in a Public Inquiry, when it may be part of a Proof of Evidence submitted to the Inquiry. It is essential, therefore, to write the concluding statement in a clear and concise style that can be easily understood by the non-specialist and the Public Inquiry Inspector alike. In complicated cases, or when it aids clarity, a glossary should be compiled to explain in simple language the meaning of the terms and words used in the ASIDOHL2 report to describe historic landscapes. Historic landscape terminology can be academically obscure to the non-specialist, or have an entirely different meaning in a planning context, which can cause unnecessary confusion. Brevity will also be essential with succinct statements summarising the overall results of the assessment.

APPENDIX

List of organizations from whom further information and advice may be sought about this Guide and the Register and the areas it includes:

Countryside Council for Wales

Maes y Ffynnon, Penrhosgarnedd, Bangor
Gwynedd LL57 2DW
Tel 01248 385500
www.ccw.gov.uk

Cadw

Welsh Assembly Government,
Plas Carew, Unit 5/7 Cefn Coed
Parc Nantgarw, Cardiff CF15 7QQ
Tel 01443 33 6000
www.cadw.wales.gov.uk

Dyfed Archaeological Trust (Cambria Archaeology)

The Shire Hall, Carmarthen Street, Llandeilo
Carmarthenshire SA19 6AF
Tel 01558 823131
www.acadat.com

Clwyd-Powys Archaeological Trust

7a Church Street, Welshpool
Powys SY21 7DL
Tel 01938 553670
www.cpat.org.uk

Glamorgan-Gwent Archaeological Trust

Heathfield House,
Heathfield
Swansea SA1 6EL
Tel 01792 655208
www.ggat.org.uk

Gwynedd Archaeological Trust

Craig Beuno, Garth Road, Bangor
Gwynedd LL57 2RT
Tel 01248 352535
www.heneb.co.uk

