

Appendix 9.2

ASIDOHL2 ASSESSMENT

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Glossary

Term	Definition
Archaeological Site (also 'Monuments')	Historic assets which may consist of surface and/or sub-surface remains, features, deposits and/or material relating to past human activity with a degree of significance meriting consideration in planning decisions.
Artefact	An item of archaeological interest.
ASIDOHL2	' <i>Assessment of the Significance of the Impact of Development On Historic Landscape</i> ' – a formal methodology for assessing the impact of development on historic landscapes included in the Register of Landscapes of Historic Interest in Wales. ¹
Baseline	'Baseline conditions' are the environmental conditions in existence just before the occurrence of an impact – i.e. they are the conditions that would be affected.
Bronze Age	The period of human activity between 2,500 Before Common Era (BCE) and 700 BCE
Construction activity	Vegetation removal, topsoil stripping, temporary storage of materials, ground excavation and remodelling, bare earth, movement of construction vehicles and tall features such as cranes and other construction plant.
Construction Environmental Management Plan (CEMP)	A plan prepared by a contractor before the start of construction work, detailing 'environmental aspects' that may be affected by the construction work and management methods to prevent any such effects. The CEMP would include methods and site management practices to be applied to prevent generation of nuisance dust, accidental pollution events and a range of other potential sources of accidental damage to the environment, and response and reporting procedures to minimise the damage in the event of a pollution incident.
Conservation Management Plan (CMP)	A plan setting out how threats to historic assets will be managed and how opportunities to enhance or better reveal the significance of historic assets will be realised.
Desk study	A collation and review of relevant existing information available from published, archival or online sources, including for instance geological and hydrogeological mapping, historical maps, environmental records etc., allowing an assessment of risks to the human and environmental receptors to be undertaken.
Designated Historic Asset	Assets registered on the National Historic Assets of Wales, Cadw. These may be protected by primary legislation (e.g. listed buildings, conservation areas, scheduled monuments) or have a non-statutory designation (e.g. World Heritage Sites (WHS), registered battlefields, registered parks and gardens, designated wrecks).
Earthworks	The moving of soil or rock to reconfigure the topography of a site.
Environmental Impact Assessment (EIA)	EIA is a means of carrying out, in a systematic way, an assessment of the likely significant environmental effects from a development.
Environmental Statement (ES)	A document reporting the findings of the Environmental Impact Assessment (EIA) and produced in accordance with the EIA Regulations.

¹ Wales. Cadw & CCW (2007) *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*

² Wales. Cadw & CCW (2007) *Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (page 20)

Term	Definition
Essential setting	One of the two dimensions of setting the other being wider setting. The closer surroundings in which an asset is experienced – defined as: “in the case of a building ... the ancillary land used with it or the curtilage” ²
Fieldwalking survey	Method of systematic non-intrusive survey involving walking across a field, usually ploughed, along transects to collect archaeological artefacts.
Geology	Geology is the study of solid earth, the material of which it is composed (principally rocks) and the processes by which they evolve.
Geophysical survey	Method of non-intrusive investigation involving the use of magnetometers to identify fluctuations in the earth’s magnetic field which might indicate the presence of archaeological remains. Burnt remains and metals are best identified through this method of survey.
Historic Asset	An item of heritage interest, for example an historic building or an archaeological find.
Historic Asset Conservation Principles (Cadw 2011)	'<i>An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, an historic building, or a parcel of historic landscape. Nationally important historic assets will normally be designated.</i>'³ Some historic assets are designated as scheduled monuments, listed buildings, WHSs, conservation areas, Registered Parks and Gardens, Registered Battlefields, or locally designated through policies in the Local Development Plan (LDP). Undesignated assets may be recorded in Historic Environment Records (HER), while many other assets are currently unrecorded. Information contained in HERs is not definitive, since they may include features which, for instance, have been entirely removed, or are of uncertain location, dubious identification, or negligible importance. The identification of undesignated historic assets is therefore to some extent a matter of professional judgement. Both discrete features, and extensive landscapes defined by a specific historic event, process or theme, can be defined as historic assets; and assets may overlap or be nested within one another.
Historic Environment Records (HER)	A database maintained by the Welsh Archaeological Trusts, containing records of archaeological sites, historic buildings and other aspects.
Iron Age	The period of human activity between 700 BCE and 43 Common Era (CE).
Immediate setting	See essential setting
Listed Building	A building or structure which is considered to be of ' <i>special architectural or historic interest</i> ' ⁴ .
Made Ground	Ground created by infilling an area with material taken from elsewhere; typically, reworked soils, rubble, gravel, sand or former waste material e.g. ash.
Medieval	The period of human activity between 1066 CE and 1550 CE.
Mesolithic	Middle Stone Age. The period of human activity between 10,000 BCE and 4,500 BCE.

³ Wales. Cadw (2011) *Conservation Principles*

⁴ Wales. Cadw (2018) *Understanding Listing in Wales*

Term	Definition
Metal detector survey	Method of intrusive investigation involving the use of metal detectors to locate buried metal objects.
Mitigation	Measures which have the purpose of avoiding, reducing or compensating for adverse environmental impacts. It may also include measures to create environmental benefits.
Modern	The period of human activity from 1900 CE to the present day.
Neolithic	New Stone Age. The period of human activity between 4,500 BCE and 2,500 BCE.
Non-Designated Historic Asset	Assets identified by the local planning authority or national registers for the historic environment which have no formal designation but are considered to have a degree of significance meriting consideration in planning decisions. These can include locally listed buildings, information on sites held by the relevant HER and National Record of the Historic Environment (NRHE).
North section	Section of proposed development located north of Bryn settlement, within Penhydd forestry block.
Ordnance Datum	The standard measure of sea level in the UK, from which all heights are measured for mapping purposes.
Palaeolithic	Old Stone Age. The period of human and pre-human activity before around 10,000 BCE.
Photomontage	A photorealistic image of the scheme, based on a 3D computer model of the layout, overlaid onto a base photograph to create a visual representation. Features that would be removed as part of the scheme are removed from the base photograph.
Post-medieval	The period of human activity between 1550 CE and 1900 CE.
Prehistoric	The period before the year 43 CE.
Receptor	The existing environmental feature that would be affected by an impact – for instance a specific archaeological site.
Registered Historic Landscape	A landscape area included in either the Register of Landscapes of Outstanding Historic Interest in Wales or the Register of Landscapes of Special Historic Interest in Wales (Part 2 of the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales).
Registered Park and/or Garden	A park or garden included in Part 1 of the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales.
Requirement	A requirement listed as a condition of planning permission.
Roman	The period of human activity between 43 CE and 410 CE.
Setting:	<i>‘The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape.’</i>
Conservation Principles (Cadw 2011)	Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate the significance or may be neutral.
(Heritage) Significance	The value of a historic asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a historic asset’s physical presence, but also from its setting.
Significance: cultural heritage values	Cultural values in the historic environment that people want to enjoy and sustain for the benefit of present and future generations.

Term	Definition
	Archaeological - There will be archaeological interest in a historic asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point; Architectural - These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the historic asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types; Artistic - Artistic interest is an interest in other human creative skills, like sculpture; Historic - An interest in past lives and events (including pre-historic). Historic assets can illustrate or be associated with them. Historic assets with historic interest not only provide a material record of our nation’s history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.
South section	Section of proposed development located south of Bryn settlement, within Bryn forestry block.
Statutory consultation	Community and stakeholder consultation carried out in line with the statutory requirements set out in Developments of National Significance (Procedure) (Wales) Order 2016
Statutory consultees	Organisations that the Client is required to consult under The Developments of National Significance (Procedure) (Wales) Order 2016 (as amended).
Wider setting	One of the two principal dimensions of setting the other being essential setting. Defined as “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” ⁵
Zone of Theoretical Visibility (ZTV)	The zone from which the scheme is theoretically visible over ‘bare earth’, meaning the earth surface, including bodies of water and permanent ice and snow but excluding vegetation and manmade objects.

⁵ Wales. Cadw & CCW (2007) Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process (page 20)

List of Abbreviations

Abbreviation	Description
AIL	Abnormal Indivisible Load
AOD	Above Ordnance Datum
ASIDOHL2	Assessment of the Significance of Impact of Development on Historic Landscapes (second edition)
BCBC	Bridgend County Borough Council
CCW	Countryside Council for Wales
DBA	Desk-based Assessment
DNS	Developments of National Significance
EIA	Environmental Impact Assessment
GGAT	Glamorgan-Gwent Archaeological Trust
ha	Hectares
HER	Historic Environment Record
HGVs	Heavy Goods Vehicles
HLCA(s)	Historic Landscape Character Area(s)
Illus	Illustration
km	Kilometre
LDP	Local Development Plan
Natural Power	Natural Power Consultants Ltd
NMR	National Monuments Record
NPTCBC	Neath Port Talbot County Borough Council
NRW	Natural Resources Wales
PDA	Proposed Development Area
PPW	Planning Policy Wales
RCAHMW	Royal Commission on Ancient and Historic Monuments Wales
TAN	Technical Advice Note
WAG / WG	Welsh Assembly Government / Welsh Government
WSI	Written Scheme of Investigation
WTGs	Wind Turbine Generators
ZTV	Zone of Theoretic Visibility
3DW	3D Web Technologies Ltd

A9.1 INTRODUCTION

- A9.1.1 Assessment of the Significance of Impact of Development on Historic Landscapes (second edition) (ASIDOHL2)⁶ is a staged process devised for the assessment of the significance of the impact of development on landscapes included in the Register of Landscapes of Historic Interest in Wales.
- A9.1.2 Y Bryn Wind Farm Ltd are seeking planning permission for a wind farm (Y Bryn Wind Farm) which is considered as a Developments of National Significance (DNS) project. The proposed wind farm site (hereafter referred to as the proposed development area (PDA)) lies partly within the Margam Mountain Registered Landscape of Special Historic Interest, and approximately 3.3 km to the north of the Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape of Outstanding Historic Interest (Illustrations (Illus) 1 and 2). In response to the Environmental Impact Assessment (EIA) scoping report Cadw requested an ASIDOHL2 assessment of the Margam Mountain registered landscape. With the agreement of Cadw the Merthyr Mawr, Kenfig and Margam Burrows landscape is assessed within the EIA following the methodology set out in *The Setting of Historic Assets in Wales*⁷).
- A9.1.3 In the following ASIDOHL2 assessment, the tables present the ASIDOHL2 scoring results and assessment, following the guidelines of the Guide to Good Practice⁶, and are followed by a brief summary explanation of the objectives and results of each stage.

Summary Description of Development

- A9.1.4 The PDA covers 2,300 hectares (ha) of land approximately 1 kilometre (km) west of Maesteg (Illus 1). The PDA is in two parts – a southern block of approximately 1,500 ha to the south of Bryn village of which the majority lies within the Margam Mountain Registered Landscape (approximately 4 ha of access track and abnormal indivisible load (AIL) and heavy goods vehicles (HGVs) route lies outside the registered landscape); and a northern block of approximately 820 ha to the north of Bryn village and outside the Registered Historic Landscape.
- A9.1.5 The proposed development comprises of 18 wind turbine generators (WTGs), a substation and battery compound, construction compounds, external wind turbine transformer housings, crane hardstanding areas, underground electricity cables between the turbines, associated new and upgrading of existing access tracks, temporary borrow pits and wind monitoring equipment. A full description of the proposed development, including the tip heights of individual turbines in presented in the ES (Chapter 5) and the proposed development layout is shown on Illus 3. All of these elements have been included within the calculation of direct physical impacts of the development (Stage 2), the total footprint of the construction phase is 92 ha.
- A9.1.6 Construction of the wind farm will require areas of felling within the forestry (see Chapter 13). An appropriate safe system of work during felling (to be agreed with Glamorgan Gwent Archaeological Trust (GGAT) will avoid any physical impacts on known historic assets within the felling areas but

outside of the proposed areas of groundworks. The borrow pit areas and temporary construction compounds will be fully reinstated on completion of the construction phase resulting in no long-term landscape change and therefore these are excluded from the assessment of indirect (visual) impacts (Stage 3b).

Study Area

- A9.1.7 The Margam Mountain Registered Landscape comprises 17 Historic Landscape Character Areas (HLCAs) (Illus 2). The 15 proposed turbines in the southern section of the site and the majority of the associated infrastructure are all within HLCA010 Margam Mountain. Other infrastructure including the proposed AIL from the M4 and part of the route between the northern and southern sections of the site are proposed within three further HLCAs: HLCA003 Cwm Brombil and Graig Fawr, HLCA004 Mynydd Brombil a Ergyd Isaf, and HLCA005 Llangynwyd. The remaining six turbines in the northern section of the site, associated infrastructure and the remainder of the AIL route between the northern and southern sections and access routes for HGVs lie outside the registered landscape. These parts of the development are assessed for their visual impacts on the HLCAs only.
- A9.1.8 The study area for this ASIDOHL2 assessment comprises the Margam Mountain Registered Landscape of Special Historic Interest and all its constituent HLCAs.

Previous Assessments

- A9.1.9 A desk-based assessment (including site walkover) and stage one setting assessment has been carried out for the proposed development as part of the EIA baseline data gathering. The desk-based assessment has been used as the baseline for known heritage assets within the study area for this ASIDHOL assessment.
- A9.1.10 Margam Mountain Registered Landscape of Special Historic Interest was considered in an ASIDOHL2 Assessment for the now operational Mynydd Brombil Wind Farm as part of an EIA in 2012, this windfarm is now operational. An ASIDOHL assessment focussing on indirect visual effects was also carried out for the Foel Trawsant wind farm in 2019. These previous assessments have been reviewed as part of this assessment, in particular with regard to the conclusions regarding impacts on the HLCAs as a result of the two consented schemes.

Relevant National, Regional and Local Planning Policies

- A9.1.11 A full list of relevant planning policies is provided in the ES (Chapter 9: Cultural Heritage Assessment).
- A9.1.12 In summary, Planning Policy Wales (PPW) (Edition 11) provides the national planning policy framework for the consideration of the historic environment, and this is supplemented by guidance

⁶ Cadw & CCW (2007) *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)* Available at: [Guide to Good Practice 07 ENG AW 14.03.07:CADW.3 GGP/English P3 v.1 \(gov.wales\)](#) (Accessed: 15 December 2023)

⁷ Cadw 2012 *The Setting of Historic Assets in Wales*. Available at: [Setting of Historic Assets in Wales EN.pdf \(gov.wales\)](#) (Accessed: 15 December 2023)

contained in Technical Advice Note (TAN) 24: The Historic Environment and in associated best practice notes issued by Cadw. Specific policies within PPW relevant to this assessment are:

‘The Welsh Government seeks to protect areas on the register of historic landscapes in Wales’ (PPW11, 6.1.20)

‘The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment’ (PPW11, 6.1.21)

‘The register should ensure that necessary change is accommodated without sacrificing the essential integrity and coherence of historic landscape areas.’ (TAN24, 7.6)

LOCAL PLANNING POLICY

- A9.1.13 The majority of the site boundary lies within Neath Port Talbot County Borough Council (NPTCBC) area with some in the Bridgend County Borough Council (BCBC) area. The following are extracts from the local planning policy of the two councils in relation to protecting and enhancing the historic environment (the Neath Port Talbot Local Development Plan (LDP) (2011-2026) adopted in January 2016 and the Bridgend LDP adopted in 2013).

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL (NPTCBC)

- A9.1.14 The built environment and historic heritage (Policy SP21) is covered by LDP Objectives: OB 2, OB 23 and OB 24. This states that [historic assets]

‘will, where appropriate, be conserved and enhanced through [measures including]:

The identification of the following designated sites to enable their protection and where appropriate enhancement:

(a) Landscapes of Historic Interest;’

BRIDGEND COUNTY BOROUGH COUNCIL (BCBC)

- A9.1.15 Conservation of the Built and Historic Environment Strategic Policy is found within SP5 which states:

‘Development should conserve, preserve, or enhance the built and historic environment of the County Borough and its setting.

In particular, development proposals will only be permitted where it can be demonstrated that they will not have a significant adverse impact upon ...SP5(5) Historic Landscapes, Parks and Gardens’.

Confidence of data on which assessment based

- A9.1.16 The Headland Archaeology survey has provided a detailed inventory of previously mapped and observable surface remains and used handheld GPS surveying equipment to accurately locate features. However, the study area has not been subject to intrusive archaeological investigation, and the full presence/survival of remains is not known.

Status of the Historic Landscape Character Areas

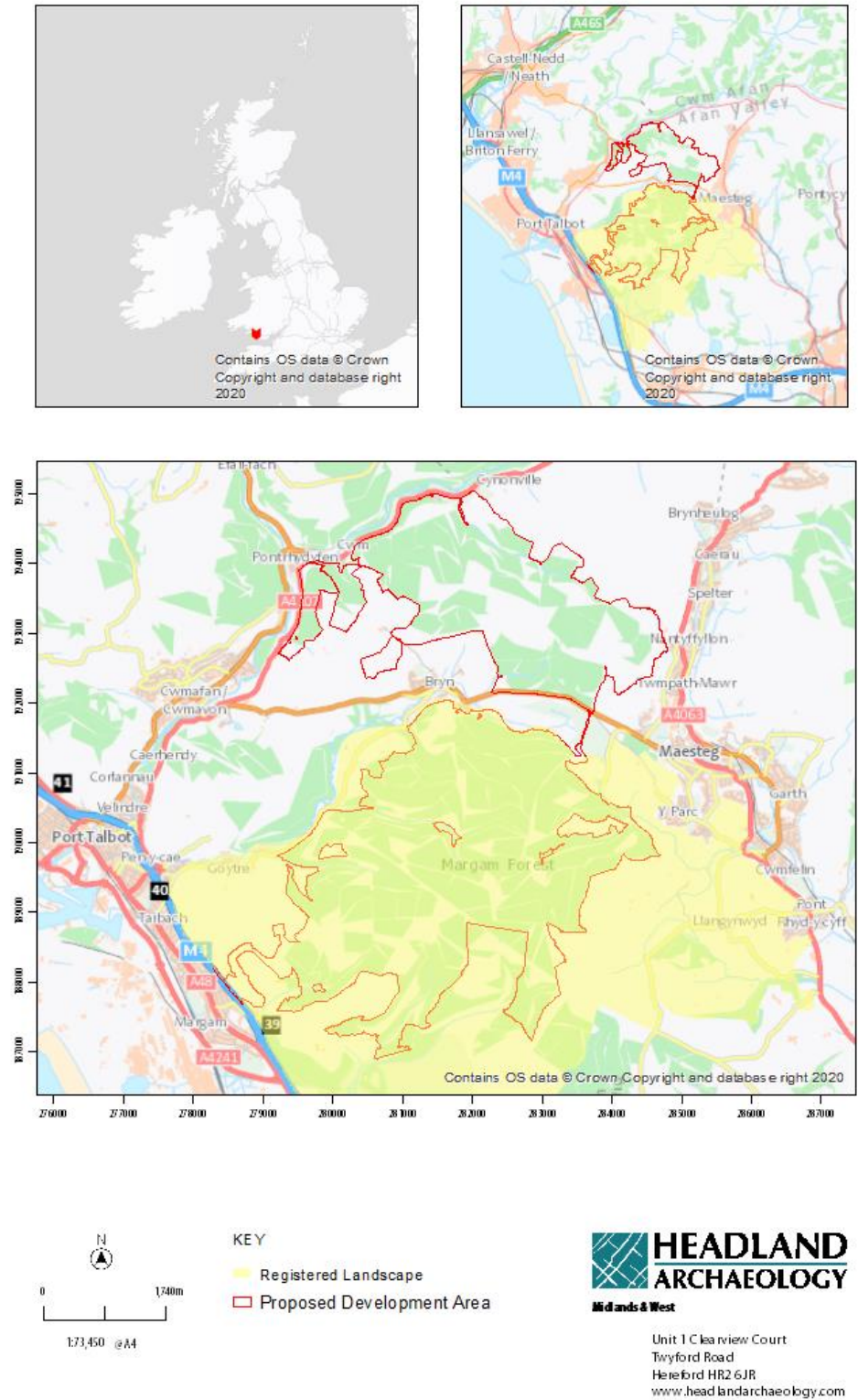
- A9.1.17 The proposed wind farm lies partially within the Mynydd Margam Registered Landscape, with the development footprint extending into four of the Historic Landscape Character Areas (Illus 2). HLCA within this landscape have been defined by Glamorgan-Gwent Archaeological Trust.
- A9.1.18 Since the definition of the character areas, the Mynydd Brombil Wind Farm has been constructed within HLCA004 Mynydd Brombil and Ergyd Isaf, altering the character of this HLCA. The ASIDOHL Assessment for the Mynydd Brombil wind farm in 2012 identified the landscape value of HLCA004 as Considerable and found that there would be a slight reduction in this value as a result of the windfarm⁸. This previous assessment considered the impacts of a development of five wind turbines, only four have been constructed and therefore the reduction in landscape value can be assumed to be slightly less. This assessment has therefore considered that the landscape value of the Mynydd Brombil a Ergyd Isaf HLCA remains considerable.

Qualifications and experience of assessor

- A9.1.19 The assessment has been carried out by Jen Richards, Senior Heritage Consultant at Headland Archaeology. Jen Richards has a degree in Ancient History and Archaeology and a Post-graduate Diploma in Landscape Archaeology and Geomatics. She has over 18 years’ experience in professional archaeology and is a Member of the Chartered Institute for Archaeologists.
- A9.1.20 Headland Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists, and is an independent company contracted by Natural Power Consultants Ltd (Natural Power) to produce the heritage chapter and supporting technical reports of the Environmental Impact Assessment for Y Bryn Wind Farm Ltd.

⁸ Pegasus 2012

Source: Headland Archaeology



Illus 1: Location of proposed development area and Study Area

A9.2 SCOPE AND METHODOLOGY

- A9.2.1 Although the PDA covers an area of 2,300 ha, the development footprint within the PDA will be much smaller than this (121 ha). For the purposes of the assessment of physical impacts the development footprint has been calculated based on the infrastructure layout (turbine locations, laydown areas, access tracks, borrow pits, substation and temporary site compounds including any micro-siting distances and tree felling areas). The assessment of indirect (visual) effects has considered the whole of the permanent elements of the development in both the northern and southern sections, not just those elements within the registered landscape.
- A9.2.2 The assessment was carried out using the following steps:
- Baseline data gathering – obtaining shapefiles of designated and non-designated historic assets from Cadw, Royal Commission on Ancient and Historic Monuments Wales (RCAHMW) and GGAT Historic Environment Record (HER);
 - Site walkover to identify any additional Category C sites (see Table A9.2) within the proposed development footprint;
 - Compilation of data sets into a GIS; and
 - Site visit to examine baseline setting of identified historic assets (for Stage 3).
- A9.2.3 The locations of all identified historic assets is shown on Illus 4-13 and details are provided in a gazetteer (found at the end of Appendix D).
- A9.2.4 The PDA includes parts of nine HLCAs within the Margam Mountain Registered Landscape. These are:
- HLCA001 Margam Abbey and Castle;
 - HLCA002 Cefn Crugwyllt and Cwm Maelwg;
 - HLCA003 Cwm Brombil and Graig Fawr;
 - HLCA004 Mynydd Brombil a Ergyd Isaf;
 - HLCA005 Llangynwyd;
 - HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor;
 - HLCA010 Mynydd Margam;
 - HLCA013 Upper Cwm Kenfin; and
 - HLCA017 Cwm Dyffryn.
- A9.2.5 Of these, four will experience direct physical impacts and are included in Stage 2 and Stage 3a of the assessment. These are: HLCA003 Cwm Brombil and Graig Fawr, HLCA004 Mynydd Brombil a Ergyd Isaf, HLCA005 Llangynwyd and HLCA010 Mynydd Margam.
- A9.2.6 All 17 HLCAs within the registered landscape are predicted to experience some visibility of the proposed wind farm and are therefore included within Stage 3b of the assessment. Stages 4 and 5 of the assessment also include all HLCAs.

- A9.2.7 An archaeological desk-based assessment (DBA) and Stage 1 setting assessment including a walkover survey of the site has been carried out by Headland Archaeology (see Appendix 9.1 of the ES) in accordance with a written scheme of investigation approved by GGAT.
- A9.2.8 Data on the HLCAs was supplied by GGAT HER. Site visits were carried out by a Headland Archaeology Heritage Consultant (Loretta Nikolic) on 4th and 6th May 2021 and (Jen Richards) on 29th January 2022.
- A9.2.9 The Zone of Theoretic Visibility (ZTV) was supplied by Natural Power based on the proposed tip height of the turbines and the topography of the surrounding landscape. A computerised 3D virtual model produced by 3D Web Technologies Ltd (3DW) has also been used to assess visibility of the proposed turbines within the Registered Landscape (and surrounding areas).
- A9.2.10 The study has been fully informed by information supplied by Cadw (including Scheduled Monuments, Listed Buildings, Parks and Gardens of Special Historic Interest), the RCAHMW (National Monuments Record (NMR) sites) and GGAT (HER Records). Sources consulted for the DBA, including West Glamorgan Records Office, National Library of Wales and Welsh Government aerial photograph collection have also been used.
- A9.2.11 It should be noted that the degree of visual change is not directly comparable to the degree of harm to the significance of an asset. The latter is assessed using a different methodology within the EIA.

Stage 1 – Contextual Information

- A9.2.12 The contextual information for the ASIDOHL2 assessment is set out in the introduction above.

Stage 2 – Direct Physical Impacts

- A9.2.13 This stage describes and, as far as possible, quantifies the direct, physical impacts of the development on the HLCAs affected. The importance of each landscape element is identified both intrinsically (as an archaeological site or building) and extrinsically (for what it contributes to the landscape character).

IMPORTANCE OF LANDSCAPE ELEMENTS

- A9.2.14 The criteria for assigning the intrinsic importance (or sensitivity) scores to components or elements of the historic landscape and is set out in Table A9.1. For the purposes of this assessment non-designated assets that the HER records as “destroyed” or “near destroyed” have been assigned to Category D and therefore are not included in the assessment; those for which the condition is “unknown” (as recorded in the HER) have been assumed to remain intact (unless the site visit was able to confirm otherwise) and have generally been assigned to Category C except where they are clearly of higher importance.

Table A9.1: Criteria for assigning importance to elements of the historic landscape

Importance	Description	Score
Category A Sites and Monuments of National Importance	This includes Scheduled Monuments, 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.	4
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.	3
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.	2
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.	1
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.	1

Source: Headland Archaeology

- A9.2.15 The extrinsic, or landscape importance of the elements identified is graded as ‘Very High’; ‘High’; ‘Considerable’; ‘Medium’; ‘Low’, or ‘Very Low’; together with an indication of the type of group to which it belongs. This is then scored as per Table A9.2.

Table A9.2: Criteria for assigning importance to elements of the historic landscape

Extrinsic importance	Score
Very High	6
High	5
Considerable	4
Medium	3
Low	2
Very Low	1

Source: Headland Archaeology

MAGNITUDE OF IMPACTS

A9.2.16 Direct, physical impacts are described and quantified in three ways, namely:

- (a) In absolute terms expressed as a statement indicating the actual percentage or proportion of the surface area of the Historic Character Area that is directly affected;
- (b) In relative terms expressed with statements indicating the percentages or proportions of the key elements or characteristics that will be permanently lost or removed by development; and
- (c) In landscape terms, i.e. 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?

A9.2.17 The overall magnitude of direct, physical impacts is graded as shown in Table A9.3.

Table A9.3: Scoring of grades of direct physical impact

Magnitude of impact (absolute impacts (a))	Magnitude of impact (relative (b))	Magnitude of landscape value impact (c)	Score
75–100% permanently lost or removed	Very Severe;	Lost	6
50–74% permanently lost or removed	Severe;	Substantially reduced	5
30–49% permanently lost or removed	Considerable;	Considerably reduced	4

Magnitude of impact (absolute impacts (a))	Magnitude of impact (relative (b))	Magnitude of landscape value impact (c)	Score
15–29% permanently lost or removed	Moderate;	Moderately reduced	3
5–14% permanently lost or removed	Slight;	Slightly reduced	2
0–4% permanently lost or removed	Very Slight.	Very slightly reduced	1

Source: Headland Archaeology

A9.2.18 The scores for each element impacted upon are added up to produce a combined total i.e. Category + Magnitude + Landscape Value + Landscape Value Effect. This figure is then divided by the number of identified elements to obtain an average figure. Where elements are not impacted upon, they are excluded from this calculation.

A9.2.19 This average score is then added to the score for the magnitude of absolute impact to find an overall magnitude of direct physical impact score.

A9.2.20 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 scale set out in Table A9.4 below. Note: the table utilises whole numbers, and thus whilst measuring scores numbers are rounded to the nearest whole number.

Table A9.4: Grading of overall magnitude of impacts

Overall Score	Grading
24-28	Very Severe
19-23	Severe
14-18	Considerable
9-13	Moderate
4-8	Slight
0-3	Very Slight

Source: Headland Archaeology

Stage 3

A9.2.21 The third stage describes and quantifies as objectively as possible the indirect impacts of the proposed development on all Historic Character Areas affected.

A9.2.22 Indirect impacts can be categorised as being mainly physical (Stage 3a) or visual (Stage 3b) in nature.

STAGE 3A: INDIRECT, PHYSICAL IMPACTS

A9.2.23 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; and/or
- (v) The frustration of access leading to decreased opportunities for education, understanding or enjoying the amenity of elements, during or consequent to development.

A9.2.24 Each category of indirect, physical impact identified is 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'.

A9.2.25 In order to determine the overall magnitude of indirect, physical impacts on a Historic Character Area, impact magnitudes are weighed up with element sensitivity (i.e. an element's intrinsic importance or status), using the same grades and scores as for Stage 2.

A9.2.26 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. 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.

STAGE 3B: INDIRECT (NON-PHYSICAL) VISUAL IMPACTS

A9.2.27 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; and/or

(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; and
- its appearance — the size, shape, colour, fabric etc. of its constituent features.

A9.2.28 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.

A9.2.29 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 is confined to the key elements identified during characterisation 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), 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', these are scored as set out in Table A9.5 below.

Table A9.5: Scores for indirect visual impacts

Magnitude of impact	Score
Very Severe;	6
Severe;	5
Considerable;	4
Moderate;	3
Slight;	2
Very Slight.	1

Source: Headland Archaeology

- A9.2.30 In order to determine the overall magnitude of the indirect, visual impacts on a Historic Character Area, impact magnitudes are weighed up with element sensitivity (i.e. an element's intrinsic importance or status), using the same grades and scores as for Stage 2.
- A9.2.31 Development form and appearance are similarly graded.
- A9.2.32 'Development form' judges factors such as the scale, density and distribution of the development, and assesses the potential visual impact these attributes will provide. 'Development appearance' assesses the physical constituents of the development, including size, shape, colour, fabric etc, and assesses the potential visual impact these attributes will provide. These assessments are made in the Magnitude and Score column of the table.
- A9.2.33 In order to maintain consistency for the calculations, a value also needs to be entered in the Category and Score column for the development form and development appearance. This is done by adding the scores of the other identified elements in the table and dividing it by the number of elements to provide an average value, which is then used.
- A9.2.34 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.
- A9.2.35 This average score is then added to the score for the indirect, physical impacts giving a figure on a scale of 1-20. This figure is then multiplied by 28 and divided by 20 to convert it to the same 28-point scale used in Stage 2. 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 Table A9.4.

Stage 4

- A9.2.36 The fourth stage of the ASIDOHL2 process evaluates 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 (of other Registered Landscapes, all of which are of national importance).

A9.2.37 The evaluation of relative importance is based on an assessment of the following criteria:

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

A9.2.38 Examples of the types of criteria that may be used in determining relative importance are included in Appendix C. These are scored as shown in Table A9.6.

Table A9.6: Evaluation scores

Value	Score
Very High / Good	5
High / Good	4
Moderate / Medium	3
Low	2
Very Low / Poor	1

Source: Headland Archaeology

- A9.2.39 Each element within each HLCA is assessed in this way, with the results presented in Section A9.3.
- A9.2.40 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) and converting them to a scale of 1–100, as follows for each step and each HLCA.

$$\text{total score} \div \text{maximum possible score} \times 100 = \text{overall score}$$

A9.2.41 The average, overall value of all the areas (and parts thereof), affected on a scale of 1–100 is then calculated by adding each average score and dividing by the number of scores (i.e. the number of

individual elements scored plus the number of HLCAs scored), rounded off to the nearest whole number. For example if four elements and two HLCAs have been scored the total of these six scores would be divided by 6.

A9.2.42 This average, overall value, or combined evaluation figure for Stage 4 is then graded as shown in Table A9.7 below.

Table A9.7: Scoring of grades of overall value / combined evaluation

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

Source: Headland Archaeology

Stage 5

A9.2.43 This final 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.

A9.2.44 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 set out in Table A9.8. Professional judgement is used to determine which score is given within each category.

Table A9.8: Overall significance of the impact of development

	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	Score
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.	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.	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.	9 or 10

	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	Score
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.	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.	Development impact on key elements is such that the overall value of the historic landscape area on the Register is significantly reduced.	7 or 8
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.	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.	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.	4, 5 or 6
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.	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.	Development impact on key elements is such that there is slight reduction in the overall value of the historic landscape area on the Register.	2 or 3
Very Low	Low Elements untypical of the historic landscape area on the Register and/or changed through modern development.	Marginal land loss and consequent fragmentation and/or visual intrusion causing negligible changes to elements and their values.	Development impact on key elements is such that the value of the historic landscape area on the Register remains essentially unchanged.	1

Source: Headland Archaeology

A9.2.45 The scores for each HLCA are added up as follows:

Value of Historic Character Area + Impact of Development + Reduction of Value = Total Score

A9.2.46 The total score for the overall significance of impact of the development on the historic landscape area, as calculated for each HLCA is then graded as set out in Table A9.9 below to give a final result as to the significance of the impact (in ASIDOHL terms).

Table A9.9: 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

Source: Headland Archaeology

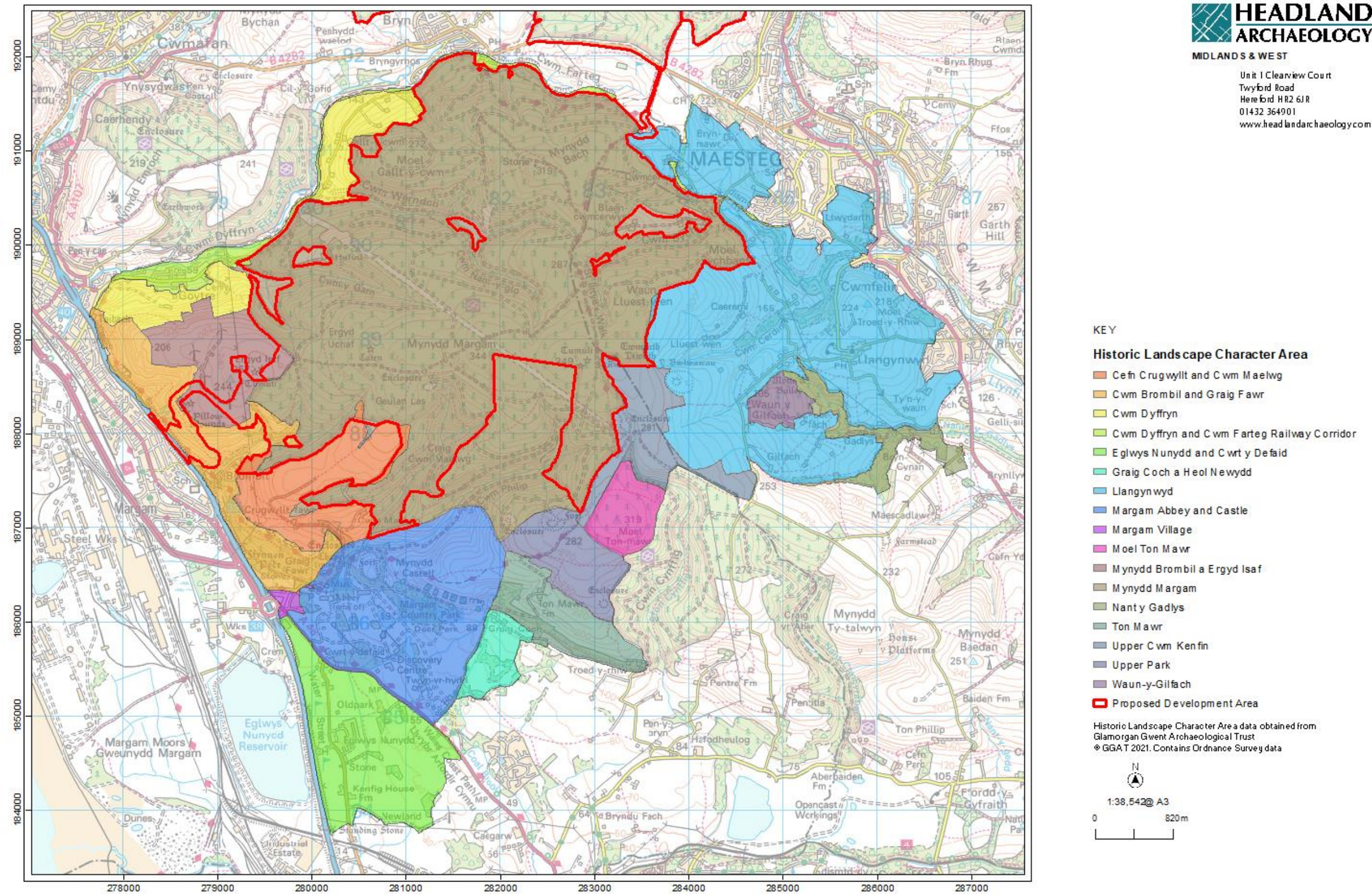
Mitigation

A9.2.47 Mitigation of adverse effects, positive benefits, advantages, improvements or amelioration offered by the proposed development may include factors such as:

- conservation work,
- improving access
- increasing opportunities for study, research etc.,

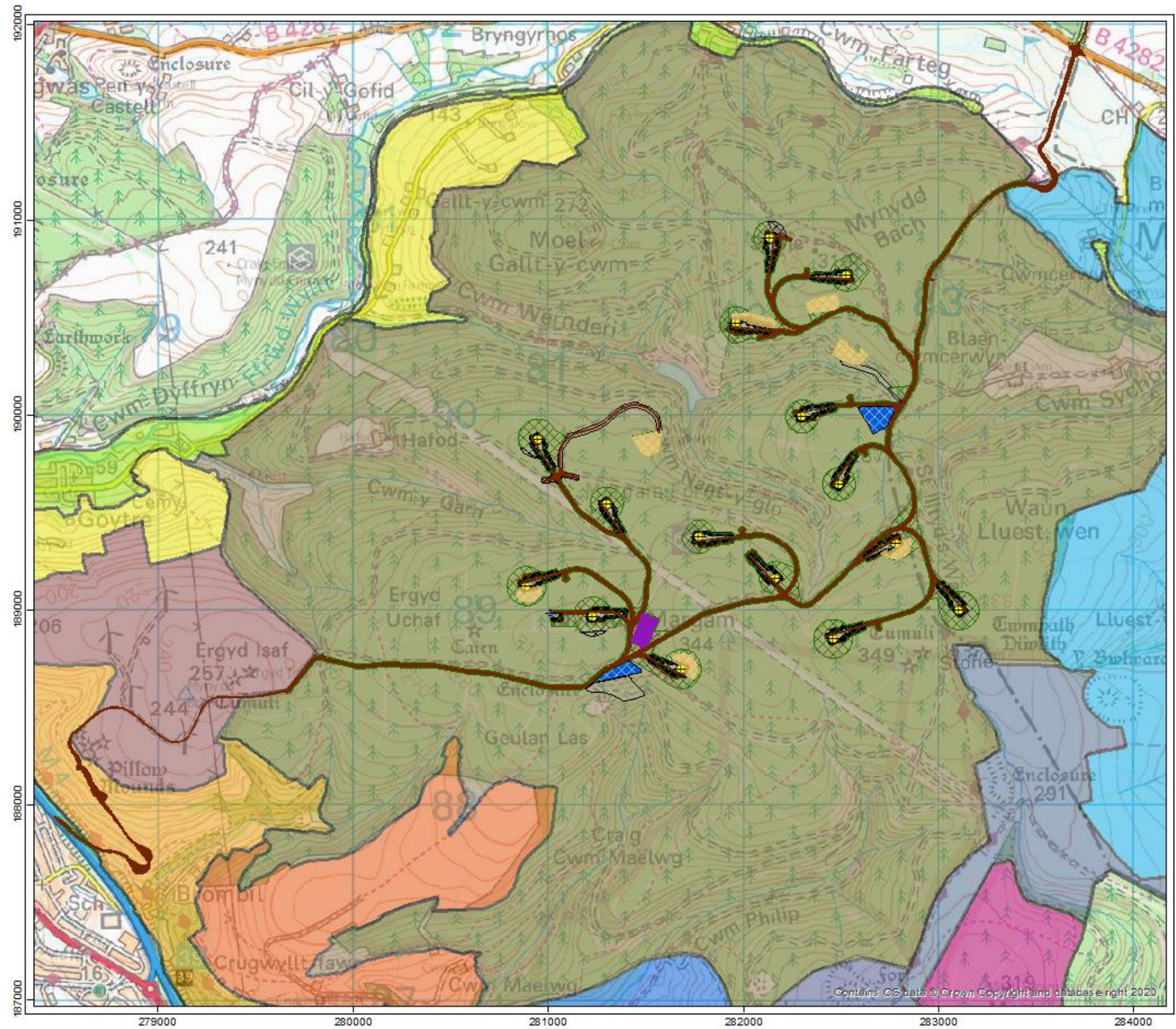
A9.2.48 Mitigation measures proposed for the Y Bryn Wind Farm are presented in Section 9.5 of Chapter 9: Cultural Heritage of the ES.

Source: Headland Archaeology



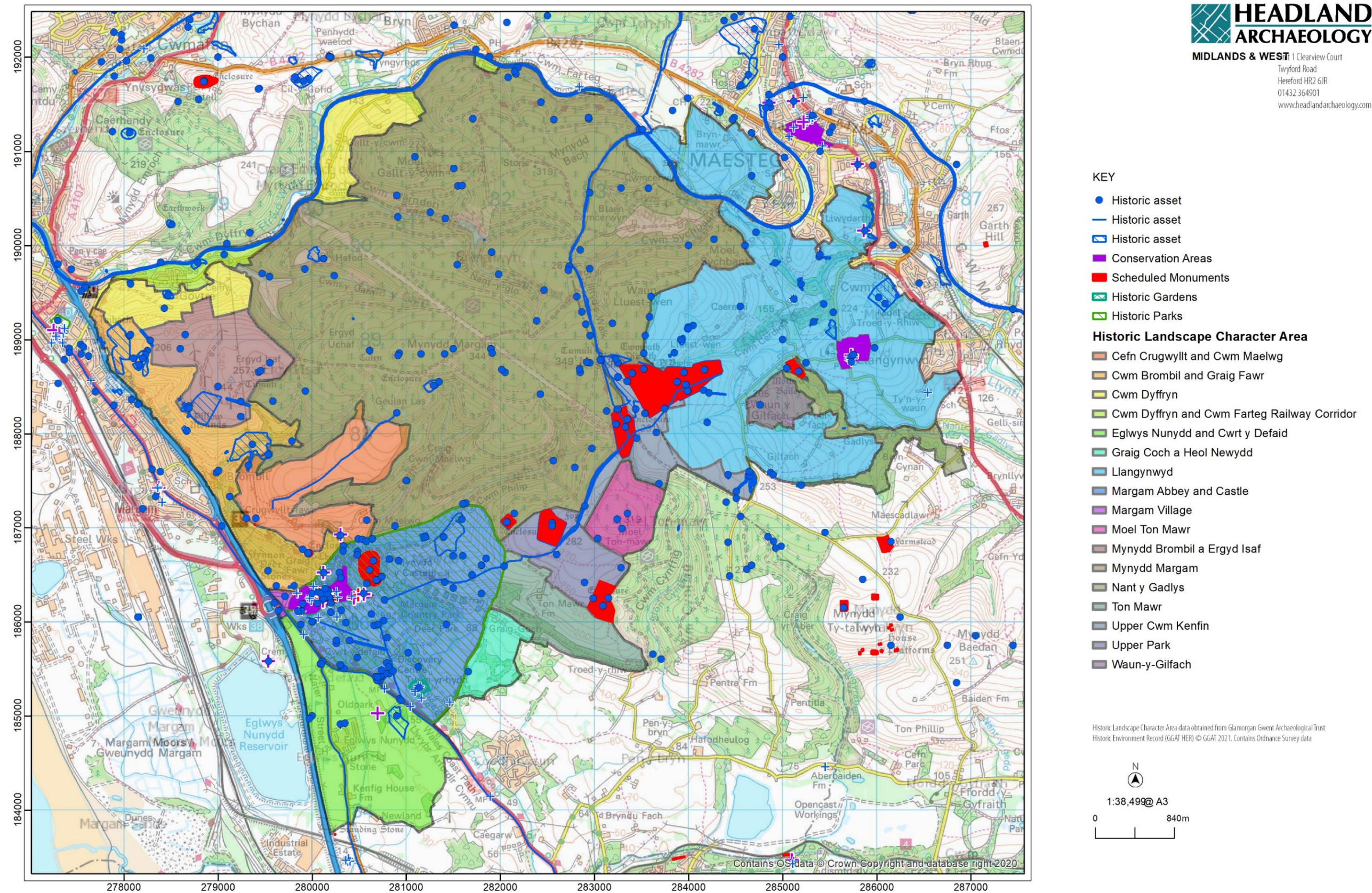
Illus 2: Historic Landscape Character Areas

Source: Headland Archaeology



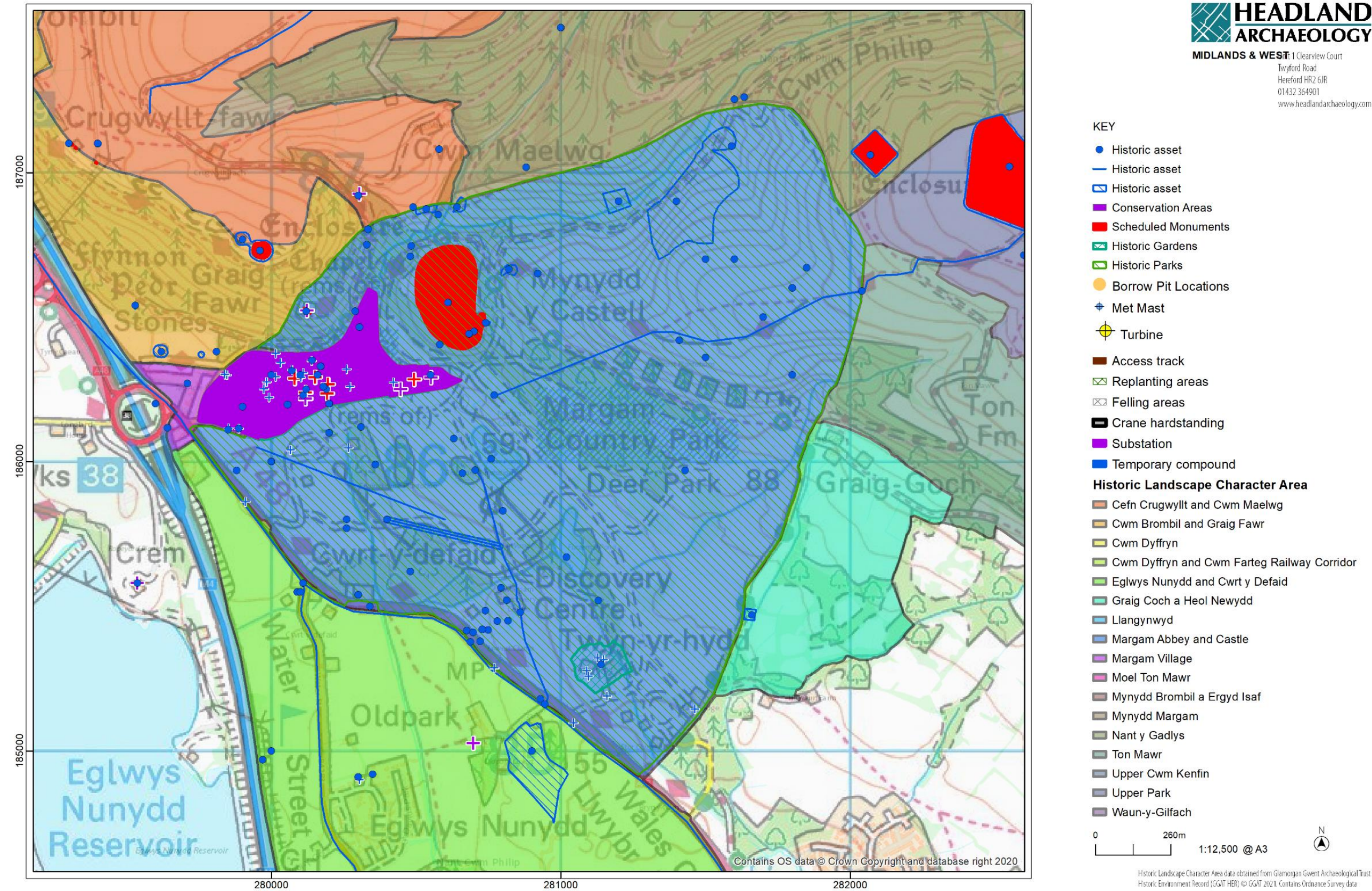
Illus 3: Development footprint within HLCAs

Source: Headland Archaeology



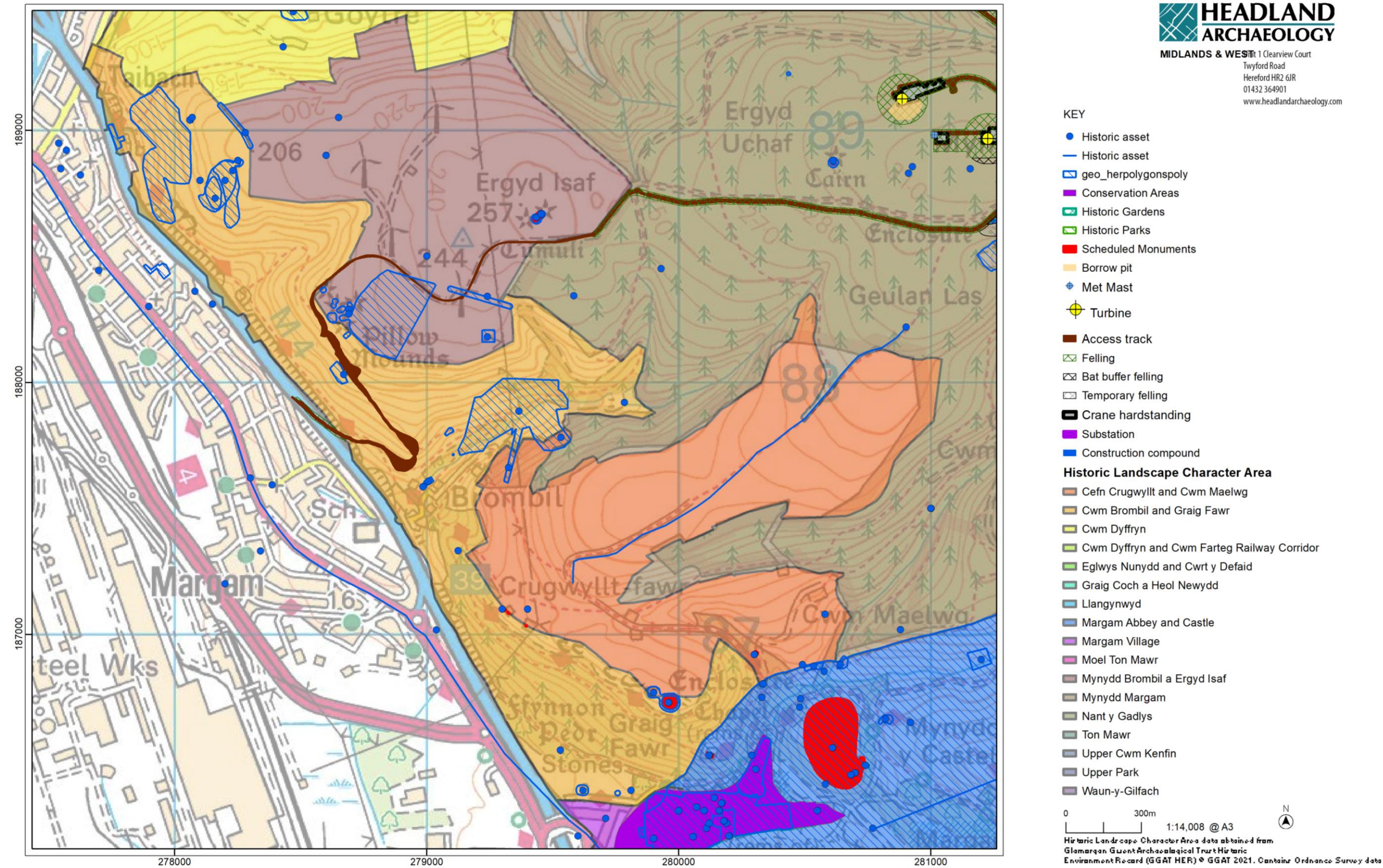
Illus 4: Known historic assets within HLCAs (overview)

Source: Headland Archaeology



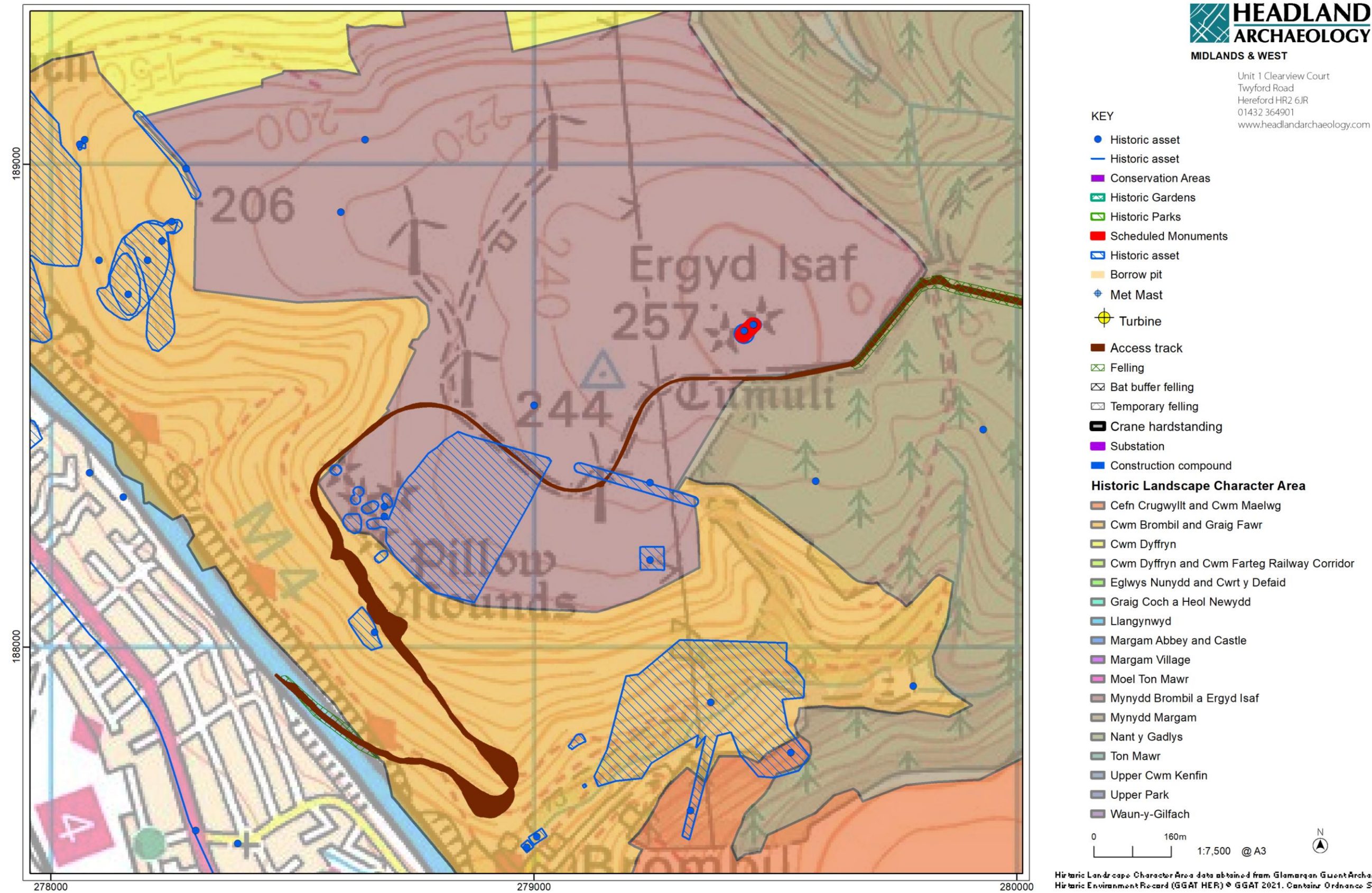
Illus 5: Known historic assets within HLCA001, HLCA007 and HLCA008 (no development footprint)

Source: Headland Archaeology



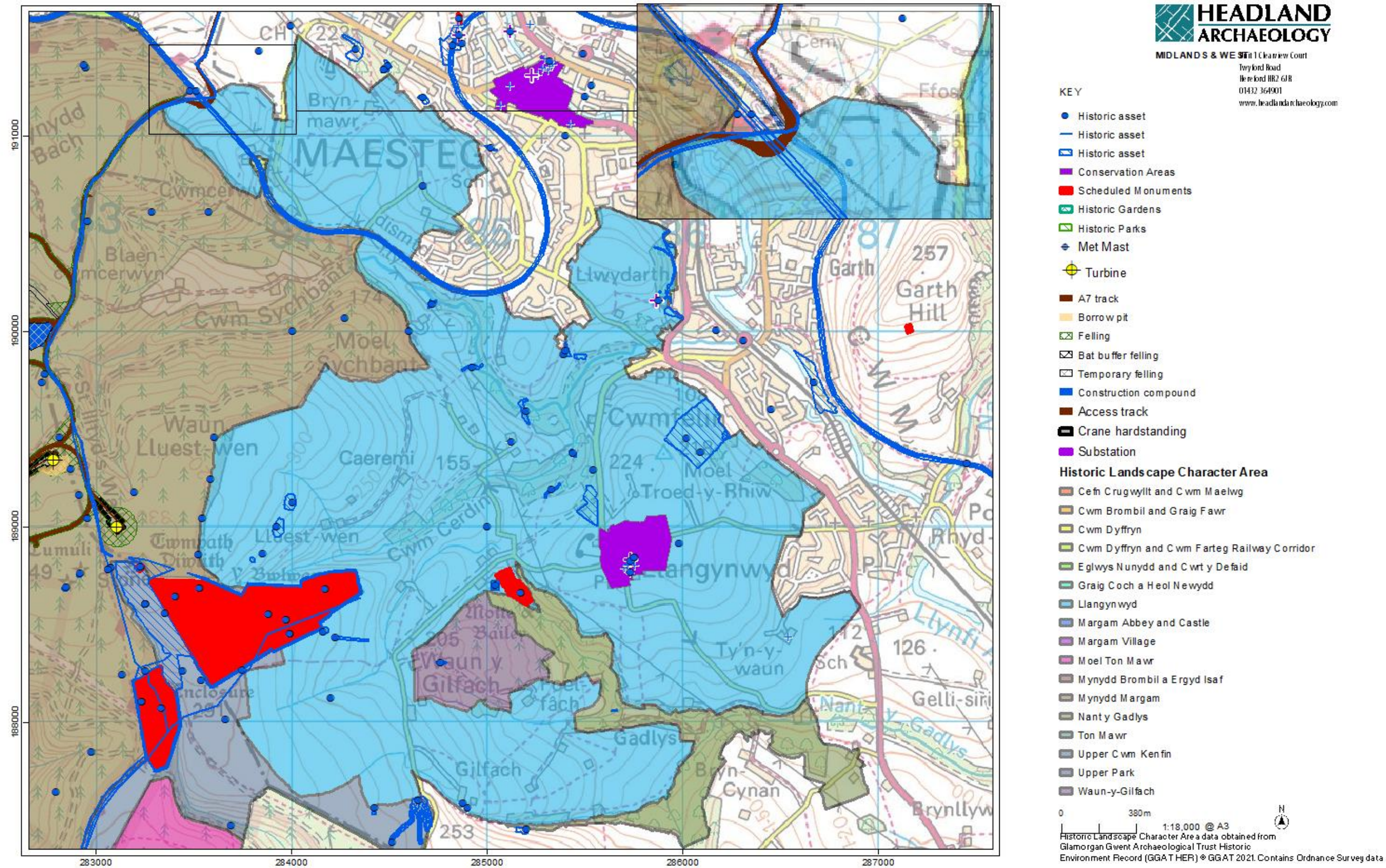
Illus 6: Known historic assets within HLCA002 (no development footprint) and HLCA003 and HLCA 004 (with development footprint)

Source: Headland Archaeology



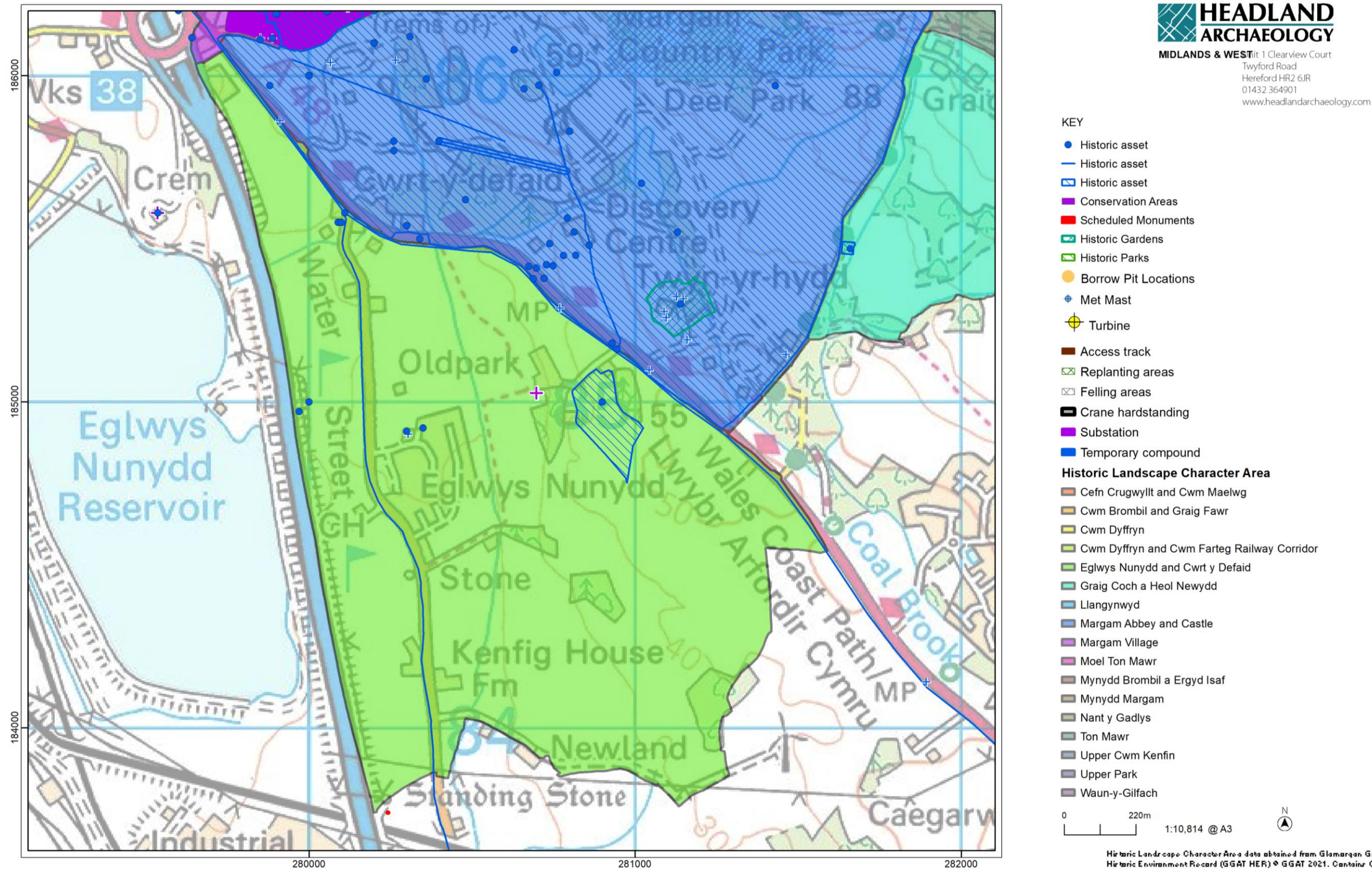
Illus 7: Detail of known historic assets and development footprint within HLCA003 and HLCA 004

Source: Headland Archaeology



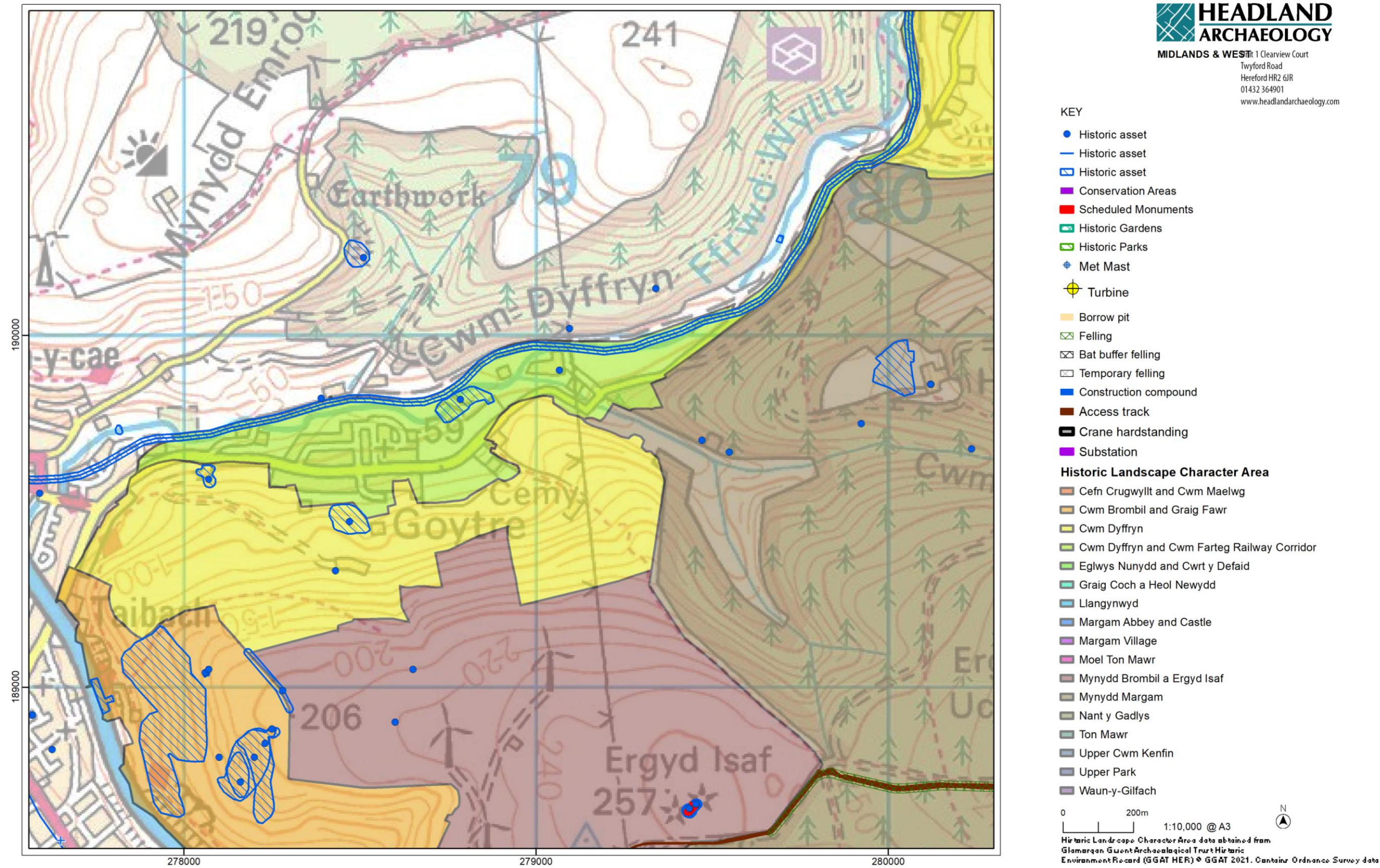
Illus 8: Known historic assets and development footprint within HLCA005, and HLCA011 and HLCA012 (no development footprint)

Source: Headland Archaeology



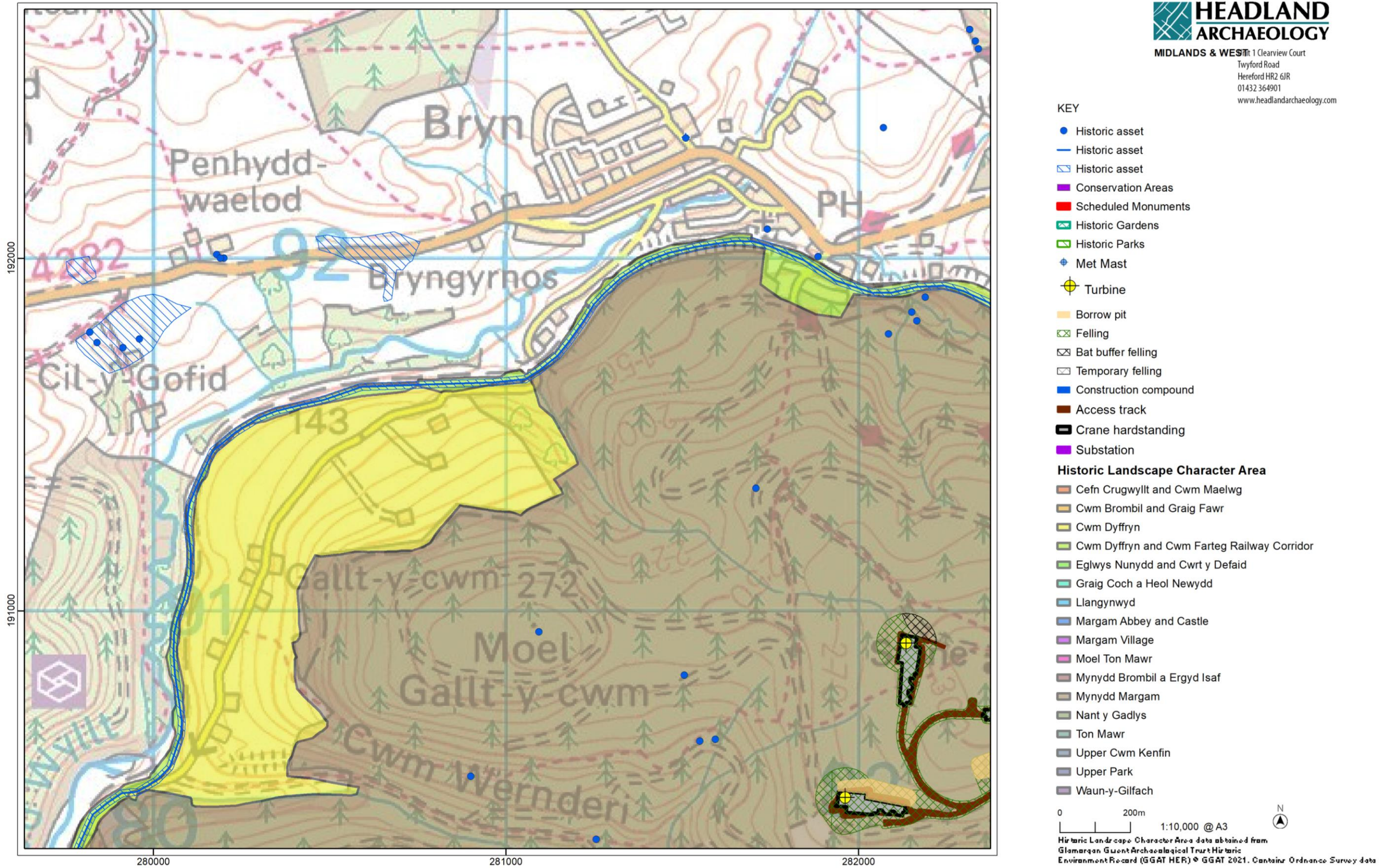
Illus 9: Known historic assets within HLCA006 (no development footprint)

Source: Headland Archaeology



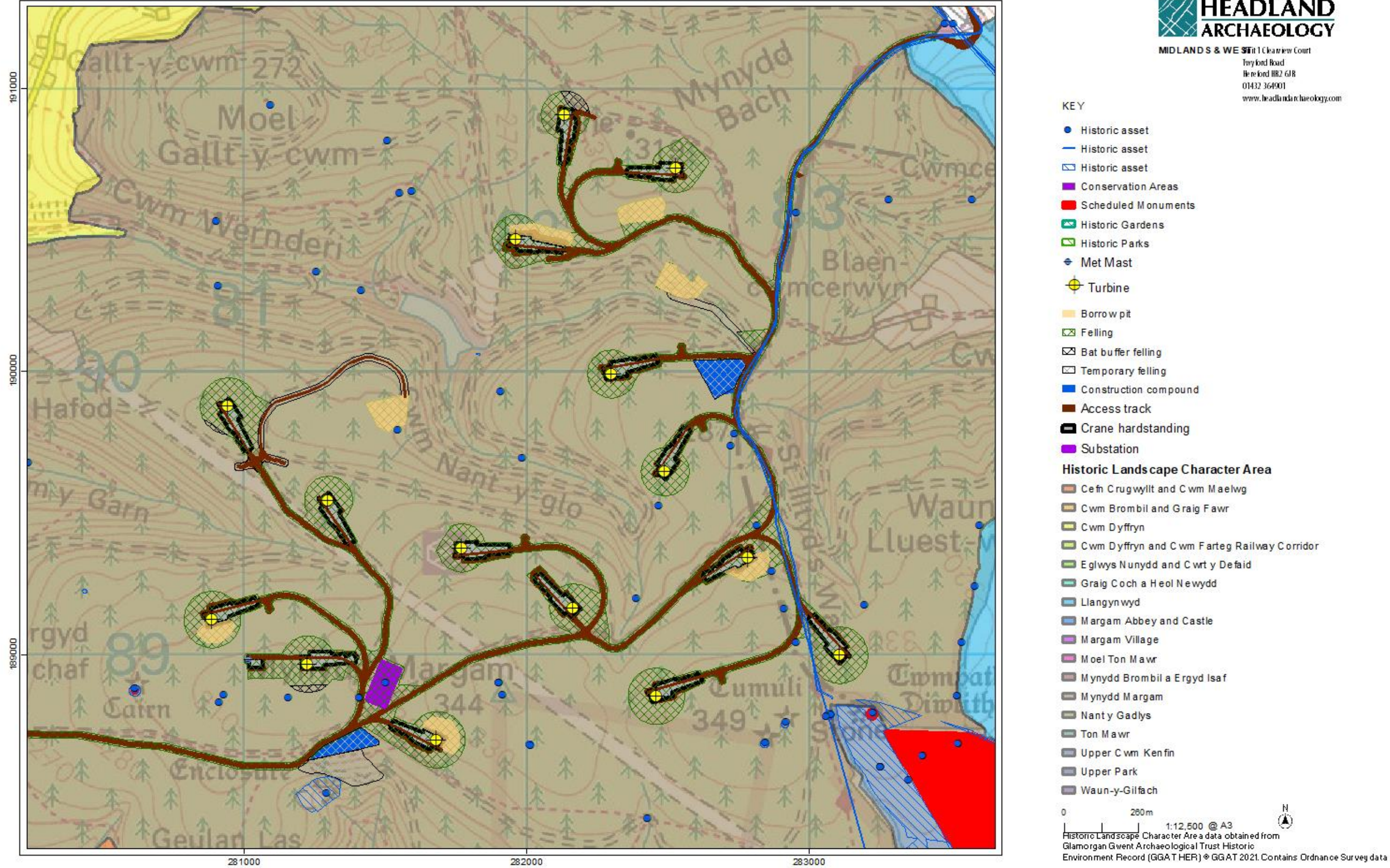
Illus 10: Known historic assets within HLCA009 and HLCA017 – south (no development footprint)

Source: Headland Archaeology



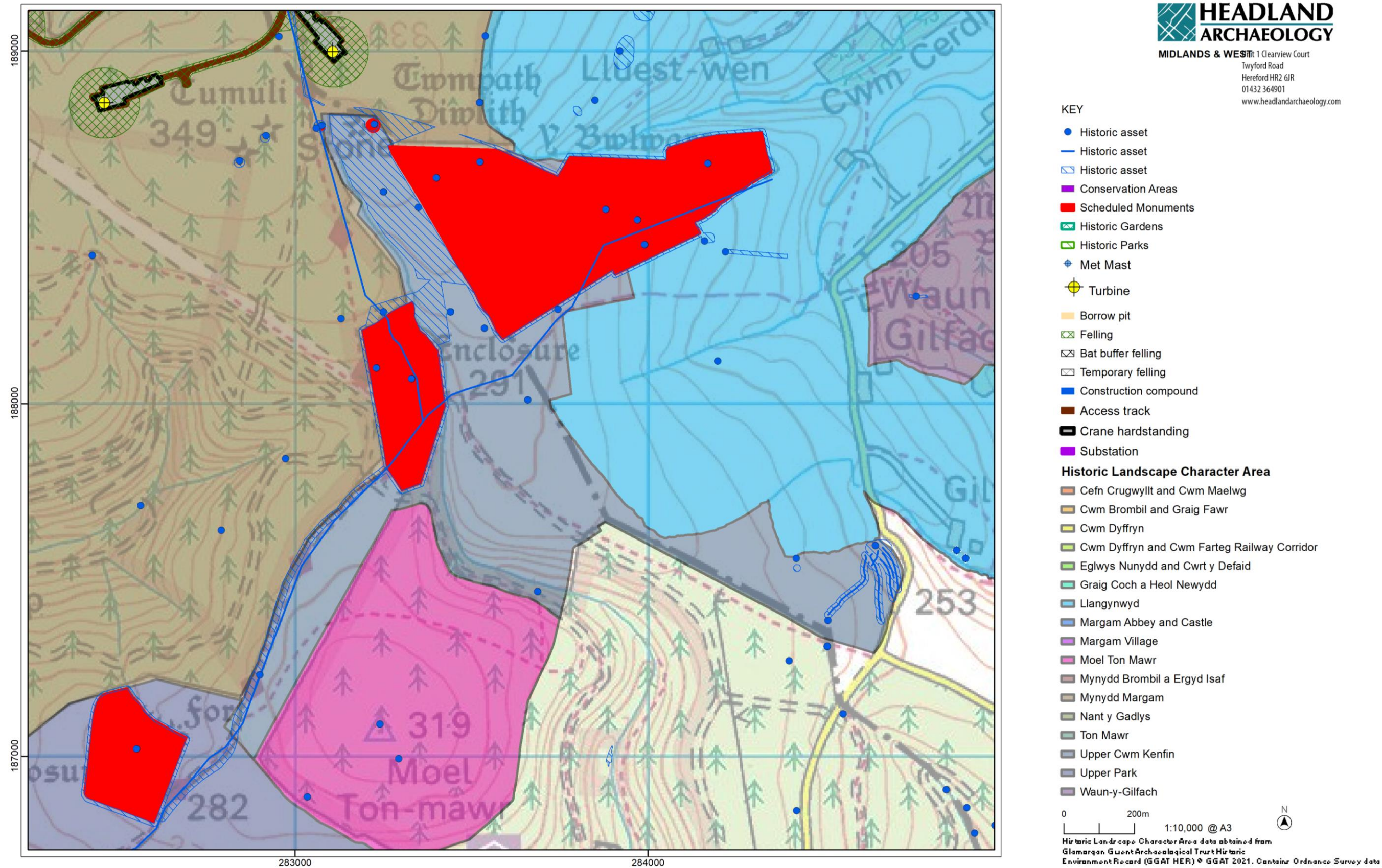
Illus 11: Known historic assets within HLCA009 and HLCA017 -north (no development footprint)

Source: Headland Archaeology



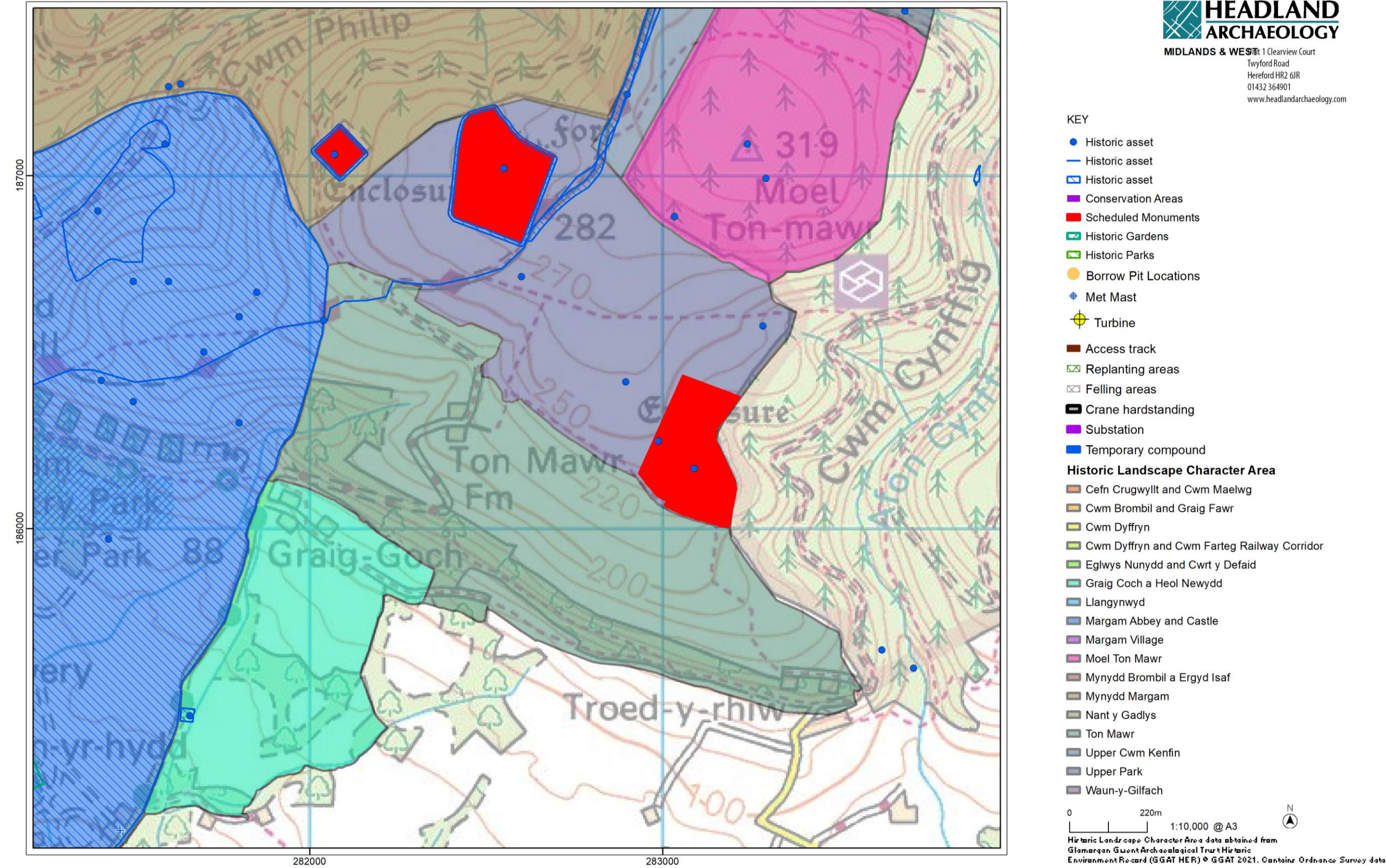
Illus 12: Detail of known historic assets and development footprint within HLCA010

Source: Headland Archaeology



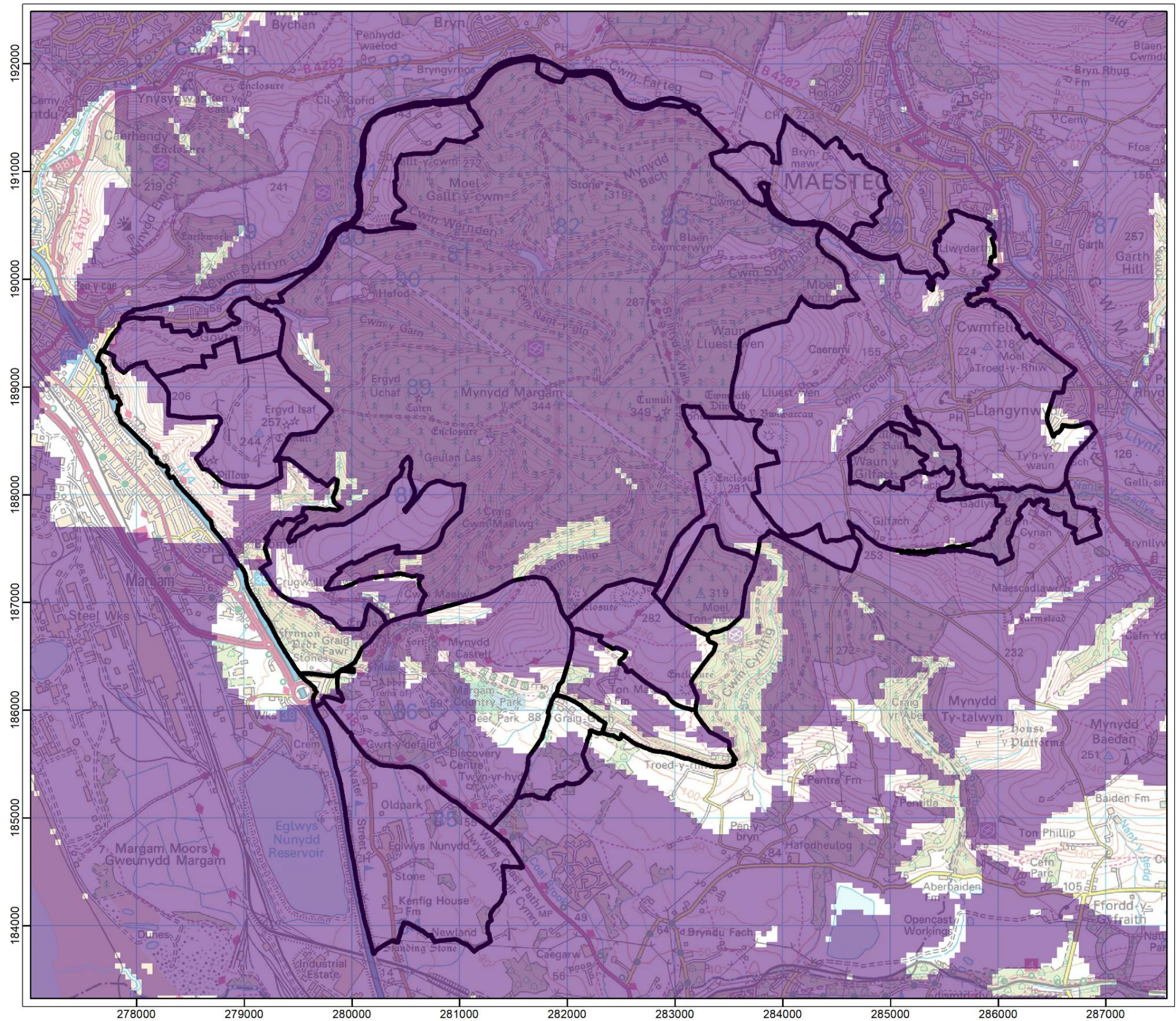
Illus 13: Known historic assets within HLCA013 (no development footprint) and HLCA014 (no development footprint)

Source: Headland Archaeology



Illus 14: Known historic assets within HLCA015 and HLCA016 (no development footprint)

Source: Headland Archaeology



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01432 364901
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KEY
Zone of Theoretic Visibility (blade tip)
HLCAs

0 840m
1:38,489 @ A3

Historic Landscape Character Area data obtained from
Glamorgan Gwent Archaeological Trust Historic
Environment Record (GGAT HER) © GGAT 2021. Contains Ordnance Survey data

Illus 15: HLCAs and ZTV



A9.3 RESULTS

Stage 2: Assessment of Direct, Physical Impacts

A9.3.1 The development may have a direct impact upon four HLCAs: HLCA003 Cwm Brombil and Graig Fawr, HLCA004 Mynydd Brombil and Ergyd Isaf, HLCA005 Llangynwyd and HLCA010 Mynydd Margam. The development footprint within these areas is shown on Illus 3. The known archaeological resource of the parts of the HLCAs which will be subject to a potential direct impact have been fully assessed by the desk-based assessment and walkover survey.

HLCA003 CWM BROMBIL AND GRAIG FAWR

A9.3.2 Although no turbines are proposed for construction within this area, the proposed access track from the M4 passes through this HLCA for a total length of approximately 1.3 km. The whole of the HLCA comprises a total area of land of 177 ha. The development footprint within this HLCA equates to 0.6 ha. The magnitude of absolute impact (according to the sliding scale set out in Table A9.3) is therefore assessed as Very Slight – 1.

A9.3.3 Cwm Brombil and Graig Fawr comprises the steep west-facing slopes of Mynydd Margam and is largely situated at heights of between 10 m - 200 m above ordnance datum (AOD). These steep slopes overlook the town of Port Talbot, and are dominated by thick woodland in the southern, downslope area. The higher areas of the slopes are more open and comprise pasture and rough scrub.

A9.3.4 The historic assets recorded within this HLCA (shown on Illus 6 and 7) include two Scheduled Monuments (Half Moon Camp; Cadw Ref. GM477 and Chain Home Low Radar Station; Cadw Ref. GM488). These Scheduled Monuments both lie outside the development footprint and will not be subject to direct physical impacts. Non-designated assets within the HLCA are Brombil Farm and associated structures, Brombil colliery, a field drain and culvert, Brombil Reservoir, a house platform and a Gorsedd stone circle. None of these features will be directly impacted upon by current development proposals.

Table A9.10: Direct, Physical Impacts on Historic Character Area HLCA003 Cwm Brombil and Graig Fawr

Absolute Impact (Loss of Area)		Magnitude of impact (absolute) - Score		
Development Area within HLCA: 0.6 ha		Very Slight -1		
Character Area: 177 ha				
Absolute Impact = 0.39% of HLCA				
Element / % Loss	Category – Score (Intrinsic Importance)	Magnitude Of Impact (Relative) – Score	Extrinsic Importance (Landscape Value) – Score	Magnitude Of Landscape Value Impact – Score
Half Moon Camp / none	A – 4	None – 0	Considerable – 4 HLCA003 is a steeply sloping area with clear views of the surrounding area.	None – 0

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
			It is a local high point, suitable for the putative Iron Age enclosure within the site. The presence of two Scheduled Monuments in the southern area further enhances the value of the Character Area	
Chain Home Low Radar Station / none	A – 4	None – 0	Low - 2.	None – 0
Gorsedd Stone Circle, Margam / none	B – 3	None – 0	Low – 2	None – 0
Fynnon Pedr culvert / none	C - 2	None – 0	Very Low - 1	None – 0
Brombil Farm, Margam 3 (site of battle recorded as Pant y Cae on OS 1 st edition) / none	B – 3	None – 0	Very Low – 1, the battle site is recorded from documentary sources and no further details are known	None – 0
Tai Bach earthworks (possible quarry) / none	B – 3	None – 0	Low – 2, associated with other extraction sites in this HLCA	None – 0
Brombil Farm, Margam 8 – Iron Age enclosure / none	B – 3	None -0	Considerable – 4, this asset is located above steeply sloping ground facing southwest suitable for such an enclosure, the presence of a scheduled Iron Age	None – 0

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
			enclosure in the south of the area further enhances the value of the HLCA	
Ironstone working / none	C – 2	None – 0	Low – 2, associated with other extraction earthworks in this area	None – 0
Three structures shown on 1 st edition map / none	C – 2	None – 0	Low – 2, they are likely associated with each other although function unknown	
Brombil Colliery and Tramway / none	B – 3	None – 0	High – 5, the tramway extends into the adjacent HLCA	None – 0
Brombil Reservoir / none	C – 2	None – 0	Considerable – 4, this is an elevated location suitable for the function of this reservoir which was created to supply hydraulic power to Port Talbot docks	None – 0
House platforms / none	B – 3	None – 0	Considerable – 4, although some of the platforms are near destroyed and some have been identified as pillow mounds, this group, which extends into the adjacent HLCA, is in an appropriate location for squatter settlement on the edge of the mountain and associated with the 18 th century industrial exploitation of this area	None – 0
Brombil Farm,	C – 2	None 0	Medium – 3, well preserved stone and	None 0

Absolute Impact (Loss of Area)	Magnitude of impact (absolute) - Score
Margam 2 – field boundary / none	earth bank typical of the north-western part of Brombil Farm, forms the boundary with adjacent HLCA

Source: Headland Archaeology

- A9.3.5 As no elements are directly impacted upon, Table A9.11 finds that the average element score for the HLCA003 Cwm Brombil and Graig Fawr HLCA is 0.
- A9.3.6 Thus the overall magnitude of direct physical impact upon the HLCA003 Cwm Brombil and Graig Fawr is 1 + 0 = 1, Very Slight, in accordance with the overall grading scores set out in Table A9.4.
- HLCA004 MYNYDD BROMBIL A ERGYD ISAF**
- A9.3.7 Although no turbines are proposed for construction within this area, approximately 990 m of access track is proposed to cross this HLCA (of which approximately 790 m will utilise the existing tracks of the Mynydd Brombil Wind Farm). The character area extends to 118 ha. The development footprint within this HLCA equates to 0.48 ha. The magnitude of absolute impact (according to the sliding scale set out in Table A9.3) is therefore assessed as Very Slight – 1.
- A9.3.8 Mynydd Brombil and Ergyd Isaf comprises an area of enclosed upland which formed part of the Margam Abbey Estate and rises to a height of 260 m AOD. The mountain is primarily post-medieval enclosure but includes a deserted medieval or post-medieval upland settlement landscape with relict prehistoric funerary and ritual features. This character area also includes the operational Mynydd Brombil Wind Farm constructed after the definition of the character areas, and which was identified as resulting in a slight reduction of the landscape character value in a previous ASIDOHL assessment⁹.
- A9.3.9 A large number of historic assets are recorded within the HLCA, including a pair of burial cairns protected as a Scheduled Monument (Ergyd Isaf cairns, GM160). The HLCA also includes a quarry, post-medieval farm, an earthwork formed of a series of low banks and depressions, and an individual pillow mound which is unusual in form, being an equal-armed cross flanked by a continuous ditch. None of these would be physically impacted by the development.
- A9.3.10 Identified historic assets within the development footprint within HLCA003 are shown on illustrations. 6 and 7. These comprise a field of earthwork pillow mounds (relating to rabbit husbandry probably associated with the monastic site at Margam), and a length of dry-stone boundary wall dating to the early 19th century. These have both already been impacted by the existing access tracks of the Mynydd Brombil windfarm and no further track widening is proposed in the vicinity of these assets. They will therefore not experience any direct physical impacts.

⁹ Pegasus 2012

Table A9.11: Direct, Physical Impacts on Historic Character Area HLCA004 Mynydd Brombil a Ergyd Isaf

Absolute Impact (Loss of Area)		Magnitude of impact (absolute) - Score		
Development Area within HLCA: 0.48 ha		Very Slight -1		
Character Area: 118 ha				
Absolute Impact = 0.41%				
Element / % Loss	Category – Score (Intrinsic Importance)	Magnitude Of Impact (Relative) – Score	Extrinsic Importance (Landscape Value) – Score	Magnitude Of Landscape Value Impact – Score
Pillow mound earthworks / none	B – 3	None – 0	High 5 – large group of mounds with associated outlying mound, associated with Cistercian monastery at Margam, but some of the earthworks may represent later house platforms of a squatter settlement associated with the industrial exploitation of the mountain	None – 0
Brombil Farm, Margam 1 – field boundary / none	C – 2	None 0	Medium – 3, well preserved stone and earth bank typical of the north-western part of Brombil Farm	None 0
Brombil Farm, Margam 2 – field boundary / none	C – 2	None 0	Medium – 3, well preserved stone and earth bank typical of the north-western part of Brombil Farm, forms the boundary with adjacent HLCA	None 0
Ergad Isaf cairns / none	A – 4	None – 0	Very High - 6. Mynydd Brombil is a summit which forms a suitable location for these Scheduled burial mounds.	None – 0
Tai Bach Quarry / none	C – 2	None – 0	Low – 2	None – 0

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
Brombil Farm, Margam 9 / none	C – 2	None – 0	High – 5, possible house platform which would be associated with the others within this HLCA	None – 0
Pillow mound earthworks / none	B – 3	None – 0		
	B – 3	None – 0	High 5 – large group of mounds with associated outlying mound, associated with Cistercian monastery at Margam, but some of the earthworks may represent later house platforms of a squatter settlement associated with the industrial exploitation of the mountain	None – 0
Brombil Farm, Margam 1 – field boundary / none	C – 2	None 0	Medium – 3, well preserved stone and earth bank typical of the north-western part of Brombil Farm	None 0
Brombil Farm, Margam 2 – field boundary / none	C – 2	None 0	Medium – 3, well preserved stone and earth bank typical of the north-western part of Brombil Farm, forms the boundary with adjacent HLCA	None 0
Ergad Isaf cairns / none	A – 4	None – 0	Very High - 6. Mynydd Brombil is a summit which forms a suitable location for these Scheduled burial mounds	None – 0
Tai Bach Quarry / none	C – 2	None – 0	Low – 2	None – 0

Source: Headland Archaeology

A9.3.11 As no elements are directly impacted upon, Table A9.12 finds that the average element score for the HLCA004 Mynydd Brombil a Eryd Isaf is 0. Thus the overall magnitude of direct physical impact upon the HLCA004 Mynydd Brombil a Eryd Isaf is 1 + 0 = 1, Very Slight, in accordance with the overall grading scores set out in Table A9.4.

HLCA005 LLANGYNWYD

A9.3.12 Although no turbines are proposed for construction within this area, an element of an access track extends fractionally into the HLCA at its northern edge. The whole of the HLCA comprises a total area of land of 704 ha. The development footprint within this HLCA equates to 0.25 ha. The magnitude of absolute impact (according to the sliding scale set out in Table A9.3) is therefore assessed as Very Slight – 1.

A9.3.13 The Llangynwyd HLCA is a relict archaeological landscape dominated by numerous prehistoric and medieval settlement sites with associated field systems.

A9.3.14 A large number of historic assets are recorded within the HLCA, including 15 listed buildings (two Grade II* Listed – Church of St Cynwyd, Ref: 11243 and Llwydarth Farmhouse, Ref: 11256; and the remainder Grade II Listed), two Scheduled Monuments (Llangynwyd Castle, Ref: GM085 and Y Bwlwarcau Ref. GM059 -approximately half of the scheduled area lies within this HLCA) and the Llangynwyd Conservation Area, which contains the majority of the listed buildings. Non-designated assets within the HLCA comprise sections of tramway, a Royal Observer Corps site, field boundaries and boundary markers, a commemorative stone, medieval earthworks, an Iron Age hillfort and a quarry.

A9.3.15 None of these assets will be physically impacted by the proposed development. The access track passes over a section of the Port Talbot railway which is within a tunnel and therefore will not be physically affected by the development.

Table A9.12: Direct, Physical Impacts on Historic Character Area HLCA005 Llangynwyd

Absolute Impact (Loss of Area)		Magnitude of impact (absolute) - Score		
Development Area within HLCA: 0.25 ha		Very Slight – 1		
Character Area: 704 ha				
Absolute Impact = 0. 04% of HLCA				
Element / % Loss	Category – Score (Intrinsic Importance)	Magnitude Of Impact (Relative) – Score	Extrinsic Importance (Landscape Value) – Score	Magnitude Of Landscape Value Impact – Score
Llangynwyd Castle / none	A – 4	None – 0	Low – no nearby associated elements	None – 0
Y Bwlwarcau hillfort and cairnfield/ none	A – 4	None – 0	Very high – part of a group of prehistoric earthworks within this HLCA and	None – 0

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
			neighbouring HLCA – 6	
Llwydarth Farmhouse / none	A – 4	None – 0	Low – 2	None – 0
Church of St Cynwyd / none	A – 4	None – 0	High – important building within Llangynwyd Conservation Area – 5	None – 0
The Old House Inn PH / none	B – 3	None - 0	High – within Llangynwyd Conservation Area – 5	None - 0
Telephone call box / none	B – 3	None - 0	High – visual association with Old House PH, within Llangynwyd Conservation Area – 5	None - 0
The Hopcyn Cross / none	B – 3	None - 0	High – within Llangynwyd Conservation Area – 5	None - 0
Church yard memorials (five groups) / none	B – 3	None - 0	High – strong visual and historic association with St Cynwyd’s church and within Llangynwyd Conservation Area – 5	None - 0
Churchyard walls / none	B – 3	None - 0	High – associated with St Cynwyd church and within Conservation Area – 5	None - 0
Llangynwyd Conservation Area / none	B – 3	None – 0	High – includes several other historic assets / landscape elements – 5	None – 0
Ty’n-y-waun farmhouse	B – 3	None - 0	Low – 2	None - 0
Medieval platform	B – 3	None - 0	Considerable – probably associated	None - 0

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
near Bwlwarcau / none			with examples within the scheduled Bwylwarcau fort - 3	
Castell farm buildings / none	B – 3	None – 0	Considerable – associated with the cloddiau boundary – 3	None - 0

Source: Headland Archaeology

- A9.3.16 As no elements are directly impacted upon, Table A9.13 finds that the average element score for the HLCA005 Llangynwyd is 0.
- A9.3.17 Thus the overall magnitude of direct physical impact upon the HLCA005 Llangynwyd is 1 + 0 = 1, Very Slight in accordance with the overall grading scores set out in Table A9.4.

HLCA010 MYNYDD MARGAM

- A9.3.18 The area of the site within this HLCA is approximately 88.55 ha. The whole of the HLCA comprises a total area of land of 1,640 ha.
- A9.3.19 All of the proposed turbines and remaining infrastructure in the southern block are proposed within this area. The magnitude of absolute impact (according to the sliding scale set out in Table A9.3) is therefore assessed as Slight – 2.
- A9.3.20 This HLCA is defined as extensive 20th century forestry which was formerly open mountain and enclosed land in the valleys. It was associated with the Cistercian Abbey of Margam, specifically Hafod-y-Porth Grange and Cryke Grange.
- A9.3.21 A large number of archaeological features are recorded within the HLCA, including two Scheduled Monuments (Roman Camp, Ref: GM058, and the site of the Bodvoc Stone, Ref: GM443). These Scheduled Monuments lie outside the development footprint and will not be subject to direct physical impacts. Non-designated assets within the HLCA but outside the development footprint include findspots of lithic artefacts, earthwork remains of uncertain or prehistoric date, post-medieval quarries and a former tramway as well as an area of possible bomb craters and the sites of two WWII aircraft crashes. The HER records two of these (Mynydd Bach old coal level and a structure at Nant-y-glo) as destroyed, and as Category D sites, they are therefore not included in the assessment. The detailed record for Mynydd Bach cairn also records that this was destroyed by quarrying, and as a Category D site, this is therefore also excluded from the assessment. Likewise Rhyd Llechws, Brynallwyn sheepfold, Ffynnon y Foel structure, Cwm Goblyn sheepfold, Nan-y-glo-sheepfold and Twy-Hwnt structure are also excluded as the HER records them as “near destroyed”.
- A9.3.22 Identified historic assets within the development footprint within HLCA010 are shown on Illustration 14. These comprise the prehistoric trackway known as Heol y Moch, boundary stones forming parts of a boundary recorded on 19th century mapping, and an enclosure also recorded on 19th century mapping.
- A9.3.23 Heol y Moch (also known as the Pig’s Way and recorded on early OS mapping as “British Trackway” is still in use as a forest track. This continued use of the route is likely to have truncated

evidence of the original trackway meaning that upgrades to the trackway are unlikely to encounter undisturbed buried remains; the magnitude of impact is therefore considered to be at most Moderate, despite the comparative length of the track that would be affected. The route will not be lost, although it will be widened in places and its surface altered, therefore the effect on its landscape value is judged to be low.

- A9.3.24 The boundary stones and enclosure were not observed during the walkover as they lie within currently planted areas, but for the purpose of this assessment they are presumed to be still extant. The majority of these assets are in areas where the forestry will be felled but which will have no groundworks; they will therefore not be physically impacted by the proposed development as long as a safe system of work is implemented during felling. One of the boundary stones is within an area of proposed new track and in the worst case could potentially be removed by this track if it cannot be micrositied to avoid impacts. This would equate to less than 10% loss of the total number of boundary stones within the HLCA.

Table A9.13: Direct, Physical Impacts on Historic Character Area HLCA010 Mynydd Margam

Absolute Impact (Loss of Area)			Magnitude of impact (absolute) - Score	
Development Area within HLCA: 88.55 ha			Slight – 2	
Character Area: 1,640 ha				
Absolute Impact = 5.40 % of HLCA				
Element / % Loss	Category – Score (Intrinsic Importance)	Magnitude Of Impact (Relative) – Score	Extrinsic Importance (Landscape Value) – Score	Magnitude Of Landscape Value Impact – Score
Roman Camp / none	A – 4	None – 0	Very high – part of a group of prehistoric earthworks within this HLCA and neighbouring HLCA – 6	None – 0
Danish Camp / none	A – 4	None – 0	Very high – part of a group of prehistoric earthworks within this HLCA and neighbouring HLCA – 6	None – 0
Ergyd Uchaf round barrow / none	A – 4	None – 0	Very high – associated with Twmpath Diwlith scheduled monument in adjacent HLCA and with Bodvoc stone ring cairn (and site of the Bodvoc	None - 0

Absolute Impact (Loss of Area)				Magnitude of impact (absolute) - Score	
				stone) in this HLCA-6	
the site of the Bodvoc Stone/ none	A – 4		None – 0	Very high – associated with Twmpath Diwlith scheduled monument in adjacent HLCA and with Ergyd Uchaf round barrow and Bodvoc stone ring cairn in this HLCA – 6	None – 0
Port Talbot railway / none	C – 2		None – 0	Low – 1	None – 0
Heol Y Moch (Pig's Way) prehistoric trackway. 2.39km of 3.29km = 72%	B – 3		Moderate - 3	Very high – probably associated with Roman Camp and Danish Camp, strong landscape feature surviving from prehistory - 6	Low – 1 (route will remain although archaeological value may reduce)
Cefn Crugwyllt medieval trackway / none	B – 3		None – 0	High – probably associated with the Cistercian abbey at Margam to the southwest - 5	None - 0
Llyndwr Fawr southeast, barrow/ none	B – 3		None – 0	High – one of a group of barrows on Margam Mountain that form a relict prehistoric landscape – 5	None – 0
Llyndwr Fawr east, barrow / none	B – 3		None – 0	High – one of a group of barrows on Margam Mountain that form a relict prehistoric landscape – 5	None – 0
Geulan Las enclosure / none	B – 3		None – 0	High – associated with other prehistoric enclosures on Margam Mountain - 5	None – 0
Hafod y Porth grange, chapel and churchyard / none	B – 3		None – 0	High – associated with Cistercian abbey at Margam - 5	None – 0

Absolute Impact (Loss of Area)				Magnitude of impact (absolute) - Score	
Field boundary, Margam./ none	C – 2		None – 0	Low – 1	None – 0
Circular mound, Mynydd Margam/ none	B – 3		None 0	High as a mound on highest point of the mountain this may be another barrow - 5	None 0
Ffynnon Iago / none	B – 3		None 0	High – one of several holy wells across the Historic Landscape – 5	None 0
Blaencyneiron / none	B – 3		None 0	Medium – associated with Blaen-Cyneiron enclosure - 3	None 0
Blaen Cyneiron enclosure / none	B – 3		None 0	Medium – associated with Blaencyneiron house - 3	None 0
Wernderi / none	B – 3		None -0	Low – 1	None 0
Moel Tonmawr old quarry / none	C -2		None 0	Low – 1	None 0
Mynydd Margam trig points (two) / none	C – 2		None 0	Medium – one is located on a mound that may be a barrow or a former beacon, both are located on high ground within the HLCA which is commensurate with their function, they are also associated with the Moel Gallt-y-Cwm trig point – 3	None 0
Cwm Philip sheepfold / none	C – 2		None – 0	Medium – associated with Nant Cwm Philip long hut, one of several sheepfolds on Margam Mountain reflecting its former land use – 3	None 0

Absolute Impact (Loss of Area)				Magnitude of impact (absolute) - Score	
Nant Cwm Philip long hut / none	B – 3	None 0	Medium – associated with Cwm Philip sheepfold – 3	None 0	
Blaen-Maelwg gravel pits	C – 2	None – 0	High – associated with Blaen-Maelwg enclosure in this HLCA and probably with coal levels and quarries in HLCA to south – 5	None – 0	
Brombil old gravel pit / none	C – 2	None 0	Low – 1	None 0	
Brombil water well / none	C – 2	None -0	Low -1	None 0	
Nant y glo farmstead ./ none	B – 3	None 0	Low – associated with Nant y glo Ty Un Nos – 1	None 0	
Nant y glo Ty un nos / none	B – 3	None – 0	Low – associated with Nant y glo farmstead – 1	None -0	
Heol y Moch enclosure / none	B – 3	None – 0	Low – 1	None - 0	
Maes-Dwfn Old Quarry / none	C – 2	None- 0	Low – 1	None - 0	
Farteg Fach enclosure 1 / none	B – 3	None – 0	Medium – part of a group of features at Garteg Fach – 3	None – 0	
Farteg Fach structure / none	B – 3	None – 0	Medium – part of a group of features at Garteg Fach – 3	None – 0	
Farteg Fach coal level I / none	C – 2	None – 0	Medium – part of a group of features at Garteg Fach – 3	None – 0	
Farteg Fach coal level II / none	C – 2	None – 0	Medium – part of a group of features at Garteg Fach – 3	None -0	
Maes-Dwfn enclosure / none	B – 3	None – 0	Low	None – 0	

Absolute Impact (Loss of Area)				Magnitude of impact (absolute) - Score	
Tyn-y-fordd structure / none	B – 3	None – 0	Medium – associated with Tyn-y-ffordd level – 3	None – 0	
Tyn-y-fordd level / none	C – 2	None – 0	Medium – associated with Tyn-y-ffordd structure – 3	None – 0	
Cwm y Garn quarry1 / none	C – 2	None -0	Medium – associated with Cwm y Garn quarry 2 – 3	None – 0	
Cwm y Garn quarry 2 / none	C – 2	None – 0	Medium – associated with Cwm y Garn quarry 1 - 3	None – 0	
Moel Gallt-y-cwm trig point / none	C – 2	None – 0	Medium – ground within the HLCA which is commensurate with its function, also associated with the two Mynydd Margam trig points – 3	None - 0	
Cwm Garteg quarry / none	C – 2	None – 0	Low – 1	None - 0	
Cwm structure / none	C – 2	None -0	Low – 1	None -0	
Farteg Fach structure / none	C – 2	None – 0	Low – 1	None – 0	
Mynydd Bach quarry / none	C – 2	None – 0	Low – 1	None – 0	
Cwm Goblyn tramway / none	C – 2	None -0	Low – 1	None – 0	
Rhyd Blaen y Cwm entrenchment	B – 3	None – 0	Low – 1	None – 0	
Craig Cwm Maelog charcoal burning platforms / none	C -2	None – 0	Low – 1	None -0	

Absolute Impact (Loss of Area)				Magnitude of impact (absolute) - Score	
Craig Maelog	Cwm	C – 2	None – 0	Low – 1	None – 0
Boundary stones / one of eleven= 9%		C – 2	Low – 2	Medium – 3, groups of stones form clear boundaries, one of which is the boundary of the HLCA	Low – 2
Hawker Hurricane crash site / none		A-4	None – 0	Low -1	None – 0
Westland Lysander crash site / none		A-4	None -0	Low – 1	None – 0

Source: Headland Archaeology

- A9.3.25 Two landscape elements will be physically affected and Table A9.14 finds that the average element score for HLCA010 Mynydd Margam is 9.5.
- A9.3.26 Thus the overall magnitude of direct physical impact upon the HLCA010 Mynydd Margam is 2 + 5.5= 9.5, Moderate in accordance with the overall grading scores set out in Table A9.4.

Stage 3a: Indirect Physical Impacts

A9.3.27 No indirect physical impacts are anticipated in HLCAs beyond those which are directly impacted upon by the wind farm development.

HLCA003 CWM BROMBIL AND GRAIG FAWR

A9.3.28 The proposed access track from the M4 will pass immediately adjacent to the house platform at Tai Bach (HER ref 01993qw). There is therefore a risk of erosion to this asset. This monument is considered to be a Category B monument and the magnitude of risk is considered to be Moderate, 3.

Table A9.14: Assessment Of Indirect, Physical Impacts On Historic Character Area HLCA003

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Increased risk of erosion to Tai Bach house platform	B - 3	Moderate — 3

Source: Headland Archaeology

A9.3.29 No other elements of the HLCA are considered to be at risk. This results in an average indirect physical impact upon HLCA004 of 6.

HLCA004 MYNYDD BROMBIL A ERGYD ISAF

A9.3.30 The proposed access track from the M4 will pass within 10 m of one of the pillow mounds, leading to a risk of erosion to this asset. The pillow mounds are considered to be a Category B monument and the risks are considered to be slight, 2.

A9.3.31 The existing access track passes through the field containing the pillow mounds but away from the earthworks and passes through a dry-stone wall. No indirect effects are predicted to the pillow mounds as a result of the additional use of this existing track. Construction traffic is considered to result in an increased risk of vibration affecting the dry-stone wall. This is considered to be a Category C monument and the risk is considered to be Slight, 2.

A9.3.32 No other elements of the HLCA are considered to be at risk. This results in an average indirect physical impact upon HLCA004 of 4.5.

Table A9.15: Assessment Of Indirect, Physical Impacts On Historic Character Area HLCA004

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Increased risk of erosion to pillow mounds	B – 3	Slight – 2
Increased risk of vibration impacts to dry stone wall	C — 2	Slight — 2

Source: Headland Archaeology

HLCA005 LLANGYNWYD

A9.3.33 The AIL route will pass over a section of the Port Talbot railway (01435.0m) that lies within a tunnel. The AIL route also broadly follows the route of a historic trackway (07923w) but as no upgrades to this track are required no physical impacts will occur. There will be no indirect physical impacts on

these assets. All other landscape elements within this HLCA are sufficiently removed from the development footprint that indirect physical effects will not occur.

A9.3.34 No other elements of the HLCA are considered to be at risk. This results in an average indirect physical impact upon HLCA004 of 0.

HLCA010 MYNYDD MARGAM

A9.3.35 The proposed wind farm will result in a very slight effect on one group of boundary stones by severing the functional connection between them if the easternmost of this group is lost. These are Category C monuments, and the risk is considered to be low to moderate.

A9.3.36 There is a risk of losing coherence of the Lysander airplane crash remains if these are disturbed by the development. This is considered to be a Category A monument and the risk is considered to be low given the distance between the mapped crash location and the nearest elements of the proposed wind farm.

A9.3.37 No other elements of the HLCA are considered to be at risk. This results in an average indirect physical impact upon HLCA010 of 4.

Table A9.16: Assessment Of Indirect, Physical Impacts On Historic Character Area HLCA010

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Functional connection between group of boundary stones disrupted	C – 2	Very slight -1
Possible disturbance of remains of Lysander airplane crash site	A – 4	Very slight - 1

Source: Headland Archaeology

Stage 3b: Indirect Non-physical (Visual) Impacts

A9.3.38 The ZTV has been based on a “bare earth” model and does not take account of vegetation or buildings. Where the site visits have confirmed that vegetation and / or buildings provide additional screening to an asset, the visibility of turbines will be reduced and the extent of this has been assessed using the virtual model (including tree location and height data) and photomontages where appropriate.

HLCA001 MARGAM ABBEY AND CASTLE

A9.3.39 Margam Abbey and Castle is dominated by a large area of open parkland associated with the Abbey, along with steep hillsides to the north and east. The parkland itself is extensive and reflects a long history of land use across multiple periods, from prehistory through to post-industrial. Due to the height of the turbines and their location on high ground they will be visible from the majority of this HLCA.

A9.3.40 No elements of the HLCA will be subject to direct or indirect physical impacts. Margam Castle lies outside the ZTV but views of it are possible from areas that are within the ZTV, and it is assessed. Conversely the group of scheduled stones lies within an area of predicted visibility, but as these

are housed inside a building, there will be no visual change to their setting, and they are excluded from the assessment.

A9.3.41 On the advice of Cadw the non-designated assets within Margam Park have been increased to Category A as they form integral parts of this designated asset. Likewise, the other designated assets that form part of the Registered Park have been scored as Category A, even where they would otherwise be of “Category B”.

Table A9.17: Indirect Non-Physical (Visual) Impacts, HLCA001 Margam Abbey and Castle

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Margam Park, Grade I Registered Park (Cadw Ref. GM52)	A – 4	Considerable - 4, tips of up to 13 turbines visible from the park, and turbines visible from key viewpoint locations
Mynydd Y Castell Camp. Scheduled Monument (Cadw Ref. GM162)	A – 4	Considerable - 4, tips of up to 13 turbines visible from the camp but the monument is surrounded by trees reducing the visual effect of the presence of turbines
Margam Abbey Scheduled Monument and Grade I Listed buildings (Cadw Ref. GM005, 14149 and 14150)	A – 4	Moderate – 3, tips of up to 10 turbines visible from the abbey ruins, but abbey remains appreciated only in close proximity and surrounding buildings and vegetation will screen the turbines from view
St Mary's Abbey Church, Grade I Listed Building (Cadw Ref. 14148)	A – 4	Moderate - 3, tips of up to 8 turbines visible from the church but this is appreciated only in close proximity and surrounding buildings and vegetation will screen the turbines from view
Margam Orangery, Grade I Listed Building (Cadw Ref. 14152)	A – 4	Moderate - 3, tips of up to 7 turbines visible from the orangery and its surroundings but will not intrude into the key views of the orangery
Terrace with pools and flower beds fronting Margam orangery, Grade II* Listed Building (Cadw Ref. 23267)	A – 4	Moderate - 3, tips of up to 8 turbines visible but will not intrude on key views
Ivy Cottage including façade of former banqueting hall, Grade I	A – 4	Slight – 2, tips of up to 4 turbines visible from the building but it is appreciated only in close proximity

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Listed Building (Cadw Ref. 14153)		and surrounding buildings and vegetation will screen the turbines from view
Hen Eglwys Scheduled Monument and Grade II* Listed building (Cadw Ref. GM163)	A – 4	Moderate - 3, tips of up to 10 turbines visible from the church, and up to 7 turbines visible beyond the ruins of the church in views from the south-west slightly competing with it visually, but it will still be possible to appreciate the relationship between the old church and Margam village
Margam Stones Scheduled Monument (Cadw Ref. GM011). The stones are located inside a building therefore there will be no visual impacts	(No impact)	(No impact)
Margam Castle Grade I Listed Building (Cadw Ref. 14170)	A – 4	Considerable – 4Tip of one turbine visible from castle itself. Tips of up to 11 turbines e visible to the right of the building in views from the south-east and south
Terrace walls and screen Grade II* Listed Building (Cadw Ref. 14163)	A – 4	Very slight – 1, tips of up to 3 turbines visible from this asset.
Service Buildings including courtyard walls at Margam Castle, Grade II* Listed Building (Cadw Ref. 23278). Lies outside ZTV	(No impact)	(No impact)
Margam Conservation Area	A - 4	Moderate - 3, tips of up to 10 turbines visible from the conservation area although most parts will have visibility of fewer and the buildings and vegetation will provide additional screening
Stone steps in terraced garden Grade II Listed Building (Cadw Ref. 23266)	A - 4	Slight – 2, tips of up to 4 turbines visible although vegetation will screen them from view
Broadwalk steps, Grade II Listed Building (Cadw Ref. 23275)	A - 4	Moderate – 3, tips of up to 9 turbines visible although

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
		vegetation will screen them from view
Arch over culvert, Grade II Listed Building (Cadw Ref. 23276)	A - 4	Moderate – 3, tips of up to 9 turbines visible but asset only experienced in close proximity
Alms-houses, Grade II Listed Building (Cadw Ref. 14151). Lies outside ZTV	A – 4	Very Slight – 1. Tips of up to 2 turbines visible.
Churchyard walls and gate piers to St Mary's Abbey Church. Grade II Listed Building (Cadw Ref. 14161)	A - 4	Slight – 2. Tips of up to 4 turbines visible but asset only appreciated in very close proximity
Kitchen garden walls including Vinery glasshouse. Grade II Listed Building (Cadw Ref. 14162). Lies outside ZTV	(No impact)	(No impact)
Middle Lodge, Grade II Listed Building (Cadw Ref. 14164). Lies outside ZTV	(No impact)	(No impact)
Citrus house, Grade II Listed Building (Cadw Ref. 23264). Lies outside ZTV.	A – 4	Very Slight – 1, tips of up to 2 turbines visible
Retaining wall adjoining citrus house, Grade II Listed Building (Cadw Ref. 23265). No turbines predicted to be visible from this asset	(No impact)	(No impact)
Stones Museum, Grade II Listed Building (Cadw Ref. 23269).	A - 4	Slight - 2. Tips of up to 4 turbines visible from area around museum building
War memorial, Grade II Listed Building (Cadw Ref. 23270).	A - 4	Slight – 2. Tips of up to 4 turbines visible from areas around the war memorial
Ornamental pool, Grade II Listed Building (Cadw Ref. 23272).	A - 4	Slight - 2. Tips of up to 4 turbines visible from the pool
Former changing rooms, Grade II Listed Building (Cadw Ref. 23273)	A - 4	Very slight – 1. Tip of 1 turbine visible from the building

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Turbine House Grade II Listed building (Cadw Ref. 23268)	A - 4	Moderate - 3. Tips of up to 7 turbines visible from around the listed building.
Pair of Gate Piers, Grade II Listed (Cadw Ref. 23271)	A - 4	Moderate - 3. Tips of up to 10 turbines visible from the listed building
East Lodge Gate Piers, Gates and Flanking Walls, Grade II Listed (Cadw Ref. 14168)	A - 4	Moderate -3. Tips of up to 9 turbines visible from here.
Gateway and Quadrant Walls leading to Twyn yr Hydd Grade II Listed (Cadw Ref. 14169)	A - 4	Considerable – 4. Tips of up to 11 turbines visible from this asset.
Twyn yr Hydd, Grade II Listed (Cadw Ref. 23281)	A - 4	Moderate – 3. Tips of up to 10 turbines visible from Twyn yr Hydd.
Farm building at Twyn yr Hydd. Grade II Listed Building (Cadw Ref. 23277).	A - 4	Moderate – 3, tips of up to 10 turbines visible from this asset
Kitchen garden wall and glass house at Twyn yr Hydd. Grade II Listed Building (Cadw Ref. 23279)	A - 4	Moderate – 3, tips of up to 10 turbines visible from this asset
Garden wall at Twyn yr Hydd. Grade II Listed Building (Cadw Ref. 23280)	A - 4	Moderate -3, tips of up to 10 turbines visible from this asset
Entrance to Twyn yr Hydd and flanking walls. Grade II Listed Building (Cadw Ref. 23281)	A - 4	Moderate -3, tips of up to 10 turbines visible from this asset
Medieval Deer Park (GGAT Ref. 00948)	A - 4	Considerable – 4, tips of up to 13 turbines visible from this asset
Roman road RR60 (GGAT Ref. 02738w)	A - 4	Considerable - 4, tips of up to 13 turbines visible from this asset.
Trackway, Margam Park (GGAT Ref. 06058w)	A - 4	Considerable – 4. Tips of, up to 12 turbines visible from this asset

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Road from Margam to Llangynwyd (GGAT Ref. 01076.0w)	A - 4	Severe – 5. Tips of up to 18 turbines visible from this asset
Trackway (GGAT Ref. 01097.0w)	A - 4	Considerable - 4, tips of up to 13 turbines visible from this asset.
Craig Goch Platform, Margam (GGAT Ref. 01094w). Lies outside ZTV	(No impact)	(No impact)
Margam Circle, ring ditch (GGAT Ref. 04600w). Lies outside ZTV	(No impact)	(No impact)
Modern storage tank (GGAT Ref. 07305w)	(No impact)	(No impact)
Cryke Mill (GGAT Ref. 00766w)	A - 4	Moderate – 3. Tips of up to 9 turbines visible
Group of medieval earthworks in Margam Park - Mynydd Margam Platform (GGAT Ref. 00772w) Farmstead, Mynydd y Castell (GGAT Ref. 00773w) Medieval Field system (GGAT Ref. 01093w) Ridge and Furrow (GGAT Ref. 01095w)	A - 4	Considerable – 4, tips of up to 13 turbines visible from this asset
Earthwork, Margam (GGAT ref. 01092w). Lies outside ZTV	(no impact)	(no impact)
Quarry, Margam (GGAT Ref. 01096w)	A - 4	Considerable – 4, tips of up to 13 turbines visible from this asset
Ponds, Margam (GGAT Ref. 01099w)	A - 4	Moderate – 3. Tips of, up to 7 turbines visible
Quarry, Margam (GGAT Ref. 01100w)	A - 4	Considerable – 4, tips of up to 13 turbines visible from this asset

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Ornamental Gardens, Margam Country Park (GGAT Ref. 01101w)	A - 4	Moderate – 3, tips of up to 9 turbines visible from this asset
Wicked Well (GGAT Ref. 01156w)	B – 3	Moderate – 3, tips of up to 10 turbines visible from this asset.
Lady's Well, Margam (GGAT Ref. 01157w)	A - 4	Moderate – 3, tips of, up to 7 turbines visible from this asset
Ffynnon Gyffyr Well (GGAT Ref. 01158w)	B – 3	Moderate – 3, tips of up to 10 turbines visible from this asset
Cross Base in Margam Park (GGAT Ref. 01412w)	B – 3	Considerable – 4, tips of up to 12 turbines visible from this asset
Cropmarks, Margam Park (GGAT Ref. 02945w, 02946w and 02952w)	A - 4	Moderate – 3, tips of up to 9 turbines visible from this asset.
Margam Park, Boundary Wall of Formal Garden (GGAT Ref. 02947w)	A - 4	Moderate – 3, tips of up to 9 turbines visible from this asset
Margam Park cottages (GGAT Ref. 02948w and 02949w)	A - 4	Moderate – 3, tips of up to 9 turbines visible from this asset
Margam Park fishponds (GGAT Ref. 02950w and 02951w)	A - 4	Moderate – 3, tips of up to 9 turbines visible from this asset
Trackway (GGAT Ref. 03329.0w)	B – 3	Moderate – 3, tips of up to 9 turbines visible from this asset
Mansell Estate Avenue (GGAT Ref. 03330.0w)	B – 3	Considerable – 4. Tips of up to 11 turbines visible from this asset
Fishponds, Margam (GGAT Ref. 03331w)	B – 3	Considerable – 4, tips of up to 11 turbines visible from this asset
Stone lined drain (GGAT Ref. 03333w)	A - 4	Very Slight – 1, tips of up to 2 turbines visible
Cwm Farmstead (GGAT Ref. 03898w)	A - 4	Very Slight – 1, tip of 1 turbine visible
“New Pond” (GGAT Ref. 04586w)	A - 4	Moderate – 3, tips of. up to 9 turbines visible from this asset

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Wood named Nursery Dywyll (GGAT Ref. 04587w)	B – 3	Considerable – 4 tips of, up to 13 turbines visible from this asset
Furzemill Pond (GGAT Ref. 04589w)	B – 3	Moderate -3, tips of, up to 7 turbines visible from this asset
Rifle Range (GGAT Ref. 04590w)	B – 3	Moderate – 3. Tips of, up to 7 turbines visible
Gravel Pit, Margam (GGAT Ref. 04596w)	A - 4	Considerable – 4, tips of up to 12 turbines visible from this asset
Lady's Seat (GGAT Ref. 04597w)	A - 4	Moderate -3, tips of up to 9 turbines visible from this asset
Margam Churchyard (GGAT Ref. 05242w)	A - 4	Moderate – 3, tips of up to 8 turbines visible from this asset
Churchyard Of Capel Mair/Hen Eglwys (GGAT Ref. 05275w). Lies outside ZTV	(No impact)	(No impact)
Hen Gastell and Platform at Mynydd y Castell (GGAT Ref. 06067w06068w)	A - 4	Considerable -4, tips of, up to 13 turbines visible from this asset
Gravel Pit (GGAT Ref. 07307w)	A - 4	Moderate – 3, tips of up to 10 turbines visible from this asset
Ynys, group of structures (GGAT Ref. 07308w)	A – 4	Slight – 2, tips of up to 6 turbines visible
Ffynnon y Drych-fanau well (GGAT Ref. 07309w)	A - 4	Slight – 2, tips of up to 6 turbines visible
Tyn-y-coed (GGAT Ref. 07310w)	A - 4	Moderate – 3, tips of, up to 7 turbines visible
Well (GGAT Ref. 07312w)	A - 4	Moderate – 3, tips of, up to 9 turbines visible
Structure (GGAT Ref. 07314w)	A - 4	Considerable – 4, tips of up to 11 turbines visible
Fishpond (GGAT Ref. 07315w)	A - 4	Moderate – 3, tips of up to 10 turbines visible
Trackway, Nursery, Margam Park (GGAT Ref. 08389w)	B – 3	Considerable – 4, tips of up to 12 turbines visible

ELEMENT	CATEGORY AND SCORE	MAGNITUDE OF VISUAL IMPACT AND SCORE
Trackway, Lowest Clump, Margam Park (GGAT Ref. 08390w)	B – 3	Considerable – 4, tips of up to 12 turbines visible
Stream, west of Furzemill Pond, Margam Park (GGAT Ref. 08391w)	B – 3	Considerable – 4, tips of up to 11 turbines visible
Internal Park Boundary, Nursery, Margam Park (GGAT Ref. 08392w)	A - 4	Considerable – 4, tips of up to 12 turbines visible
Inner Park Boundary, Great Park, Margam Park (GGAT Ref. 08393w)	A - 4	Considerable – 4, tips of, up to 13 turbines visible
Pond, Lowest Clump, Margam Park (GGAT Ref. 08396w)	B – 3	Considerable – 4, tips of, up to 13 turbines visible
Sunken Trackway, Nursery, Margam Park (GGAT Ref. 08398w)	A - 4	Considerable – 4, tips of, up to 13 turbines visible
Tree Avenue (north), Nursery, Margam Park (GGAT Ref. 08401w)	A - 4	Considerable – 4, tips of, up to 11 turbines visible
Development form	3.83 (average sensitivity)	3.04
Development appearance	3.83 (average sensitivity)	3.04

Source: Headland Archaeology

A9.3.42 Thus for the HLCA001 Margam Abbey and Castle the magnitude of indirect impacts comprises:

Indirect physical impacts = 0

Indirect visual impacts = (4+4) + (4+4) + (4+3) + (4+3) +(4+3) +(4+3) +(4+2) + (4+3) + (no impact) + (4+4) + (4+1) + (no impact) + (4+3) + (4+2) + (4+3) + (4+3) + (4+1) + (4+2) + (no impact) + (no impact) + (4+1) + (no impact) + (4+2) + (4+2) + (4+2) + (4+1) + (4+3) + (4+3) + (4+3) + (4+4) + (4+3) + (4+3) + (4+3) + (4+3) + (4+3) + (4+4) + (4+4) + (4+4) + (4+5) + (4+4) + (no impact) + (no impact) + (no impact) + (4+3) + (4+4) + (no impact) + (4+4) + (4+3) + (4+4) + (4+3) + (3+3) + (4+3) + (3+3) + (3+4) + (4+3) + (4+3) + (4+3) + (3+3) + (3+4) + (3+4) + (4+1) + (4+1) + (4+3) + (3+4) + (3+3) + (3+3) + (4+4) + (4+3) + (4+3) + (no impact) + (4+4) + (4+3) + (4+2) + (4+2) + (4+3) + (4+3) + (4+4) + (4+3) + (3+4) + (3+4) + (3+4) + (4+4) + (4+3) + (3+4) + (4+4) + (4+4) + (3.83+3.04) + (3.83+3.04) / (77+2) = 542.74 / 79 = 6.87

Overall indirect impacts: (0) + (6.87) = 6.87

A9.3.43 Converted to the 28-point scale this is:

$6.87 \times 28 / 20 = 9.62$

Rounded to the nearest whole number this is 10.

A9.3.44 Thus the overall indirect impact by the development upon HLCA001 Margam Abbey and Castle is Moderate.

HLCA002 CEFN CRUGWYLLT AND CWM MAELWG

A9.3.45 HLCA002 Cefn Crugwyllt and Cwm Maelwg comprises a mix of medieval and post-medieval settlements and dry-stone walls. Small areas of mixed woodland are also present. The site is largely within the ZTV, although two historic features, a medieval bath house associated with Margam Abbey and Bromail coal level, lie outside the ZTV. No elements of the HLCA will be subject to direct or indirect physical impacts.

Table A9.18: Indirect Non-Physical (Visual) Impacts, HLCA002 Cefn Crugwyllt and Cwm Maelwg

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Cefn Crugwyllt Medieval Trackway (GGAT Ref. 01069.0w)	B – 3	Considerable – 4, tips of up to 13 turbines visible from the trackway
Margam Medieval Bath House – Scheduled Monument and Grade II* Listed building (Cadw Ref. GM545 and 23274) and associated holy well (GGAT Ref. 00764w).	A - 4	Slight – 2, tips of up to 5 turbines visible
Half Moon enclosure – associated with Scheduled Half Moon Camp which is in adjacent HLCA (GGAT Ref. 01996w)	B – 3	Considerable – 4, tips of up to 13 turbines visible
Brombil colliery (shaft and tramway) (GGAT Ref. 03894w and 03901w) – most of this asset lies in the next HLCA and outside the ZTV but these elements are within the ZTV	B – 3	Moderate-3, tips of up to 8 turbines visible.
Bromail coal level (GGAT Ref. 01378w). Lies outside the ZTV	(No impact)	(No impact)
Cwm Maelog long hut (GGAT Ref. 02044w)	B – 3	Slight – 2, tips of up to 5 turbines will be visible
Development form	3.2 (average sensitivity)	3
Development appearance	3.2 (average sensitivity)	3

Source: Headland Archaeology

A9.3.46 Thus for the HLCA 002 Cefn Crugwyllt and Cwm Maelwg the magnitude of indirect impacts comprises:

Indirect physical impacts = 0

Indirect visual impacts = (3+54) + (4+2) + (3+4) + (3+3) + (no impact) + (3.2+3) + (3.2+3) / (5+2) = 38.4 / 7 = 5.48

Overall indirect impacts: (0) + (5.48) = 5.48

A9.3.47 Converted to the 28-point scale this is:

$5.48 \times 28 / 20 = 7.67$, rounded to the nearest whole number this is 8.

A9.3.48 Thus the overall indirect impact by the development upon HLCA002 Cefn Crugwyllt and Cwm Maelwg is Slight.

HLCA003 CWM BROMBIL AND GRAIG FAWR

A9.3.49 The characteristics of HLCA003 Cwm Brombil and Graig Fawr are discussed above. The steep topography means that much of this HLCA lies outside the ZTV. The Tai Bach house platform (GGAT Ref. 01993w) lies outside the ZTV for the turbines but is immediately adjacent to the abnormal loads access route from the M4 and will have visibility of this element of the development. The direct and indirect physical effects on this HLCA are described.

Table A9.19: Indirect Non-Physical (Visual) Impacts, HLCA003 Cwm Brombil and Graig Fawr

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Half Moon Camp. Scheduled Monument (Cadw Ref. GM477)	A – 4	Considerable – 4, tips of up to 13 turbines visible
Chain Home Low Radar Station. Scheduled Monument (Cadw Ref. GM488).	A - 4	Very Slight – 1, tip of one turbine visible
Enclosure, possible hillfort (GGAT Ref 05346). Lies outside ZTV	(No impact)	(No impact)
Post-medieval stone circle – Gorsedd (GGAT Ref 04601). Lies outside ZTV	(No impact)	(No impact)
Fynon Pedr culvert (GGAT Ref. 00746w). Lies outside ZTV	(no impact)	(no impact)
House platform, Tai Bach (GGAT Ref. 01993w). Outside ZTV for turbines but adjacent to access track	B – 3	Very slight – 1, no turbines visible but access track will be.
Iron stone working (GGAT Ref. 06171w). Lies outside ZTV	(No impact)	(No impact)
Possible quarrying earthworks (GGAT Ref. 02610w) Lies outside ZTV	(No impact)	(No impact)

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Brombil reservoir (GGAT Ref. 09087w). Lies outside ZTV	(No impact)	(No impact)
Structures (GGAT Ref. 07274w and 07275w and 07313w)	B – 3	Slight -2, tips of up to 4 turbines visible, the access track will be visible from two of them.
Brombil colliery and tramway (GGAT Ref. 07278w). The parts of this asset that are within this HLCA lie outside the ZTV	(No impact)	(No impact)
Development form	3.5	2
Development appearance	3.5	2

Source: Headland Archaeology

A9.3.50 Thus for the HLCA003 Cwm Brombil and Graig Fawr the magnitude of indirect impacts comprises:

Indirect physical impacts = 3
Indirect visual impacts = (4+4) + (4+1) + (no impact) + (no impact) + (no impact) + (3+1) + (no impact) + (no impact) + (no impact) + (3+2) + (3.5+2) + (3.5+2) / (4+2) = 33 / 6 = 5.5
Overall indirect impacts: (3) + (5.5) = 8.5

A9.3.51 Converted to the 28-point scale this is:

8.5 x 28 / 20 = 11.9
Rounded to the nearest whole number this is 12.

A9.3.52 Thus the overall indirect impact by the development upon HLCA003 Cwm Brombil and Graig Fawr is Moderate.

HLCA004 MYNYDD BROMBIL A ERGYD ISAF

A9.3.53 The characteristics of HLCA004 Mynydd Brombil and Ergyd Isaf are discussed above. The entire HLCA lies within the ZTV and all or the majority of the turbines will be visible from the key elements of this landscape.

Table A9.20: Indirect Non-Physical (Visual) Impacts, HLCA004 Mynydd Brombil and Ergyd Isaf

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Ergyd Isaf Scheduled Monument (Cadw Ref. GM160)	A – 4	Severe – 5. tips of up to 18 turbines will be visible from here
Tai Bach quarry (GGAT Ref. 01995w)	B – 3	Severe – 5. tips of up to 18 turbines will be visible from here
Development form	3.5	5

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Development appearance	3.5	5

Source: Headland Archaeology

A9.3.54 Thus for the HLCA004 Mynydd Brombil and Ergyd Isaf the magnitude of indirect impacts comprises:

Indirect physical impacts = 4.5
Indirect visual impacts = (4+5) + (3+5) + (3.5+5) + (3.5+5) / (2+2) = 34 / 4 = 8.5
Overall indirect impacts: (4.5) + (8.5) = 13

A9.3.55 Converted to the 28-point scale this is:

13 x 28 / 20 = 18.2, rounded to the nearest whole number this is 18.

A9.3.56 Thus the overall indirect impact by the development upon HLCA004 Mynydd Brombil and Ergyd Isaf is Considerable.

HLCA005 LLANGYNWYD

A9.3.57 HLCA005 Llangynwyd lies partly within the site boundary and comprises dispersed settlements with associated farmland and areas of ancient woodland. The main area of settlement is Llangynwyd village itself, a conservation area focused on the parish church. The area is undulating, and key features are considered to be the conservation area, church and castle. The direct and indirect physical impacts on this HLCA are detailed above. Table A9.21 sets out the potential visual impacts on the landscape. Almost all of the HLCA will have visibility of some turbines, however due to the undulating topography visibility of the turbines varies considerably between elements of this landscape.

Table A9.21: Indirect Non-Physical (Visual) Impacts, HLCA005 Llangynwyd

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Y Bwlwarcau Scheduled Monument (Cadw Ref.	A – 4	Severe – 5, tips of up to 18 turbines will be visible from here
Llangynwyd Castle Scheduled Monument (Cadw Ref.	A – 4	Moderate – 4, tips of up to 13 turbines will be visible from here
Llwydarth Farmhouse, Grade II* Listed Building (Cadw Ref. 11256)	A – 4	Moderate – 4, tips of up to 12 turbines will be visible from here
Church of St Cynwd, Grade II* Listed Building (Cadw Ref. 11243)	A - 4	Severe – 5, tips of up to 18 turbines will be visible from here

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Churchyard walls Grade II Listed Building (Cadw Ref. 20437)	B – 3	Severe – 5, tips of up to 18 turbines will be visible from here
Churchyard monuments, Grade II Listed Buildings (Cadw Ref. 20436, 20435, 20434, 20431, 20430)	B – 3	Severe – 5, tips of up to 18 turbines will be visible from here
The Old House Inn, Grade II Listed Building (Cadw Ref. 11352)	B – 3	Considerable – 4, tips of up to 13 turbines will be visible from here
The Hopcyn Cross, Grade II Listed Building (Cadw Ref. 20429)	B – 3	Severe – 5, tips of up to 17 turbines will be visible from here.
Telephone call box, Grade II Listed Building (Cadw Ref. 11353)	B – 3	Considerable – 4, tips of up to 12 turbines will be visible from here.
Pentre Farmhouse, Grade II Listed Building (Cadw Ref. 11373)	B – 3	Considerable – 4, tips of up to 12 turbines will be visible from here
Gilfach-ganol farmhouse and bee boles Grade II Listed Buildings (Cadw Ref. 11375, 20432)	B – 3	Slight – 2, tips of up to 7 turbines will be visible from here.
Llangynwyd Conservation Area	B – 3	Severe – 5, tips of up to 18 turbines will be visible from here
Port Talbot Railway (GGAT Ref. 01435.0m) – asset runs through tunnel in this section	(No impact)	(No impact)
House platforms on Moel-troed-yr-rhiw (GGAT Ref. 01140m, 01141m)	B – 3	Slight – 2, tips of up to 6 turbines will be visible from here.
ROC post (GGAT Ref. 08412m)	B – 3	Severe – 5, tips of up to 18 turbines will be visible from here.
Cadair Edward tree and commemorative stone (GGAT Ref. 00123m, 05224m)	(No impact)	(No impact)

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Tramways (GGAT Ref. 06571m, 06572m, 06573m, 06574m, 06576m)	C – 2	Considerable – 4, tips of up to 13 turbines will be visible from these assets
Lluest-wen enclosure and platforms (GGAT Ref. 00112m, 00113m, 00114m)	B – 3	Slight – 2, tips of up to 5 turbines will be visible from here
Castell Farm cloddiau boundary (GGAT Ref. 06031m)	B -3	Considerable – 4, tips of up to 14 turbines will be visible from here
Small stone cottage Ty'nton (GGAT Ref. 01730m)	B – 3	Very Slight – 1, tips of up to 3 turbines will be visible from here
Development form	3.117	3.89
Development appearance	3.17	3.89

Source: Headland Archaeology

A9.3.58 Thus for the HLCA005 Llangynwyd the magnitude of indirect impacts comprises:

Indirect physical impacts = 0

Indirect visual impacts = (4+5) + (4+4) + (4+4) + (4+56) + (3+5) + (3+5) + (3+4) + (3+5) + (3+4) + (3+4) + (3+2) + (3+5) + (3+2) + (3+65) + (no impact) + (2+4) + (3+2) +(3+54) + (3+1) + (3.17+3.89) + (3.17+3.89) / (18+2) = 141.12 / 20= 7.06

Overall indirect impacts: (0) + (7.06) =7.06

A9.3.59 Converted to the 28-point scale this is:

7.06 x 28 / 20 = 9.88, rounded to the nearest whole number this is 10.

A9.3.60 Thus the overall indirect impact by the development upon HLCA005 Llangynwyd is Moderate.

HLCA006 EGLWYS NUNYDD AND CWRT-Y-DEFAID

A9.3.61 HLCA006 Eglwys Nunydd and Cwrt-y-defaid lies approximately 1.2 km to the south-west of the site boundary, and predominantly comprises agricultural land, along with a small modern housing estate. The area is low lying, adjacent to the coast, and was formerly the location of a Grange associated with Margam Abbey. Such granges were small centres established to administrate the outlying land holdings of the Abbeys. This former grange is considered to be the key historic feature within the HLCA. No elements of the HLCA will be subject to direct or indirect physical impacts. Turbine hubs and blades are predicted to be visible above the horizon at a distance of over 3.2 km to the north-east of the HLCA. Table A9.22 sets out the potential visual impacts upon the landscape.

Table A9.22: Indirect Non-Physical (Visual) Impacts, Eglwys Nunydd and Cwrt-y-defaig

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Roman roads (GGAT Ref. RR60c05a and RR60c-05b).	B – 3	Severe -5, tips of up to 17turbines will be visible from here.
Eglwys Nynndd Medieval Grange (GGAT Ref. 00786w)	B – 3	Considerable – 4, tips of up to 13 turbines will be visible from here.
Llanfugeilydd Grange (GGAT Ref. 05203w)	B - 3	–Considerable – 4, tips of up to 12 turbines will be visible from here.
Grade II Listed Barn at Eglwys Nunydd (Cadw Ref. 14157)	B – 3	Severe -5, tips of up to 18 turbines will be visible from here.
Grade II* Listed Old Park (Cadw Ref. 14158)	A - 4	Severe -5, tips of up to 18 turbines will be visible from here.
Mileposts (Cadw Refs. 23285 and 23286)	B – 3	Severe – 5, tips of up to 18turbines will be visible from here.
Flint scatter indicative of occupation (GGAT Ref. 04782w)	B – 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Development form	3.14	4.71
Development appearance	3.14	4.71

Source: Headland Archaeology

A9.3.62 Thus for the HLCA006 Eglwys Nunydd and Cwrt-y-defaig the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (3+5) + (3+4) + (3+4) + (3+5) + (4+5) + (3+5) + (3+5) + (3.14+4.71) + (3.14+4.71) / (7+2) = 71.7 / 9 = 7.97
Overall indirect impacts: (0) + (7.97) = 7.97

A9.3.63 Converted to the 28-point scale this is:

7.97 x 28 / 20 = 11.16, rounded to the nearest whole number this is 11.

A9.3.64 Thus the overall indirect impact by the development upon HLCA006 Eglwys Nunydd and Cwrt-y-defaig is Moderate.

HLCA007 CRAIG GOCH A HEOL NEWYDD

A9.3.65 HLCA007 Graig Goch a Heol Newydd lies 1.15 km south of the site boundary and 2.55 km south of the nearest turbine . No A, B or C category sites were identified within the HLCA, and the standard ASIDOHL2 Stage 3b methodology was therefore unsuitable. As such professional judgement has been used to determine the magnitude of any potential non-physical (visual) impacts.

A9.3.66 HLCA007 Graig Goch a Heol Newydd is a low-lying area of small, enclosed fields, many with small irregular boundaries indicative of post-medieval piecemeal enclosure. The ZTV predicts no visibility

of turbines from the northern half of this HLCA, and visibility of up to nine blade tips from the southern edge of the HLCA where the ground rises up. However, development within the site will not impact upon the intervisibility between elements of the HLCA, including the enclosed fields and the related post-medieval farmsteads. As such, the overall indirect impact by the development upon HLCA007 Graig Goch a Heol Newydd is considered to be Very Slight and has been assigned a score of 1.

HLCA008 MARGAM VILLAGE

A9.3.67 Margam Village is a small post-medieval hamlet, which lies approximately 913 m south-west of the site boundary and mostly outside the ZTV. The village is a mix of post-medieval Listed buildings, unlisted 19th-century buildings, and more modern ribbon development. No elements of the HLCA will be subject to direct or indirect physical impacts. Table A9.23 sets out the potential visual impacts upon the landscape.

Table A9.23: Indirect Non-Physical (Visual) Impacts, HLCA008 Margam Village

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Roman Road (GGAT Ref. RR60c05a)	B – 3	Very Slight – 1, tips of up to 2 turbines will be visible from part of the road
Grade II Listed Building Cwm Cottage (Cadw Ref. 14165)	B – 3	Slight - 2, tips of up to 4 turbines will be visible from here
Grade II Listed Margam Cottage (Cadw Ref. 14166)	B – 3	Slight – 2, tips of up to 5 turbines will be visible from here
Grade II Listed building 2 Grove Cottages (Cadw Ref. 14167). Lies outside ZTV	(No impact)	(No impact)
Grade II Listed building 3 Grove Cottages (Cadw Ref. 23293). Lies outside ZTV	(No impact)	(No impact)
Margam Conservation Area (part within this HLCA)	B – 3	Slight – 2, tips of up to 5 turbines will be visible from here.
Development form	3	1.75
Development appearance	3	1.75

Source: Headland Archaeology

A9.3.68 Thus for the HLCA008 Margam Village the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (3+1) + (3+2) + (3+2) + (no impact) + (no impact) + (3+1.75) + (3+1.75) / (4+2) = 31.5 / 6 = 5.25
Overall indirect impacts: (0) + (5.25) = 5.25

A9.3.69 Converted to the 28-point scale this is:

5.25 x 28 / 20 = 7.35, rounded to the nearest whole number this is 7.

A9.3.70 Thus the overall indirect impact by the development upon HLCA008 Margam Village is Slight.

HLCA009 CWM DYFFRYN AND CWM FARTEG RAILWAY CORRIDOR

A9.3.71 The Railway Corridor is the route of the now-disused Port Talbot Railway, dating from 1898. As such, the majority of the features in the Character Area are industrial, primarily railway and mining related and includes the site of a celluloid works later used as a Prisoner of War camp of which nothing survives. No elements of the HLCA will be subject to direct or indirect physical impacts. Table A9.24 sets out the potential visual impacts upon the landscape.

Table A9.24: Indirect Non-Physical (Visual) Impacts, HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Port Talbot Railway (GGAT Ref. 07903m)	B – 3	Severe – 5, tips of up to 18 turbines will be visible from here
Development form	3	5
Development appearance	3	5

Source: Headland Archaeology

A9.3.72 Thus for the HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (3+5) + (3+5) + (3+5) / (1+2) = 15 / 3 = 5
Overall indirect impacts: (0) + (5) = 5

A9.3.73 Converted to the 28-point scale this is:

$5 \times 28 / 20 = 7$

A9.3.74 Thus the overall indirect impact by the development upon HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor is Slight.

HLCA010 MYNYDD MARGAM

A9.3.75 The Mynydd Margam HLCA is a mix of modern and ancient woodland, subject to managed logging, within which the majority of the proposed development will be sited. Prehistoric remains survive extensively within the forest, with a large number of enclosures, cairns, barrows and earthworks situated across the upland landscape. The HLCA previously formed part of the land associated with Margam Abbey, and a number of medieval remains are located within it. Post medieval remains include evidence of mineral extraction.

A9.3.76 As this HLCA contains the southern group of turbines visibility of the development based on the bare earth ZTV is predicted to be high, although because of the forested nature of the character area actual visibility of the turbines will be reduced – the assessment below has been based on the predicted visibility to represent a worst case of visibility. This is because during the operational life of the wind farm areas of forestry will be felled increasing visibility of the turbines until the trees mature.

A9.3.77 The direct and indirect physical impacts of the development on the HLCA are detailed above.

Table A9.25: Indirect Non-Physical (Visual) Impacts, HLCA0010 Mynydd Margam

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Danish Camp – Scheduled Monument (Cadw Ref. GM056)	A - 4	Considerable – 4, tips of up to 13 turbines will be visible from here.
Ergyd Uchaf Round Barrow - Scheduled Monument (Cadw Ref. GM159)	A - 4	Severe 5, tips of up to 18 turbines will be visible from here.
Site of Bodvoc stone – Scheduled Monument (Cadw Ref. 2294)	A – 4	Severe 5, tips of up to 18 turbines will be visible from here.
Hawker Hurricane crash site (GGAT Ref. 07903m)	A – 4	Severe – 5, tips of up to 18 turbines will be visible from here.
Westland Lysander crash site (GGAT Ref. 08016w)	A – 4	Moderate - 3, tips of up to 7 turbines will be visible from here
Heol Y Moch Way “Pig’s Way” Medieval Trackway (GGAT Ref. 01077w)	B - 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Nant-y-Glo farmstead (GGAT Ref. 03095w)	B – 3	Severe - 5, tips of up to 16 turbines will be visible from here
Blaencyneiron house (GGAT Ref. 01739w)	B – 3	Considerable - 4, tips of up to 13 turbines will be visible from here.
Wernderi house (GGAT Ref. 02724w)	B – 3	Considerable – 4, tips of up to 13turbines will be visible from here.
Hafod y Porth former Medieval Grange (GGAT Ref. 00760w, 05269w, 05276w)	B – 3	Moderate – 3, tips of up to 10 turbines will be visible from here.
Ffynnon Iago Medieval Holy Well (GGAT Ref. 01433m)	B – 3	Considerable – 4, tips of up to 13 turbines will be visible from here.
Cefn Crugwyllt Medieval Track (GGAT Ref. 01069.0) Lies mainly in adjacent HLCA	B – 3	Considerable – 4, tips of up to 13 turbines will be visible from here.
Llyndwr Fawr Round Barrow (GGAT Ref. 00751w)	B – 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Llyndwr Fawr Round Barrow No 2 (GGAT Ref. 00752w)	B – 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Geulan Las Iron Age Enclosure (GGAT Ref. 00757)	B - 3	Slight – 3, tips of up to 6 turbines will be visible from here.

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Circular mound known as Mynydd Margam Beacon Barrow (GGAT Ref. 01155w) Adjacent to work compound	B - 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Mynydd Margam boundary stones (GGAT Ref. 03372m, 03372m, 033734m, 03375m, 038886w, 03887w, 03888w)	C – 2	Severe - 5, tips of up to 18 turbines will be visible from here.
Heol y Moch boundary stones (GGAT Ref. 03911w, 03912w, 03913w, 03914w, 03915w, 03916w)	C – 2	Severe - 5tips of up to 18 turbines will be visible from here.
Development form	3.17	4.44
Development appearance	3.17	4.44

Source: Headland Archaeology

A9.3.78 Thus for the HLCA0010 Mynydd Margam the magnitude of indirect impacts comprises:

Indirect physical impacts = 4

Indirect visual impacts = (4+4) + (4+5) + (4+5) + (4+5) + (4+3) + (3+5) + (3+5) + (3+4) + (3+4) + (3+3) + (3+4) + (3+5) +(3+5) +(3+5) + (3+3) + (3+5) + (2+5) + (2+5) + (3.17+4.44) + (3.17+4.44) / (18 + 2) = 152.22 / 20 = 7.61

Overall indirect impacts: (4) + (7.61) = 11.61

A9.3.79 Converted to the 28-point scale this is:

11.61 x 28 / 20 = 16.25, rounded to the nearest whole number this is 16.

A9.3.80 Thus the overall indirect impact by the development upon HLCA0010 Margam Forest is Considerable.

HLCA011 WAUN Y GILFACH

A9.3.81 HLCA0011 Waun-y-Gilfach is an area of woodland approximately 1 km to the east of the site boundary, containing no Category A, B or C sites and as such professional judgement is used to determine the magnitude of any potential non-physical (visual) impacts.

A9.3.82 Although this area is predicted to have visibility of the turbines based on a bare ground ZTV the wooded nature of this landscape means that it is not considered to be subject to non-physical (visual) impacts.

HLCA012 NANT Y GLADLYS

A9.3.83 HLCA012 Nant y Gladlys lies approximately 1 km east of the site boundary. It is an area of ancient and other broad leafed woodland mixed with medieval or post-medieval agricultural settlement and fields with post-medieval vernacular buildings and industrial archaeology relating to milling. There are no Category A, B or C sites within this HLCA and as such professional judgement is used to determine the magnitude of any potential non-physical (visual) impacts.

A9.3.84 Although this area is predicted to have visibility of the turbines, the heavily wooded nature of this landscape means that visual change will be negligible, and no impacts are predicted.

HLCA013 UPPER CWM KENFIG

A9.3.85 Upper Cwm Kenfig lies immediately east of the site boundary and comprises a mix of enclosed and unenclosed land. Key elements include important Bronze Age and other prehistoric remains, with evidence of peat survival which may have ‘sealed in’ further deposits. No elements of the HLCA will be subject to direct or indirect physical impacts. Visibility of the turbines is predicted to be high due to the elevated topography of this HLCA. Table A9.26 sets out the potential visual impacts upon the landscape.

Table A9.26: Indirect Non-Physical (Visual) Impacts, HLCA013 Upper Cwm Kenfig

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Twmpath Diwlith Round Barrow (Cadw Ref. GM557)	A – 4	Severe - 5, tips of up to 18 turbines will be visible from here.
Roman Camp Iron Age Scheduled Monument (Cadw Ref. GM058).	A - 4	Considerable – 4, tips of up to 15 turbines will be visible from here.
Y Bwlwarcau Scheduled Monument (Cadw Ref GM059) (part within this HLCA)	A - 4	Severe - 5, tips of up to 18 turbines will be visible from here.
Heol y Moch / The Pigs Way, Medieval, possibly prehistoric trackway (GGAT Ref. 01077) (part within this HLCA)	B - 3	Severe - 5, tips of up to 18 turbines will be visible from here.
Development form	3.75	4.75
Development appearance	3.75	4.75

Source: Headland Archaeology

A9.3.86 Thus for the HLCA013 Upper Cwm Kenfig the magnitude of indirect impacts comprises:

Indirect physical impacts = 0

Indirect visual impacts = (4+5) + (4+4) + (4+5) +(3 + 5) + (3.75+4.75) + (3.75+4.75) / (4+2) = 55 / 6 = 9.17

Overall indirect impacts: (0) + (9.17) = 9.17

A9.3.87 Converted to the 28-point scale this is:

9. 17 x 28 / 20 = 12.84, rounded to the nearest whole number this is 13.

A9.3.88 Thus the overall indirect impact by the development upon HLCA013 Upper Cwm Kenfig is Moderate.

HLCA014 MOEL TON MAWR

A9.3.89 Moel Ton Mawr lies approximately 150 m south-east of the site boundary. The area is largely forest, with evidence of Bronze Age upland features preserved within the HLCA. No elements of the HLCA

will be subject to direct or indirect physical impacts. Table A9.27 sets out the potential visual impacts upon the landscape. Visibility of all of the turbines is predicted from this HLCA.

Table A9.27: Indirect Non-Physical (Visual) Impacts, HLCA0014 Moel Ton Mawr

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Moel Ton Mawr Round Barrow (GGAT Ref. 00755w)	B - 3	Severe – 5, tips of up to 18 turbines will be visible from here.
Development form	3	5
Development appearance	3	5

Source: Headland Archaeology

A9.3.90 Thus for the HLCA0014 Moel Ton Mawr the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (3+5) + (3+5) + (3+5) / (1+2) = 24 / 3 = 8
Overall indirect impacts: (0) + (8) = 8

A9.3.91 Converted to the 28-point scale this is:

$8 \times 28 / 20 = 11.2$, rounded to the nearest whole number this is 11.

A9.3.92 Thus the overall indirect impact by the development upon HLCA0014 Moel Ton Mawr is Moderate.

HLCA015 UPPER PARK AND TON-Y-GRUGOS

A9.3.93 The HLCA lies immediately south of the site boundary, and comprises upland open fields, enclosed by wire and post fences. Extensive prehistoric features survive within the landscape, largely characteristic of the Late Iron Age. No elements of the HLCA will be subject to direct or indirect physical impacts. Visibility of all of the turbines is predicted from this HLCA. Table A9.28 sets out the potential visual impacts upon the landscape.

Table A9.28: Indirect Non-Physical (Visual) Impacts, HLCA015 Upper Park and Ton-y-grugos

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Camp 530m east of Tonmawr. Scheduled Monument (Cadw Ref. GM090)	A – 4	Considerable – 4, tips of up to 13 turbines will be visible from here.
Camp N of Tonmawr Scheduled Monument (Cadw Ref. GM057)	A - 4	Considerable – 4, tips of up to 15 turbines will be visible from here.
Medieval Road (GGAT Ref. 01076w)	B - 3	Severe – 5, tips of up to 18 turbines will be visible from here.
Development form	3.67	4.33
Development appearance	3.67	4.33

Source: Headland Archaeology

A9.3.94 Thus for the HLCA015 Upper Park and Ton-y-grugos the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (4+4) + (4+4) + (3+5) + (3.67+4.33) + (3.67+4.33) / (3+2) = 40 / 5 = 8
Overall indirect impacts: (0) + (8) = 8

A9.3.95 Converted to the 28-point scale this is:

$8 \times 28 / 20 = 11.2$, rounded to the nearest whole number this is 11.

A9.3.96 Thus the overall indirect impact by the development upon HLCA015 Upper Park and Ton-y-grugos is Moderate.

HLCA016 TON MAWR

A9.3.97 Ton Mawr lies 100 m south of the site boundary. No A, B or C category sites were identified within the HLCA and as such professional judgement is used to determine the magnitude of any potential indirect (visual) impacts.

A9.3.98 HLCA016 Ton Mawr is a small area of rectilinear fields, previously forming part of the Margam Abbey estate. No turbine hubs will be visible from this HLCA, but the tips of up to 13 turbines are predicted to be visible from around half of the HLCA. The interaction between elements of the HLCA, and between the HLCA and the adjacent landscapes will not be affected. As such, the overall indirect impact by the development upon HLCA016 Ton Mawr is considered to be Very Slight and is assigned a score of 1.

HLCA017 CWM DYFFRYN

A9.3.99 HLCA017 is in two parts, both of which immediately adjacent to the west side of the site boundary. No elements of the HLCA will be subject to direct or indirect physical impacts. Visibility of most of the turbines is predicted from this HLCA. Table A9.29 sets out the potential visual impacts upon the landscape.

Table A9.29: Indirect Non-Physical (Visual) Impacts, HLCA017 Cwm Dyffryn

IMPACTS	CATEGORY & SCORE	MAGNITUDE & SCORE
Lletypiod post medieval house (GGAT Ref. 02728w)	B – 3	Severe – 5, tips of up to 16 turbines will be visible from here.
Post-medieval quarry (GGAT Ref. 05777)	C - 2	Severe – 5, tips of up to 18 turbines will be visible from here.
Post-medieval quarry (GGAT Ref. 05776)	C - 2	Considerable - 4, tips of up to 13 turbines will be visible from here.
Development form	2.33	4.67
Development appearance	2.33	4.67

Source: Headland Archaeology

A9.3.100 Thus for the HLCA017 Cwm Dyffryn the magnitude of indirect impacts comprises:

Indirect physical impacts = 0
Indirect visual impacts = (3+5) + (2+5) + (2+4) + (2.33+4.67) + (2.33+4.67) / (3+2) = 35 / 5 = 7
Overall indirect impacts: (0) + (7) = 7

A9.3.101 Converted to the 28-point scale this is:

$7 \times 28 / 20 = 9.8$, rounded to the nearest whole number this is 10.

A9.3.102 Thus the overall indirect impact by the development upon HLCA017 Cwm Dyffryn is Moderate.

Stage 4: Evaluation of Relative Importance

A9.3.103 Two HLCAs are not predicted to experience any direct or indirect impacts and are therefore excluded from the Stage 4 assessment. These are HLCA011 Waun-y Gilfach and HLCA012 Nant y Gladlys.

HLCA001 MARGAM ABBEY AND CASTLE

Table A9.30: Stage 4a summary for HLCA001 Margam Abbey and Castle

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY			✓		
REPRESENTATIVENESS				✓	
DOCUMENTATION		✓			
GROUP VALUE			✓		
SURVIVAL		✓			
CONDITION		✓			
COHERENCE		✓			
INTEGRITY		✓			
POTENTIAL			✓		
AMENITY	✓				
ASSOCIATIONS			✓		

A9.3.104 The majority of the HLCA lies within the ZTV, including parts of the open parkland and designed walks to the south-east. Several important elements, including the Iron Age Hillfort, and views of Margam Castle, will be impacted to a degree.

Table A9.31: Stage 4b summary for HLCA001 Margam Abbey and Castle

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY	✓				
REPRESENTATIVENESS			✓		
DOCUMENTATION	✓				
GROUP VALUE	✓				
SURVIVAL			✓		
CONDITION		✓			
COHERENCE		✓			
INTEGRITY		✓			
POTENTIAL	✓				
AMENITY	✓				
ASSOCIATIONS		✓			

A9.3.105 The HLCA includes a large hillfort, along with a later medieval deer park and a Grade I Listed Abbey and the Grade I Listed Margam Castle, considered to be nationally significant features. The Abbey and Castle are significant within both the Registered Landscape and Wales as a whole, and the HLCA therefore has a high rarity rating. Due to the exceptional nature of the features and landscape, it cannot be considered representative of the landscape, and scores moderately for representativeness. Documentation is thorough, with plans, legal documents and written histories of the abbey and park. The group value of related elements within the designed setting of the park is high, and the remains are in generally good condition, with a high survival of the monuments. There is a very high potential for future landscape studies and amenity value in terms of leisure and education. This amenity value has already been partially exploited in the form of public access, information boards etc.

Table A9.32: Stage 4c summary for HLCA001 Margam Abbey and Castle

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY		✓			

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
REPRESENTATIVENESS				✓	
DOCUMENTATION		✓			
GROUP VALUE		✓			
SURVIVAL			✓		
CONDITION		✓			
COHERENCE		✓			
INTEGRITY		✓			
POTENTIAL		✓			
AMENITY		✓			
ASSOCIATIONS		✓			

A9.3.106 Margam Abbey and Castle is an excellently preserved group of rare assets with a high level of documentation and maintains this value even within the wider national context.

A9.3.107 Thus the total scores for HLCA001 are:

For Stage 4a: 3+2+4+3+4+4+4+3+5+3= 39

For Stage 4b: 5+3+5+5+3+4+4+4+5+5+4= 47

For Stage 4c: 4+2+4+4+3+4+4+4+4+4+4= 41

A9.3.108 As a percentage value this is:

(39+47+41) / 3 = 42.3

(42.3/55) x 100 = 77%

A9.3.109 Thus the Stage 4 value of HLCA001 Margam Abbey and Castle is High using the sliding scale set out at Table A9.7.

HLCA002 CEFN CRUGWYLLT AND CWM MAELWG

Table A9.33: Stage 4a summary for HLCA002 Cefn Crugwyllt and Cwm Maelwg

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY				✓	

REPRESENTATIVENESS	✓
DOCUMENTATION	✓
GROUP VALUE	✓
SURVIVAL	✓
CONDITION	✓
COHERENCE	✓
INTEGRITY	✓
POTENTIAL	✓
AMENITY	✓
ASSOCIATIONS	✓

A9.3.110 Although the majority of the HLCA lies within the ZTV, one particularly significant element, the medieval Bath House, will not be impacted by proposals.

Table A9.34: Stage 4b summary for HLCA002 Cefn Crugwyllt and Cwm Maelwg

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY		✓			
REPRESENTATIVENESS			✓		
DOCUMENTATION				✓	
GROUP VALUE				✓	
SURVIVAL			✓		
CONDITION			✓		
COHERENCE			✓		
INTEGRITY			✓		
POTENTIAL			✓		
AMENITY				✓	
ASSOCIATIONS					✓

A9.3.111 HLCA002 includes a Scheduled medieval Bath House, a rare feature previously associated with Margam Abbey, which contributes to the high rarity value. Additional medieval sites are also common, in contrast to the prehistoric sites found elsewhere in the Registered Landscape. The group value of related elements is fairly poor, and the survival and condition of monuments is similar to elsewhere within the Registered Landscape. The HLCA is largely enclosed and comprises regular fields, which probably developed through a gradual process of clearance and enclosure during the medieval and early post-medieval periods. Given the low range of sites within the HLCA, the potential for future landscape studies and amenity is also quite low. The HLCA has no known historic associations.

Table A9.35: Stage 4c summary for HLCA002 Cefn Crugwyllt and Cwm Maelwg

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY			✓		
	REPRESENTATIVENESS			✓		
	DOCUMENTATION				✓	
	GROUP VALUE				✓	
	SURVIVAL				✓	
	CONDITION				✓	
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
	AMENITY					✓
	ASSOCIATIONS					✓

A9.3.112 Although the Bath House is a significant medieval feature, other examples are recorded across the Registered Landscapes of Wales, and the sloping semi-upland landscape is similarly not particularly rare.

A9.3.113 Thus the total scores for HLCA002 are:

For Stage 4a: 2+2+2+2+2+2+2+2+2+1= 21
For Stage 4b: 4+3+2+2+3+3+3+3+2+1= 29
For Stage 4c: 3+3+2+2+2+2+2+2+1+1= 22

A9.3.114 As a percentage value this is:

$(21+22+41) / 3 = 24$

$(24/55) \times 100 = 44\%$

A9.3.115 Thus the Stage 4 value of HLCA002 Cefn Crugwyllt and Cwm Maelwg is Considerable.

HLCA003 CWM BROMBIL AND GRAIG FAWR

Table A9.36: Stage 4a summary for HLCA003 Cwm Brombil and Graig Fawr

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY			✓		
	REPRESENTATIVENESS				✓	
	DOCUMENTATION				✓	
	GROUP VALUE					✓
	SURVIVAL				✓	
	CONDITION					✓
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
	AMENITY					✓
	ASSOCIATIONS				✓	

A9.3.116 The majority of the HLCA lies outside the ZTV for the turbines, although the central part will have visibility of the abnormal load access track from the M4 which passes through this HLCA. The majority of the key features will not be impacted but the Scheduled Half Moon Camp hillfort will be. The scores for Stage 4a are therefore correspondingly reduced compared to those for Stage 4b.

Table A9.37: Stage 4b summary for HLCA003 Cwm Brombil and Graig Fawr

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY		✓			
	REPRESENTATIVENESS			✓		
	DOCUMENTATION				✓	
	GROUP VALUE					✓
	SURVIVAL				✓	
	CONDITION					✓
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
	AMENITY					✓
	ASSOCIATIONS				✓	

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
DOCUMENTATION			✓		
GROUP VALUE				✓	
SURVIVAL			✓		
CONDITION				✓	
COHERENCE			✓		
INTEGRITY			✓		
POTENTIAL			✓		
AMENITY				✓	
ASSOCIATIONS			✓		

A9.3.117 HLCA003 includes a Scheduled hillfort, as well as a post-medieval stone circle (created for an Eisteddfod) and a Scheduled WWII radar station. This station is unique within the Registered Landscape, and makes a major contribution to the rarity score, as does the stone circle which is also unique within the Registered Landscape. The steep slopes of the HLCA are not entirely representative of the landscape, but it does form an important element of the wider mountainous terrain. Documentation is good, including an 1814 Estate Survey, and the survival of the post-medieval enclosure is also good. The condition of the extant monuments is generally average for the Registered Landscape, except for the Scheduled Radar Station, which survives as a concrete box and metal gantry, with no further context or associated remains. The tough terrain suggests there is little scope for amenities, although the role of Radar in WWII may be considered a key association, and the early OS maps suggest an ancient battle may have taken place within the HLCA.

Table A9.38: Stage 4c summary for HLCA003 Cwm Brombil and Graig Fawr

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY			✓		
REPRESENTATIVENESS			✓		
DOCUMENTATION				✓	

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
GROUP VALUE				✓	
SURVIVAL			✓		
CONDITION				✓	
COHERENCE				✓	
INTEGRITY				✓	
POTENTIAL				✓	
AMENITY				✓	
ASSOCIATIONS			✓		

A9.3.118 The Scheduled Radar Station, complete with surviving gantry, is a rare and significant feature, even within the national context of Wales. The slopes and uplands are representative of the Registered Landscape and contribute to its relatively high score.

A9.3.119 Thus the total scores for HLCA003 are:

For Stage 4a: 2+2+1+1+2+2+1+1+1 = 13

For Stage 4b: 4+3+3+2+3+2+3+3+3+2+3 = 31

For Stage 4c: 3+3+2+2+3+2+2+2+2+2+3 = 26

A9.3.120 As a percentage value this is

$(13+31+26) / 3 = 23.33$

$(23.33/55) \times 100 = 42\%$

A9.3.121 Thus the Stage 4 value of HLCA003 Cwm Brombil and Graig Fawr is Considerable.

HLCA004 MYNYDD BROMBIL A ERGYD ISAF

A9.3.122 All of the HLCA lies within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.39: Stage 4b summary for HLCA004 Mynydd Brombil and Ergyd Isaf

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY		✓			
REPRESENTATIVENESS				✓	

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
DOCUMENTATION			✓		
GROUP VALUE				✓	
SURVIVAL		✓			
CONDITION				✓	
COHERENCE			✓		
INTEGRITY			✓		
POTENTIAL			✓		
AMENITY				✓	
ASSOCIATIONS					✓

A9.3.123 The HLCA includes a cruciform pillow mound, one of only two in Glamorgan, which contributes to the high rarity score. Also recorded are a scheduled round barrow and further, more regular pillow mounds. The plethora of pillow mounds, and relative lack of prehistoric features (for an upland area), means the representativeness of the HLCA is considered to be low. Documentation of the area is adequate, including an early 19th-century Estate Survey, and the post-medieval layout survives well, including dry stone walls in situ. However, the condition of the scheduled monument is considered to be poor, given the extensive evidence of antiquarian robbing. The coherence and integrity of the post-enclosure landscape is clear, although the tough terrain makes the amenity score low. There are no known historic associations.

Table A9.40: Stage 4c summary for HLCA004 Mynydd Brombil and Ergyd Isaf

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY			✓		
REPRESENTATIVENESS				✓	
DOCUMENTATION				✓	
GROUP VALUE				✓	
SURVIVAL			✓		

CONDITION	✓
COHERENCE	✓
INTEGRITY	✓
POTENTIAL	✓
AMENITY	✓
ASSOCIATIONS	✓

A9.3.124 The upland landscape is an important component of the Registered Landscape but is not considered to be rare within the wider national context.

A9.3.125 Thus the total scores for HLCA004 are

For Stage 4b: 4+2+3+2+4+2+3+3+3+2+1 = 29

For Stage 4c: 3+2+2+2+3+2+2+2+2+1+1 = 22

A9.3.126 As a percentage value this is

(29+22) / 2 = 25.5

(25.5/55) x 100 = 46%

A9.3.127 Thus the Stage 4 value of HLCA004 Mynydd Brombil and Ergyd Isaf is Considerable.

HLCA005 LLANGYNWYD

A9.3.128 The vast majority of the HLCA lies within the ZTV, and so Stage 4a has not been carried out.

Table A9.41: Stage 4b summary for HLCA005 Llangynwyd

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY		✓			
REPRESENTATIVENESS	✓				
DOCUMENTATION	✓				
GROUP VALUE		✓			
SURVIVAL		✓			
CONDITION		✓			
COHERENCE		✓			

INTEGRITY	✓
POTENTIAL	✓
AMENITY	✓
ASSOCIATIONS	✓

A9.3.129 The Llangynwyd HLCA includes two scheduled monuments, a conservation area and the Grade II* listed church of St Cynwyd and Llwydarth farmhouse, adding to the rarity value of this HLCA within the registered landscape. The HLCA includes examples of most asset types represented within the registered landscape and therefore is considered to be highly representative. The important well-documented historic associations lead to the high documentation and association scores. Much of the HLCA is accessible with a number of public footpaths leading to a high amenity value. The continuation of settlement on some of the sites within the HLCA adds to the group value, and survival and condition of assets is good. The coherence and integrity of the medieval landscape in particular is good. The landscape is well understood and there is therefore considered to be low potential for further study.

Table A9.42: Stage 4c summary for HLCA005 Llangynwyd

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY	✓				
	REPRESENTATIVENESS	✓				
	DOCUMENTATION	✓				
	GROUP VALUE		✓			
	SURVIVAL		✓			
	CONDITION		✓			
	COHERENCE		✓			
	INTEGRITY					
	POTENTIAL				✓	
	AMENITY		✓			
	ASSOCIATIONS	✓				

A9.3.130 The number of associations with this landscape is so high as to be unusual within Wales and contributes to its high rarity score.

A9.3.131 Thus the total scores for HLCA005 are

For Stage 4b: 4+5+5+4+4+4+4+2+4+5 = 45

For Stage 4c: 5+5+5+4+4+4+4+2+4+5 = 47

A9.3.132 As a percentage value this is

(45+46) / 2 = 45.5

(45.5/55) x 100 = 83%

A9.3.133 Thus the Stage 4 value of HLCA005 Llangynwyd is Very High.

HLCA006 EGLWYS NUNYDD AND CWRT-Y-DEFAID

A9.3.134 The entirety of the HLCA lies within the ZTV, and so Stage 4a has not been carried out.

Table A9.43: Stage 4b summary for HLCA006 Eglwys Nunydd and Cwrt-y-defaid

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY			✓		
REPRESENTATIVENESS				✓	
DOCUMENTATION				✓	
GROUP VALUE			✓		
SURVIVAL				✓	
CONDITION				✓	
COHERENCE				✓	
INTEGRITY				✓	
POTENTIAL			✓		
AMENITY				✓	
ASSOCIATIONS				✓	

A9.3.135 The Grade II* Listed Old Park building makes an important contribution to the rarity score, with such buildings uncommon within the wider Registered Landscape. This score is further increased by a medieval grange associated with Margam Abbey. The HLCA has a fairly low representation of monuments within the Registered Landscape as a whole, particularly for the prehistoric periods, and the group value of related elements is also poor. The survival and condition of monuments is similar to elsewhere within the Registered Landscape. However, extensive modern housing serves to detract from the coherence and integrity of the landscape. Given the low range of sites within the HLCA, the potential for future landscape studies and amenity is also quite low.

Table A9.44: Stage 4c summary for HLCA006 Eglwys Nunydd and Cwrt-y-defaid

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY				✓	
REPRESENTATIVENESS				✓	
DOCUMENTATION				✓	

GROUP VALUE	✓
SURVIVAL	✓
CONDITION	✓
COHERENCE	✓
INTEGRITY	✓
POTENTIAL	✓
AMENITY	✓
ASSOCIATIONS	✓

A9.3.136 The HLCA is important as a former element of the Margam Estate, but its mix of postmedieval and modern enclosure, and modern residential development, is not considered to be of great value within the national context of Wales.

A9.3.137 Thus the total scores for HLCA006 Eglwys Nunydd and Cwrt-y-defaid are:

For Stage 4b: 3+2+2+3+2+2+2+3+2+2 = 25

For Stage 4c: 2+2+2+2+3+2+2+2+2+1+2 = 22

A9.3.138 As a percentage value this is:

$(25+22) / 2 = 23.5$

$(23.5/55) \times 100 = 43\%$

A9.3.139 Thus the Stage 4 value of HLCA006 Eglwys Nunydd and Cwrt-y-defaid is Considerable.

HLCA007 GRAIG GOCH A HEOL NEWYDD

A9.3.140 HLCA007 Graig Goch and Heol Newydd The vast majority of the HLCA lies within the ZTV, and so Stage 4a has not been carried out.

Table A9.45: Stage 4b summary for HLCA007 Graig Goch and Heol Newydd

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY					✓
REPRESENTATIVENESS				✓	
DOCUMENTATION				✓	
GROUP VALUE					✓

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
SURVIVAL					✓
CONDITION					✓
COHERENCE					✓
INTEGRITY					✓
POTENTIAL					✓
AMENITY					✓
ASSOCIATIONS					✓

A9.3.141 HLCA007 is an area of enclosed farmland and woodland, largely indicating a post-medieval date of enclosure. The site is well documented, previously being part of the Margam Estate, and is included on an Estate Map of 1814.

Table A9.46: Stage 4c summary for HLCA007 Graig Goch and Heol Newydd

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY					✓
REPRESENTATIVENESS					✓
DOCUMENTATION					✓
GROUP VALUE					✓
SURVIVAL					✓
CONDITION					✓
COHERENCE					✓
INTEGRITY					✓
POTENTIAL					✓
AMENITY					✓

CRITERIA

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
ASSOCIATIONS					✓

A9.3.142 The HLCA is reasonably representative of the wider Landscape but is not considered to be of particular interest within the national context.

A9.3.143 Thus the total scores for HLCA007 Graig Goch and Heol Newydd are:

For Stage 4b: 1+2+2+1+1+1+1+1+1= 13

For Stage 4c: 1+1+1+1+1+1+1+1+1+1= 11

A9.3.144 As a percentage value this is:

(13+11) / 2 = 12

(12/55) x 100 = 22%

A9.3.145 Thus the Stage 4 value of HLCA007 Graig Goch and Heol Newydd is Moderate.

HLCA008 MARGAM VILLAGE

Table A9.47: Stage 4a summary for HLCA008 Margam Village

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY					✓
REPRESENTATIVENESS					✓
DOCUMENTATION				✓	
GROUP VALUE				✓	
SURVIVAL					✓
CONDITION				✓	
COHERENCE				✓	
INTEGRITY				✓	
POTENTIAL				✓	
AMENITY					✓
ASSOCIATIONS					✓

CRITERIA

A9.3.146 Only a small part of the HLCA lies within the ZTV although this includes two of the Grade II listed buildings which are key elements of the HLCA. The scores for Stage 4a are identical to those for Stage 4b.

Table A9.48: Stage 4b summary for HLCA008 Margam Village

VALUE:		V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
CRITERIA	RARITY					✓
	REPRESENTATIVENESS					✓
	DOCUMENTATION				✓	
	GROUP VALUE				✓	
	SURVIVAL					✓
	CONDITION				✓	
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
	AMENITY					✓
	ASSOCIATIONS					✓

A9.3.147 Historic features within Margam Village comprise the Grade II Listed buildings within the village centre, which are considered neither rare nor representative of the wider landscape, although their close association results in some group value. They are generally well-maintained buildings in good condition, although modern development has detracted from the coherence and integrity of the historic landscape. There are no known historic associations.

Table A9.49: Stage 4c summary for HLCA008 Margam Village

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD (5 points)	GOOD (4 points)	MED (3 points)	(3 points)		POOR (1 point)
RARITY						✓
REPRESENTATIVENESS						✓
DOCUMENTATION						✓
GROUP VALUE						✓
SURVIVAL						✓
CONDITION						✓
COHERENCE						✓
INTEGRITY						✓
POTENTIAL						✓
AMENITY						✓
ASSOCIATIONS						✓

A9.3.148 The HLCA is not considered representative of the wider Landscape and is not considered to be of particular interest within the national context.

A9.3.149 Thus the total scores for HLCA008 Margam Village are:

For Stage 4a: 1+1+1+2+1+2+2+2+1+1= 16

For Stage 4b: 1+1+1+2+1+2+2+2+1+1= 16

For Stage 4c: 1+1+1+1+1+1+1+1+1+1= 11

A9.3.150 As a percentage value this is:

(16+16+11) / 3 = 14.3

(14.3/55) x 100 = 26%

A9.3.151 Thus the Stage 4 value of HLCA008 Margam Village is Moderate.

HLCA009 CWM DYFFRYN AND CWM FARTEG RAILWAY CORRIDOR

A9.3.152 The vast majority of the HLCA lies within the ZTV, and so Stage 4a has not been carried out.

Table A9.50: Stage 4b summary for HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD (5 points)	GOOD (4 points)	MED (3 points)	(3 points)		POOR (1 point)
RARITY						✓
REPRESENTATIVENESS						✓
DOCUMENTATION			✓			
GROUP VALUE						✓
SURVIVAL						✓
CONDITION						✓
COHERENCE			✓			
INTEGRITY			✓			
POTENTIAL						✓
AMENITY			✓			
ASSOCIATIONS						✓

A9.3.153 HLCA009 is primarily industrial, dominated by the railway corridor, and as such it is considered to be neither rare nor representative. Documentation in the form of railway plans, legal bills, and accounts is above average. The line is disused, and the survival and condition is poor, although the coherence and integrity are good maintained by its reuse as a trackway. There are no known historic associations.

Table A9.51: Stage 4c summary for HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY						✓
REPRESENTATIVENESS						✓
DOCUMENTATION			✓			
GROUP VALUE				✓		
SURVIVAL				✓		
CONDITION				✓		
COHERENCE				✓		
INTEGRITY				✓		
POTENTIAL						✓
AMENITY						✓
ASSOCIATIONS						✓

A9.3.154 Railways, particularly along the southern coast, are not exceptional in Wales. The HLCA is not considered representative of the wider Registered Landscape, and not of particular interest within the national context.

A9.3.155 Thus the total scores for HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor are:

For Stage 4b: 2+2+3+2+2+2+3+3+2+3+1= 25

For Stage 4c: 1+1+3+2+2+2+2+2+1+1+1= 18

A9.3.156 As a percentage value this is:

$(25+18) / 2 = 21.5$

$(21.5/55) \times 100 = 39\%$

A9.3.157 Thus the Stage 4 value of HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor is Moderate.

HLCA010 MYNYDD MARGAM

A9.3.158 The whole of the HLCA is within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.52: Stage 4b summary for HLCA010 Margam Forest

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY		✓				
REPRESENTATIVENESS			✓			
DOCUMENTATION			✓			
GROUP VALUE			✓			
SURVIVAL			✓			
CONDITION		✓				
COHERENCE		✓				
INTEGRITY			✓			
POTENTIAL			✓			
AMENITY			✓			
ASSOCIATIONS						✓

A9.3.159 Margam Forest includes numerous prehistoric and medieval sites, as well as post-medieval evidence and modern evidence. The HLCA has a high rarity rating, and also contains a good representation of monuments within the Registered Landscape as a whole, particularly with regard to the prehistoric and medieval periods. Documentation is reasonable, although the group value of related elements is slightly reduced, as the visual links between the features is broken up by the dense woodland. The survival and condition of monuments is similar to elsewhere within the Registered Landscape. The current landscape largely reflects its use as managed woodland, and as such the coherence and integrity of the HLCA do not score highly. The amenity value of the landscape has been partially exploited through managed footpaths and cycleways. The HLCA has no known historic associations.

Table A9.53: Stage 4c summary for HLCA010 Margam Forest

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY			✓		
REPRESENTATIVENESS			✓		
DOCUMENTATION				✓	
GROUP VALUE			✓		
SURVIVAL				✓	
CONDITION				✓	
COHERENCE				✓	
INTEGRITY				✓	
POTENTIAL				✓	
AMENITY					✓
ASSOCIATIONS					✓

A9.3.160 HLCA010 Margam Forest is a large element of the Registered Landscape as a whole and is important both for its size and the range of monuments it includes, which make it of importance within the national context.

A9.3.161 Thus the total scores for HLCA010 Margam Forest are:

For Stage 4b: 4+3+3+3+3+4+4+3+3+3+1= 34

For Stage 4c: 3+3+2+3+2+2+2+2+1+1= 23

A9.3.162 As a percentage value this is:

$(34+23) / 2 = 28.5$

$(28.5/55) \times 100 = 52\%$

A9.3.163 Thus the Stage 4 value of HLCA010 Mynydd Margam is Considerable.

HLCA011 WAUN Y GILFACH

A9.3.164 No direct, indirect (physical) or indirect (visual) effects are predicted to Waun y Gilfach and therefore a Stage 4 assessment is not required.

HLCA012 NANT Y GLADLYS

A9.3.165 No direct, indirect (physical) or indirect (visual) effects are predicted to Nant y Gladlys and therefore a Stage 4 assessment is not required.

HLCA013 UPPER CWM KENFIG

A.3.2 The whole of the HLCA lies within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.54: Stage 4b summary for HLCA013 Upper Cwm Kenfig

VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
RARITY		✓			
REPRESENTATIVENESS			✓		
DOCUMENTATION				✓	
GROUP VALUE		✓			
SURVIVAL		✓			
CONDITION		✓			
COHERENCE		✓			
INTEGRITY			✓		
POTENTIAL			✓		
AMENITY			✓		
ASSOCIATIONS					✓

A9.3.166 HLCA013 includes multiple prehistoric Scheduled Monuments, contributing the high rarity score, as well as a medieval site. It is considered to be representative of the Landscape in general, with a high group value derived from the close proximity of many Scheduled Monuments. There are no known historic associations.

Table A9.55: Stage 4c summary for HLCA013 Upper Cwm Kenfig

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY			✓			
REPRESENTATIVENESS			✓			
DOCUMENTATION				✓		
GROUP VALUE			✓			
SURVIVAL				✓		
CONDITION				✓		
COHERENCE				✓		
INTEGRITY				✓		
POTENTIAL				✓		
AMENITY						✓
ASSOCIATIONS						✓

A9.3.167 HLCA013 Upper Cwm Kenfig, although relatively small, includes multiple Scheduled Monuments. These remains make it of some importance, even within the wider national context.

A9.3.168 Thus the total scores for HLCA013 Upper Cwm Kenfig are:

For Stage 4b: 4+3+2+4+4+4+3+3+3+1= 35

For Stage 4c: 3+3+2+3+2+2+2+2+1+1= 23

A9.3.169 As a percentage value this is:

(22+35+23) / 3 = 26.6

(26.6/55) x 100 = 48%

A9.3.170 Thus the Stage 4 value of HLCA013 Upper Cwm Kenfig is Considerable.

HLCA014 MOEL TON MAWR

A9.3.171 Almost all of the HLCA is within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.56: Stage 4b summary for HLCA014 Moel Ton Mawr

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY				✓		
REPRESENTATIVENESS			✓			
DOCUMENTATION				✓		
GROUP VALUE				✓		
SURVIVAL				✓		
CONDITION			✓			
COHERENCE				✓		
INTEGRITY				✓		
POTENTIAL				✓		
AMENITY				✓		
ASSOCIATIONS						✓

A9.3.172 HLCA014 includes several prehistoric monuments as well as medieval sites, although there are no remains which are considered to be particularly rare. It is considered to be representative of the Registered Landscape in general, with extant evidence of previous landscape usage. There are no known historic associations.

Table A9.57: Stage 4c summary for HLCA014 Moel Ton Mawr

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY				✓		
REPRESENTATIVENESS				✓		
DOCUMENTATION					✓	
GROUP VALUE					✓	
SURVIVAL					✓	
CONDITION					✓	
COHERENCE					✓	
INTEGRITY					✓	
POTENTIAL					✓	
AMENITY					✓	
ASSOCIATIONS					✓	

A9.3.173 HLCA014 Moel Ton Mawr is relatively unremarkable, both within the Registered Landscape and within the national context.

A9.3.174 Thus the total scores for HLCA014 Moel Ton Mawr are:

For Stage 4b: 2+3+2+2+2+3+2+2+2+1= 23

For Stage 4c: 2+2+1+1+1+1+1+1+1+1= 13

A9.3.175 As a percentage value this is:

(23+13) / 2 = 18

(18/55) x 100 = 32%

A9.3.176 Thus the Stage 4 value of HLCA014 Moel Ton Mawr is Moderate.

HLCA015 UPPER PARK AND TON-Y-GRUGOS

A9.3.177 Almost all of the HLCA lies within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.58: Stage 4b summary for HLCA015 Upper Park and Ton-y-grugos

VALUE:	V HIGH/	HIGH/	MOD/	LOW	(2	V LOW/
	V GOOD	GOOD	MED	(3	points)	POOR
	(5 points)	(4 points)	(3 points)			(1 point)
RARITY		✓				
REPRESENTATIVENESS			✓			
DOCUMENTATION				✓		
GROUP VALUE				✓		
SURVIVAL			✓			
CONDITION		✓				
COHERENCE			✓			
INTEGRITY			✓			
POTENTIAL			✓			
AMENITY			✓			
ASSOCIATIONS						✓

A9.3.178 HLCA015 includes multiple prehistoric Scheduled Monuments, contributing the high rarity score, as well as medieval sites and other features. It is considered to be representative of the Registered Landscape in general, with reasonable survival of monuments, in a generally good condition. There are no known historic associations.

Table A9.59: Stage 4c summary for HLCA015 Upper Park and Ton-y-grugos

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY			✓		
	REPRESENTATIVENESS			✓		
	DOCUMENTATION				✓	
	GROUP VALUE				✓	
	SURVIVAL				✓	
	CONDITION				✓	
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
	AMENITY			✓		
	ASSOCIATIONS			✓		

A9.3.179 Thus the total scores for HLCA015 Upper Park and Ton-y-grugos are:

For Stage 4b: 4+3+2+2+3+4+3+3+3+3+1= 31

For Stage 4c: 3+3+2+2+2+2+2+2+2+2+2= 24

A9.3.180 As a percentage value this is:

$(31+24) / 2 = 27.5$

$(28.6/55) \times 100 = 50\%$

A9.3.181 Thus the Stage 4 value of HLCA015 Upper Park and Ton-y-grugos is Considerable.

HLCA016 TON MAWR

A9.3.182 The majority of the HCLA is within the ZTV and therefore a Stage 4a assessment has not been carried out.

Table A9.60: Stage 4b summary for HLCA016 Ton Mawr

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY					✓
	REPRESENTATIVENESS				✓	
	DOCUMENTATION				✓	
	GROUP VALUE					✓
	SURVIVAL					✓
	CONDITION					✓
	COHERENCE				✓	
	INTEGRITY					✓
	POTENTIAL					✓
	AMENITY					✓
	ASSOCIATIONS					✓

A9.3.183 HLCA016 is a largely agricultural landscape, with limited archaeological and historic features. The area is well documented as part of the Margam Estate but is otherwise unexceptional.

Table A9.61: Stage 4c summary for HLCA016 Ton Mawr

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY				✓	
	REPRESENTATIVENESS				✓	
	DOCUMENTATION				✓	
	GROUP VALUE				✓	
	SURVIVAL				✓	
	CONDITION				✓	
	COHERENCE				✓	
	INTEGRITY				✓	
	POTENTIAL				✓	
CRITERIA	AMENITY				✓	
	ASSOCIATIONS				✓	

A9.3.184 HLCA016 Ton Mawr is considered to be unexceptional within the national context.

A9.3.185 Thus the total scores for HLCA016 Ton Mawr are:

For Stage 4b: 1+2+2+1+1+1+2+1+1+1+1= 14

For Stage 4c: 1+1+1+1+1+1+1+1+1+1+1= 11

A9.3.186 As a percentage value this is:

(14+11) / 2 = 12.5

(12.5/55) x 100 = 23%

A9.3.187 Thus the Stage 4 value of HLCA016 Ton Mawr is Moderate.

HLCA017 CWM DYFFRYN

A9.3.188 All of HLCA017 lies within the ZTV, and so Stage 4a has not been carried out.

Table A9.62: Stage 4b summary for HLCA017 Cwm Drffryn: Southern Valley Sides

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY				✓	
	REPRESENTATIVENESS				✓	
	DOCUMENTATION			✓		
	GROUP VALUE				✓	
	SURVIVAL			✓		
	CONDITION			✓		
	COHERENCE				✓	
	INTEGRITY			✓		
	POTENTIAL				✓	
CRITERIA	AMENITY				✓	
	ASSOCIATIONS				✓	

A9.3.189 HLCA017 comprises the steep slopes associated with the northern edge of Mynydd Margam, with a number of quarry sites which are well documented, although not particularly rare. The post-medieval quarrying landscape is coherent and intelligible, although there are no known historic associations.

Table A9.63: Stage 4c summary for HLCA017 Cwm Dyffryn: Southern Valley Sides

CRITERIA	VALUE:	V HIGH/ V GOOD (5 points)	HIGH/ GOOD (4 points)	MOD/ MED (3 points)	LOW (2 points)	V LOW/ POOR (1 point)
	RARITY				✓	
	REPRESENTATIVENESS					✓
	DOCUMENTATION				✓	
	GROUP VALUE				✓	
	SURVIVAL					✓
	CONDITION					✓
	COHERENCE					✓
	INTEGRITY					✓
	POTENTIAL					✓
	AMENITY					✓
	ASSOCIATIONS					✓

A9.3.190 Quarrying landscapes are common within Wales, and HLCA017 is considered to be less significant within the wider national context.

A9.3.191 Thus the total scores for HLCA017 Cwm Dyffryn: Southern Valley Sides are:

For Stage 4b: 2+2+3+2+3+3+2+3+2+2+2= 26

For Stage 4c: 1+1+2+2+1+1+1+1+1+1+1= 13

A9.3.192 As a percentage value this is:

(26+13) / 2 = 19.5

(19.5/55) x 100 = 35%

A9.3.193 Thus the Stage 4 value of Cwm Dyffryn: Southern Valley Sides is Moderate.

Summary Statement for Stage 4

A9.3.194 The southern section of the proposed windfarm covers approximately half of the Registered Landscape, although the development footprint will be mainly within the Mynydd Margam HLCA which forms the central and largest HLCA.

A9.3.195 Out of the total of 17 HLCAs within the Margam Mountain Registered Landscape, potential non-physical (visual) impacts have been identified upon 15 HLCAs, due to the scale and number of the turbines. The HLCAs within the site are fairly representative of the Registered Landscape, although

Mynydd Margam presents a dramatically different vista, representing the only large area of managed woodland.

A9.3.196 HLCA001 Margam Abbey stands out as a landscape of particularly high value, both amongst the HLCAs considered within this assessment and the Registered Landscape as a whole. It contains a high proportion and range of monuments, many of which are Scheduled or Listed, dating from the prehistoric hillfort through to post-medieval parkland features, and as such is of high significance even within the national context.

Stage 5: Assessment of the overall significance of impact

A9.3.197 Table A9.64 provides an overall value for each HLCA for:

- Impact of Development (based on Stage 2 and 3 results);
- Value of Historic Character Area (based on Stage 4 results); and

- Reduction of Value of the Historic Landscape Area on Register (based on professional judgement).

A9.3.198 These values are scored on the following basis: Very High (9 or 10); High (7 or 8); Medium (4,5 or 6); Low (2 or 3); and Very Low (1). This provides a total score which is provided in the final column, out of a maximum possible value of 30. These scores are graded as per Table A9.7.

Table A9.64: Overall significance of impact

HLCA	STAGE 2 RESULT	STAGE 3 RESULT	TOTAL IMPACT SCORE (STAGE 2+ STAGE 3A + STAGE 3B SCORES) (MAX 10)	VALUE SCORE (STAGE 4) (MAX 10)	REDUCTION IN VALUE SCORE (MAX 10)	TOTAL SCORE (OUT OF 30)
HLCA001	No direct impacts	There will be no physical impacts on this HLCA but there will be moderate visual intrusion upon key landscape elements	Medium: 5	Very High: 8 a value of 77%, equating to High value The HLCA includes several key elements of the Mynydd Brombil Registered Landscape, particularly those around Margam Abbey.	Very Low: 1 The development will create a very slight reduction in the overall value of the HLCA	Moderate (14)
HLCA002	No direct impacts	There will be no physical impacts on this HLCA but there will be slight visual intrusion upon key landscape elements	Medium: 4	Medium: 4 a value of 44%, equating to Considerable value	Low: 3 The development will create a slight reduction in the overall value of the HLCA	Moderate (11)
HLCA003	Very slight: The land take within the HLCA is very small	Moderate impact There will be a moderate visual intrusion upon key elements of the landscape.	Medium: 6	Medium: 4 a value of 42%, equating to Considerable value The HLCA includes several key elements of the Registered Landscape, although most lie outside of the development footprint	Low: 3 The development will create a slight reduction in the overall value of the HLCA	Moderate (13)
HLCA004	Very slight: the land take within the HLCA is very small	There will be a high degree of visual intrusion upon key elements of the landscape.	High: 7	Medium: 4 a value of 46%, equating to Considerable value The HLCA includes a prehistoric Scheduled Monument and a rare cruciform pillow mound	Medium: 6 The development will result in a moderate reduction in the overall value of the HLCA	Fairly severe (17)
HLCA005	Very slight: the land take within the HLCA is very small	There will be a moderate degree of visual intrusion upon key elements of the landscape	Medium: 6	Very High: 9 A value of 83% equating to Very High value. The HLCA includes several important elements of the Registered Landscape including Grade II* Listed Buildings and Scheduled Monuments	Medium: 6 The development will result in a moderate reduction in the overall value of the HLCA	Severe (21)
HLCA006	No direct impacts	There will be a moderate visual intrusion upon key elements of the landscape	Medium:6	Medium: 4 a value of 43%, equating to Considerable value The HLCA includes several important elements of the Registered Landscape, including a Grade II* Listed building	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (12)

HLCA	STAGE 2 RESULT	STAGE 3 RESULT	TOTAL IMPACT SCORE (STAGE 2+ STAGE 3A + STAGE 3B SCORES) (MAX 10)	VALUE SCORE (STAGE 4) (MAX 10)	REDUCTION IN VALUE SCORE (MAX 10)	TOTAL SCORE (OUT OF 30)
HLCA007	No direct impacts	There will be slight visual intrusion into this landscape	Very Low : 1	Low: 2 a value of 22%, equating to Moderate value	Low: 1 The development will create a slight reduction in the overall value of the HLCA	Slight (4)
HLCA008	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	Low: 3	Low: 2 a value of 25%, equating to Moderate value The HLCA includes several important elements of the Registered Landscape, including several Grade II Listed buildings	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Slight (5)
HLCA009	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	Low: 3	Medium: 4 a value of 39%, equating to Moderate value The HLCA includes an important element of the Registered Landscape, the former course of the Port Talbot Railway	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (9)
HLCA010	Moderate Impact	There will be a moderate degree of visual intrusion upon key elements of the landscape	High: 7	Medium: 6 a value of 55%, equating to Considerable value The HLCA includes several key elements of the Registered Landscape, including prehistoric Scheduled Monuments and medieval features	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (15)
HLCA011	No direct impacts	NO IMPACTS	NO IMPACTS	N/A	N/A	N/A
HLCA012	No direct impacts	NO IMPACTS	NO IMPACTS	N/A	N/A	N/A
HLCA013	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	High: 7	Medium: 5 a value of 48%, equating to Considerable value The HLCA includes several key elements of the Registered Landscape, including prehistoric Scheduled Monuments and medieval features	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (14)
HLCA014	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	Medium: 6	Low: 3 a value of 31%, equating to Moderate value The HLCA includes a Bronze Age round barrow, as well as other upland features	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (11)
HLCA015	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	High: 7	Medium: 5 a value of 52%, equating to Considerable value The HLCA includes several key elements of the Registered Landscape, including prehistoric Scheduled Monuments and medieval features	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (14)

HLCA	STAGE 2 RESULT	STAGE 3 RESULT	TOTAL IMPACT SCORE (STAGE 2+ STAGE 3A + STAGE 3B SCORES) (MAX 10)	VALUE SCORE (STAGE 4) (MAX 10)	REDUCTION IN VALUE SCORE (MAX 10)	TOTAL SCORE (OUT OF 30)
HLCA016	No direct impacts	There will be very slight visual intrusion on this landscape	Very Low: 1	Low: 2 a value of 23%, equating to Moderate value	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Slight (5)
HLCA017	No direct impacts	There will be a slight visual intrusion upon key elements of the landscape	Medium: 5	Medium: 4 a value of 35%, equating to Considerable value The HLCA includes several modern industrial elements of the Registered Landscape	Low: 2 The development will create a slight reduction in the overall value of the HLCA	Moderate (10)

Mitigation

A9.3.199 The development has been designed to minimise physical impacts upon known historic assets.

A9.3.200 Although long-term, wind farm developments are temporary in nature and visual effects can be fully reversed on decommissioning. Whilst operational, the visual permeability of the scheme will ensure that views over the landscape will not be severed. Specifically to this proposal, the number of turbines has been reduced from 26 to 18 reducing the visual impact upon the landscape. This impact has been further reduced by using varying tip heights to limit the visual discordance of the scheme from key viewpoints and adjusting the layout of the turbines to limit the amount of the field of view which will contain them from as many key viewpoints as possible.

Conclusion

- A9.3.201 The preceding sections have assessed the potential physical and non-physical (including visual) impacts of the proposed development upon the archaeological resource of a substantial area of land in and around the proposed wind farm development. The assessment has been compiled in accordance with the guidance provided in the Guide to Good Practice issued by Cadw/former Countryside Council for Wales (CCW) (now Natural Resources Wales (NRW))/Welsh Government, and the scope of the assessment was agreed in consultation with Cadw.
- A9.3.202 The assessment complements further detailed study of effects within the main cultural heritage chapter of the Environmental Statement. The study area lies within the Mynydd Margam Registered Landscape of Special Historic Interest. This landscape has been subject to Historic Landscape Characterisation carried out by GGAT. Information on the cultural heritage resource has come from a range of sources. Data on known cultural heritage features has come from the local Historic Environment Record held by GGAT, the National Monuments Record held by RCAHMW, and from Cadw. Historic maps and documents detailing historic use of the study area have been accessed from National Library of Wales and other online sources.
- A9.3.203 The study area was subject to a detailed walkover survey, in order to assess the condition of recorded features and identify any new features, the methodology of which was agreed in a written scheme of investigation (WSI) approved by GGAT. The receptors identified within each HLCA were visited in the field and potential visual impacts assessed.
- A9.3.204 The proposed development comprises a total of 18 wind turbines, which will have height of up to between 206m to 250 m to tip, as well as associated access tracks, substation, and crane pads. Thirteen turbines and associated infrastructure would be located within the registered landscape, the remaining five turbines are on land to the north of the registered landscape. The development footprint falls within four HLCAs: HLCA003, HLCA004, HLCA005 and HLCA010. Only these four will experience any physical impacts.
- A9.3.205 The actual percentage of each of these landscapes subject to development is very low, and the absolute development impact upon each area is very small, even within HLCA010 which contains the majority of the proposed development.
- A9.3.206 Information gathered on the archaeological resource of the study area has fed into the ongoing design process for the development. This has ensured that no turbines will directly impact upon designated archaeological features, and the impact of the construction of the turbines and access tracks will be limited.
- A9.3.207 As well as direct physical impacts, indirect physical impacts upon archaeology have also been assessed. This includes factors such as vibration and noise from construction and use of the site which may potentially damage archaeological monuments. As with the direct physical effects these have been minimised as far as possible through the design.
- A9.3.208 Wind turbines are relatively narrow but necessarily tall structures. and in the case of the proposed development. this results in predicted visibility extending to almost all of the registered landscape. However. the hilly terrain and forested character of the central parts of the registered landscape means that views are changeable. In the case of the elements within HLCA010, visibility of the turbines will only be possible in close proximity, although the assessment has considered the

visibility of blade tip height to allow for periods of future felling when visibility may be increased. For the surrounding HLCAs the upper parts of the turbines will appear above the forest canopy.

- A9.3.209 The overall judgement of impacts upon the character areas summarised in Table A9.64, based upon the calculations carried out in Stages 2-4, appears a fair reflection of the potential development effects.
- A9.3.210 The overall significance of the impact upon HLCA005 is judged to be Severe in a six point scale which ranges from very slight to very severe. The impact to HLCA004 is judged to be Fairly Severe. The impact to nine further HLCAs (001, 002, 002, 006, 009, 010, 013, 014, 015 and 017) is considered to be Moderate and the impact on a further three landscape areas is judged to be Slight . Two HLCAs (011 and 012) are not predicted to experience any impacts.
- A9.3.211 This judgement of impacts reflects the fact that the proposed development will result in a minimal impact upon the archaeological resource but will result in a visual change to the setting of regionally and nationally important archaeological remains slightly reducing the value of the landscape.
- A9.3.212 The visual intrusion to historic features in and around the turbines are temporary (though long term) for the operational life of the wind farm and upon removal of the turbines views will return to those prior to the development.

Appendix A – Historic Landscape Citation¹⁰

- A9.3.213 Margam Mountain is a distinctive block of South Wales uplands on the south-west fringe of the Glamorgan Blaenau, where they meet the Bro and overlook and visually dominate the narrow coastal plain near the modern port and industrial town of Port Talbot. From the coastal plain just above sea level, the flanks of the mountain rise steeply to a series of more gentle slopes and plateaux between 200 m and 300 m above OD, with local crests reaching over 300m above OD, the highest of which is Margain Mountain itself, at 344111 [sic] above OD, in the centre of the area. The whole mountain is dissected and indented by several ravines and small wooded valleys or cwmoedd, each with a small stream rising in peat bogs near the crest. On the north-east, the area is bounded by the valley of the Llynfi, a tributary of the river Ogmore, and on the north-west by the small, wooded valley of Cwm Dyffryn. The southern limit is bounded by Cwm Cynffig at the head of the river kenfig, while the western limit coincides with the modern M4 motorway which more or less follows the edge of the coastal plain.
- A9.3.214 The historic landscape identified here is dominated by the steep southern flanks of Margam Mountain, a strategic location which controlled early routes to West Wales, including the main Roman road linking the Roman forts of Cardiff and Neath. Much of the area is now afforested, though archaeologically it benefited from the early landscape studies undertaken in the 1930s. The area displays continuity, density and diversity of human occupation. This was originally concentrated and scattered on the mountain itself, though recently it grew rapidly, forcing itself into the narrow confines of the coastal plain, where the natural topographical limitations and physical constraints at the junction of the Blaenau and Bro of Glamorgan allowed.
- A9.3.215 Situated above the originally densely wooded valley floors and lowland, yet accessible from the adjacent high ground, the mountain has been the focus of human activity from at least the Bronze Age, as attested by a number of single, and groups of, large cairns and barrows. The Iron Age is also well represented by an unusual concentration of distinctive hill forts, enclosures and habitation sites, and the trackways that connected them. Mynydd y Castell, Caer Cwm Philip and Y Bwlwarcau form a chain of strongholds defending the strategically important route corridor across the southern flanks of the mountain. However, the forts are equally well suited to exploit the extensive mountain pastures to the north, and indeed the complex layout and much lower defences at Y Bwlwarcau could suggest that the site's primary function was stock-raising rather than defence. The succeeding Roman period is attested by the route of the main Roman road, recorded in the 2nd-century Antonine Itinerary, and the discovery of two Roman milestones in the vicinity. Today, its course is probably preserved in the line of Water Street.
- A9.3.216 The early medieval period is well-represented by the suggested reoccupation of the hillforts and the 7th century Bodvoc Stone sited on a Bronze Age barrow on the mountain. To the south-west, at Margam and Eglwys Nunnydd, there are important early religious associations. Here there is a concentration of religious sites and Early Christian Inscribed Stone monuments, associated with an early Welsh monastic focus. This is attested by both the great Cistercian abbey at Margam, the richest monastic house in Wales, founded in 1147 on a site presumed to be on or near its

predecessor; and also by an important church site at Eglwys Nunnydd, a dedication probably associated with St Non, the mother of St David, the Patron Saint of Wales. A major collection of Early Christian Inscribed Stones, ranging from the 6th to the 11th centuries, and found within or close to the area described here, is housed at the Margam Stones Museum next to the Abbey church.

- A9.3.217 Only part of the Abbey church and fragments of neighbouring buildings survive of this once great establishment - the entire area described here lay within the Abbey's granges. After the Dissolution, much of the Abbey property was acquired by Sir Rice Mansel and remained in the family until 1942. The family's residence was based on the Abbey's domestic ranges, which were added to and altered in a variety of building styles by successive generations. The house was demolished in the late 18th century and a new mansion, Margam Castle, was built in the 1830s. During the last two centuries, the main attractions at Margam have been the magnificent Georgian orangery, built in 1787-90 to provide a repository for an ancient and famous collection of citrus trees, and the surrounding pleasure gardens which were developed mainly in the 19th century. The house and gardens are set in a large walled park which originated in the Tudor period. After a period of neglect, Margam Park was eventually acquired in 1974 by the former West Glamorgan County Council, which began an extensive programme of restoration and rehabilitation.
- A9.3.218 The continuity of the military significance of the area is demonstrated by the medieval castle of Llangynwyd in the east of the area, the administrative centre of Tir Iarll (Earl's Land), a lordship of the lords of Glamorgan, and also more recently, on the southern crest of Margam Mountain, by the Graig Fawr Chain Home Low Radar Site, constructed as part of the Second World War defensive measures. Dominating prospects to the southwest, and outside the area currently described here, are the colossal Margam Abbey Steel Works and the Port Talbot area. They represent an example of a new landscape in complete visual contrast with, and out of all proportion to, the earlier, adjacent, more subtly grafted landscape described here.

¹⁰ http://www.ggat.org.uk/cadw/historic_landscape/margam/english/mynydd_margam_main.html

Appendix B – Descriptions of Historic Character Areas

A9.3.219 These descriptions are taken from the GGAT website.

HLCA 001 Margam Abbey and Castle

A9.3.220 Significant early medieval/medieval ecclesiastic and monastic centre with church and cemetery; important early medieval ecclesiastic/secular settlement and administrative focus; important and influential post-medieval gentry estate and deer park; registered parkland and gardens; post-medieval vernacular and other notable buildings; important relict multi-period/multi-functional archaeological landscape; buried archaeology includes cropmarks and find scatters; Ancient and other broad leafed woodland and plantation; important historic associations.

Historic Background

A9.3.221 This outstanding landscape, sheltered by wooded slopes to the east and located between the hills and the sea on the course of the former Roman communication route to West Wales, was an area of substantial religious importance during the early medieval period and subsequently during the medieval period when the great Cistercian Abbey of Margam was constructed.

A9.3.222 The area is largely coterminous with the Margam Country Park and is included on the Register of Parks and Gardens in Wales (Cadw Ref number PGW (Gm) 52 (NEP), where it is evaluated as being of grade I status (Cadw; ICOMOS UK, 2000, Glamorgan: Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales. Part 1 Parks & Gardens). Of particular importance within the area is the very fine walled deer park, the banqueting house façade, the outstanding Georgian Orangery and Citrus House and 19th century gardens with their fine collection of trees and shrubs, associated with famous plant hunters of the Victorian age such as Frank Kingdon Ward. The 1950s garden of Twyn-yr-hydd is a delightful and well-preserved period piece within the park (Cadw; ICOMOS UK, 2000).

A9.3.223 The park can be divided into three main areas, two of which are within the current HLCA: the first is the low-lying ground to the south, bounded on the west by the main grounds and gardens and on the north by the steep ridge of Craig-y-Lodge; secondly, the wooded valley, lake and hillfort at the west end of the park; and finally outside the current HLCA, the northern part of the park (HLCA 015 Upper Park and Ton-y-grugos), situated on a high, rolling plateau above the ridge, and bounded by the valley of Cwm Philip to its north-west. Each part differs slightly in character and use. Hall's estate map of 1814 shows these three varying areas and gives them Little Park, Great Park and Upper Park (HLCA 015), respectively.

A9.3.224 The historic landscape area of Margam Abbey and Castle contains a nationally important and impressive collection of architecture and sculpture unparalleled elsewhere in Wales and spanning an entire millennium, from the 9th to the 19th centuries. The long-standing strategic and administrative importance, based on its prime location at the boundary between the uplands and the sea is demonstrated by the remains of all periods from the late prehistoric to the post-medieval. The importance of the area as an early medieval ecclesiastic focus is also evident from Early Christian Monuments (inscribed and decorated stones) found in the vicinity of the Cistercian Abbey (including the Conobelin, Pompeius, Ilqui, Bodvoc and Grutne stones, among others). The earlier existence of a polygonal or circular churchyard enclosure around the Abbey church at Margam is depicted in Hill's Estate Survey of 1814, an additional indication of the whereabouts of the early

medieval church site. A further early medieval ecclesiastic site has also been tentatively identified at Cryke, Capel Mair (PRN 0765w; Hen Eglwys) based on churchyard morphology, with evidence of a circular or polygonal enclosure/church yard (Evans 2003). A find of imported Frankish glass indicates the site was open to wider patterns of exchange and trade during the early medieval period (cf Hen Gastell, Wilkinson 1995). The hillfort of Mynydd-y-castell (SAM Gm 162), in terms of morphology and location, is at variance with most of the other 'defended' enclosures (see sections 6.4 - 6.5) within the historic landscape, being of a massively defended promontory or summit type (similar to but on a larger scale than the site at Hen Gastell), with a possible internal dwelling platform. While Mynydd-y-castell is considered to be of late prehistoric date (RCAHMS), the site may well prove to be a high-status secular settlement and administrative focus for the region during the early medieval period.

A9.3.225 In 1147 the lands at Margam were granted by Robert of Gloucester, lord of Glamorgan, to St Bernard's abbey of Clairvaux, for foundation of a new Cistercian house of Margam. The nave of the 12th century church survives, in use as the parish church. At the start of the 13th century the Abbey was re-constructed by Abbot Gilbert (1203-13) and the chapter house (standing but lacking its vault, which fell in 1799) and the eastern part of the church, presbytery, choir and transepts date from this time. Following the dissolution in 1536, Sir Rice Mansel of Oxwich and Old Beaupre acquired most of the ex-monastic estates. By the late 16th century a 'faire and sumptuous house' had been erected, incorporating some of the monastic buildings, and stables added during the late 17th century.

A9.3.226 Under Thomas Mansel Talbot the mansion at Margam was abandoned in favour of Penrice Castle on Gower and developed as a pleasure garden, finalised by 1814, and dominated by an imposing Orangery in the Palladian style the largest in Britain, built 1787 - 90 to designs by Anthony Keck. The present internal layout of the park is largely the work of C R M Talbot, who transformed it from 1828 onwards, after returning the family seat to Margam. He was also responsible for the construction of the new Tudor-style house (1830-5 by Thomas Hopper; site architect - Edward Haycock). The irregular plan and pinnacled, and castellated skyline of the house give it a romantic appearance. It is built of local Pyle ashlar stone, arranged around three courtyards, one in the centre of the main block and two former service courts to the east. There are two main storeys, with a gabled third storey. The surfaces of the building are ornamented with carvings and sculpted heraldic panels. A dramatic two-storeyed octagonal tower with attached stair turret and surmounted by a viewing room is located at the centre of the building. The house is aligned east-west with its main entrance front on the north. Another interesting structure erected during the period is the 'temple of the four seasons', which incorporates the façade of the late 17th century Summer Banqueting House, re-erected in 1835.

A9.3.227 The park contains a number of other typical estate buildings of the 1840s in Tudor style, also attributed to Haycock such as the west lodge near the church (gabled, tall chimneystacks).

A9.3.228 The former village of Margam, a post-medieval foundation indicated on an estate map of 1813 and depicted on the Delamotte painting of Margam (NMW; early 19th century), was located near the surviving almshouses, a linear development leading from the Abbey gateway. This settlement appears to have been cleared away during the 1830s and 40s, its site incorporated into the kitchen

gardens, and the inhabitants rehoused at a new settlement at Groes (RCAHMW Glamorgan, Adams, D J, 1986).

Historic Landscape Characteristics

A9.3.229 Margam Abbey and Castle, an extensive valuable recreational/open space and tourism resource, lies partly within a Conservation Area, and is approximately coterminous with Margam Park registered garden; the park, roughly triangular and mostly bounded by a substantial rubble stonewall, is of varying character and situated between the ridge of Mynydd Margam, to the north and north-east, and the coastal plain to the west.

A9.3.230 The area is characterised as a multi-period landscape of outstanding historical importance and includes significant remains from the prehistoric, early medieval, medieval and post-medieval periods, and has Tudor, eighteenth-century and nineteenth-century gardens and landscapes. The area formed a significant ecclesiastic/monastic estate with imposing medieval Cistercian Abbey church and cemetery, later converted to an important and influential post-medieval gentry estate and deer and Landscape Park with pleasure grounds, gardens and former kitchen garden. The area has important examples of medieval ecclesiastic and post-medieval secular and vernacular architecture, many listed and some scheduled.

A9.3.231 The area is an important relict archaeological landscape including pre-historic, medieval and post-medieval settlement/fields and pre-historic 'defensive' features, such as Mynydd-y-Castell hillfort (SAM Gm 162), a dominant landscape feature in itself. The relict features are complimented by buried archaeology, which is evidenced by cropmarks and find scatters. The area contains a considerable wealth of medieval and post-medieval buildings and structures, most of which are listed, these are as follows: Margam Castle (grade II*); Orangery (grade I); Chapter House Ruins (grade I); Infirmary Ruins (grade I); the Abbey church of St Mary's (grade A); the churchyard walls and gate piers (grade II); Alms-houses (grade II); Temple of the Four Seasons (grade II); the remains of the monastic mill (grade II); Kitchen garden walls (grade II); Terrace walls and screen (grade II); Middle Lodge (West Lodge) (grade II); Gate piers and screen at East Lodge (grade II); Margam Park wall and gate piers along A48 (grade II); Ruins of Hen Eglwys (grade II). The scheduled ancient monuments of the area are Hen Eglwys (Gm 163); Margam inscribed and sculptured stones (Gm 21); Margam Abbey (Gm 5).

A9.3.232 Other characteristics include Ancient and other broad leafed woodland and 19th century plantation, important historic associations from the medieval and post-medieval period, and minor communication features such as the course of former old parish road between Taibach and Llangynwyd, diverted in 1829 to avoid crossing the park.

HLCA 002 Cefn Crugwyllt and Cwm Maelwg

A9.3.233 Enclosed agricultural landscape with historic monastic associations and relict medieval settlement features; Ancient and other woodland; post-medieval vernacular buildings.

Historic Background

A9.3.234 The historic landscape area of Cefn Crugwyllt and Cwm Maelwg is an area associated with the medieval abbey of Margam, specifically the grange of Cryke, identified with the farmstead of Grugwallt (Crugwyllt fawr) by Gray, however, no remains of the period are visible at Crugwyllt fawr today. Margam is known to have held land at 'Crikfeld' in 1291 and the Crown Sale of 1543 included

lands in 'Cryke', and the site of a water mill called 'Cryke Mylle' (within the adjacent HLCA 001). A 'bath' or holy well within a small rectangular structure is located (8030 8692) to the east of Crugwyllt fawr within Cwmbach (RCAHMW, 1982, 275-6; Williams, 1990, 48-52).

A9.3.235 Following the dissolution of the monasteries, the area, along with other former possessions of the Abbey, was purchased at the Crown Sale of 1543 by Sir Rice Mansel, and remained in his successor's hands until the breakup of the estate during the Second World War. Hill Estate maps (1814) show that the field pattern of the area was fully established by the start of the 19th century.

Historic Landscape Characteristics

A9.3.236 Cefn Crugwyllt and Cwm Maelwg is an area, which is characterised as an enclosed agricultural landscape with medieval/post-medieval settlement/fields and varied enclosures with distinctive boundaries including drystone wall, stone-faced banks and stone-faced banks with hedges. Documentary evidence indicates the area, set on an upland spur/ridge location, was formerly part of a medieval monastic grange belonging to the adjacent Cistercian Abbey of Margam. A prominent surviving monastic feature is the 'Bath House' or 'Bath' Holy Well (PRNs 00754w and 04796w; SAM Gm 545) of 14th or 15th century date.

A9.3.237 Most of the post-medieval vernacular buildings within the area are in an altered condition, though an interesting example of a Renaissance central stair-passage house remains at Cwm Maelog. Aerial photographic material indicates possible buried archaeology in the area represented by parch marks. The southern and northern edges of the area are characterised by remnant ancient woodland augmented by later plantation and 20th century forestry. Other characteristics include minor communication features, such as the medieval trackway on Cefn Crugwyllt.

HLCA 003 Cwm Brombil and Graig Fawr

A9.3.238 Steep west-facing hillside and deeply entrenched side valleys; mixed area of Ancient and other woodland and medieval/post-medieval agricultural enclosure developed from earlier valley core; multi-period relict landscape.

Historic Background

A9.3.239 The historic landscape area of Cwm Brombil and Graig Fawr comprises the west facing lower slopes of Mynydd Margam centred on the deeply entrenched valley part of the Margam Abbey estate during the post-medieval period. During the medieval period the area was associated with various granges of Margam Abbey's including Llangyfelach (later Maes y court), Cryke and Whitecross (Groeswen) granges; the latter south of the Wessac stream (Gwessig thought to derive from 'cwysig' a ditch or furrow) within Cwm-y-Geifr (previously Cwm yr Havod), and included Cwm Brombil, the site of a coal-pit owned by the Abbey. The area includes land formerly part of Lan Ton-y-Groes, an area of agricultural lay-land associated with the medieval Groeswen grange.

A9.3.240 During the early post-medieval period industrial use of the area, at the time part of the extensive Margam Estate, continued; a gristmill is mentioned at Cwm Brombil in 1633, further alluded to in 1693. Collieries were opened between 1777 and 1780 in Cwm-yr-Afr (Cwm-y-Geifr) and Cwm Brombil by the English Copper Company to meet demands of the Copper industry; by 1814 an additional level had been opened up in Cwm Brombil. In 1838 the Brombil Tramroad, (horse drawn) was constructed, connecting the Cwm Brombil to Taibach Copper works, then operated by Messrs. Vivian. Cwm Brombil Colliery finally closed in 1880.

A9.3.241 The area today is essentially a post-medieval agricultural landscape limited areas of earlier enclosure and ancient woodland; the agricultural hinterland is largely divorced from its post-medieval farmsteads, apart from that of Brombil Farm (17th-18th century).

Historic Landscape Characteristics

A9.3.242 Cwm Brombil and Graig Fawr comprises the steep lower slopes of Mynydd Margam overlooking the coastal zone with deeply entrenched side valleys; its character dominated by the landform of the area. Much of the area is characterised by Ancient and other broadleaved woodland, augmented by 20th century forestry. A more recent, but nonetheless dominant characteristic of the area is the area's post-medieval agricultural landscape, particularly towards the north of the area, in place by early 19th century; this is typified by large enclosures, developed within formerly unenclosed, and centred on evolved irregular fieldscape of small fields, possibly of medieval or earlier origin, within Cwm y Brombil itself. The area retains distinctive field boundaries. Of the area's post-medieval agricultural settlement only that within Cwm y Brombil, comprising the vernacular buildings of Brombil Farm (PRN 1731w) remains; this is a regional house with chimney backing on the entry and outside cross passage and fireplace stair and associated four-bay barn. The northern part of the area was associated with the farms of Groeswen and Groeswen pellaaf, which lay to the west of the historic landscape boundary. Important relict elements of the landscape survive from all periods and include prehistoric, medieval and post-medieval settlement/fields, and prehistoric military/defensive feature(s); such as the Halfmoon Camp (PRN 0745w; SAM Gm 477), the small univallate hillslope enclosure above Taibach (NPRN 54,457) of Iron Age date; medieval pillow mounds (NPRN 54,461) and a group of medieval house platforms (NPRN 54,458 and NPRN 54,459) located on Mynydd Brombil. The area was formerly monastic grange land (part of Groeswen Grange) associated with Margam during the medieval period. Aerial photographs indicate buried archaeology represented by crop/parch marks also characterise the area. Recent additions to the character of the area include defensive features associated with World War II, the Home Chain Low radar station (PRN 02995w; SAM Gm 488). Other characteristics relate to the industrial exploitation of the area's coal resources; post-medieval industrial archaeological remains: coal levels/shaft and colliery tramway all at Brombil.

HLCA 004 Mynydd Brombil and Ergyd Isaf

A9.3.243 Enclosed upland, primarily post-medieval enclosure; deserted medieval/post-medieval upland settlement landscape with relict prehistoric funerary and ritual features.

Historic Background

A9.3.244 The historic landscape area of Mynydd Brombil and Ergyd Isaf comprises an area of enclosed upland part of the Margam Abbey Estate, progressively enclosed from the 18th century and currently dominated by large regular fields. The area has a number of relict features chiefly associated with medieval/post-medieval agricultural settlement ranging from pillow mounds to house (hut) platforms, but also including round barrows, burial mounds of Bronze Age date.

Historic Landscape Characteristics

A9.3.245 Mynydd Brombil and Ergyd Isaf is characterised as an area of upland/mountain, part of the former extensive upland holdings associated with Margam, which saw progressive enclosure from at least the 18th century. The area is currently set down to dry pasture and arable fodder and characterised

by medium and large regular enclosures, mostly of twentieth century date. The main landscape importance of the area is as a relict archaeological landscape of deserted medieval/post-medieval upland settlement (PRN 01994w; NPRNs 15,371; 54,460; and 300,892) associated with field systems and other agricultural features, including pillow mounds. Settlement comprises medieval platform houses; these include a group of up to 8 house platforms (NPRN 300,892), two enclosures and a group of between 3 and 5 ditched pillow mounds. The area also has a small, but important prehistoric funerary and ritual element, two Bronze Age Cairns, or round barrows (SAM Gm 160) at Ergyd Isaf, the highest point within the area at 260m.

HLCA 005 Llangynwyd

A9.3.246 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.

Historic Background

A9.3.247 The historic landscape area of Llangynwyd is an important landscape with a variety of different elements. The focus of the area is on the nucleated medieval settlement of Llangynwyd and has been so since early medieval times, if not before. The area is essentially an evolved agricultural landscape, which retains indications of settlement and enclosure developed from the prehistoric, early medieval, medieval and post-medieval periods. The western fringe of the area is demarcated by late prehistoric defended enclosures such as Y Bwlwarcau and beyond the area, the camp at Rhyd Blaen-y-cwm, which control access to the high ground of Mynydd Margam. Y Bwlwarcau (SAM Gm 59), the more impressive of these important landscape features, comprises a multi-phase earthwork with an inner enclosure of 0.3 hectare. The inner enclosure, its entrance defined by a prominent bank, ditch and counterscarp bank, is surrounded by two or three concentric banks and ditches enclosing 7.2 hectares. The site partially overlies the slighter defences of an earlier and larger enclosure.

A9.3.248 During the medieval period occupation of the same sites appear to have continued or to have been re-established; platform houses (probably occupied as seasonal hafodtai/hafodydd, or summer dwellings associated with permanent winter settlement sites or hendrefi elsewhere in the vicinity) are typical settlement features, reoccupying the defended area of Y Bwlwarcau (PRN 00116/NPRN 301,303 and PRN 01323/NPRN 15,248; SAM Gm 59) and established around Lluet-wen (PRNs 00112-00114; NPRNs 15,349-15,351). These sites, in occupation during the 13th and 14th centuries, appear to have been progressively developed during the early post-medieval period, becoming established as permanent settlements in their own right during the period. The farmstead of Lluet-wen with its associated enclosures and post-medieval lluest site is a good example. Similar processes appear to have been in operation elsewhere in the area with a fragmentary settlement/enclosure pattern developing into the wider enclosed agricultural landscape seen today. The enclosure pattern immediately adjacent to the settlement of Llangynwyd retains fossilised elements of a medieval 'open field' system, namely fossilised quillies or strip field; a field pattern possibly imposed on the pre-existing early medieval settlement with its Llan or church enclosure.

A9.3.249 The church of St Cynwyd, which forms the focal point of the compact upland village of Llangynwyd, was initially established during the early medieval period, retains structural remains of the medieval period including the striking perpendicular tower and 14th century features such as a trefoiled lancet, priest's doorway with a keeled roll and twin trefoiled lancets. However much of the building dates from the drastic restoration undertaken between 1891-3 by G. E. Halliday at the bequest of the Miss Olive Talbot of Margam. The churchyard enclosure, or llan, at Llangynwyd is of a type roughly rectangular with curved corners, known elsewhere to date from the Roman period (cf. Whitton, Jarrett and Wrathmell, 1981). Other sites within the historic landscape offer possible prehistoric parallels, such as Caer Blaen-y-cwm, and Y Bwlwarcau, all of which have similar morphological elements. This could indicate, at least, reuse of an earlier enclosure, and settlement site, if not continuity of occupation over a considerable period; the site eventually developing a funerary and ritual significance during the early medieval period.

A9.3.250 The other main focal point within the area during the medieval period is represented by the Llangynwyd Castle (SAM Gm85); a Norman structure, reconstructed by Gilbert de Clare in the 1260s. The site, originally with a great gatehouse with twin drum towers, was partly excavated in 1906. The Royal Commission have identified close parallels between the plan and defensive arrangements of the gatehouse at Llangynwyd and the inner east gatehouse at Caerphilly Castle, built by Gilbert de Clare from 1268.

A9.3.251 During the post-medieval period landownership the area was held largely by four estates: Margam, the main landholder, Gadlys, Dunraven and Goetrehan. The development of the settlement of Llangynwyd during the period appears to have continued largely within the pattern established during the medieval period; a tight compact village unit centred around the medieval church and Llan including an additional terrace of rendered cottages ranging along the north side. The latter incorporated Bethesda Chapel of 1795-99 (senior church in the area for the Congregationalists/Independents); though modernised it retains two large segment-headed windows and a central single-storey porch. The parochial centre and village of Llangynwyd remained largely dependent on the local agricultural-based economy during the early post-medieval period, with a loose scatter of farmsteads of 16th and 17th century date, such as Llwydiarth and Gelli-lenor, being the main-stay of both the economy and of local Welsh culture. Many of the farms in the area have medieval precursors and associations with important Welsh cultural and literary figures.

A9.3.252 During the 19th century the rise of industry in the area, principally iron and coal, was advanced by the construction in 1828 of the Duffryn, Llynvi and Porthcawl Railway (engineer John Hodgkinson). The line, 4ft 7 in. gauge with edge rails of the type, which later became universal, ran for 25.7 km, and linked the ironworks of the Llynfi Valley to the port of Porthcawl. It is during this period that the focus of settlement in the area moved away from the old parochial centre of Llangynwyd to the then newly developing industrial settlement of Maesteg, in the valley bottom to the east.

Historic Landscape Characteristics

A9.3.253 Llangynwyd is characterised as an important relict archaeological landscape; a palimpsest preserved within an interesting medieval/early post-medieval agricultural landscape. The dominant relict features comprise numerous and generally impressive prehistoric and medieval settlement with associated field systems. The latter includes monuments, which have a 'military/defensive'

aspect, such as the impressive Iron Age Hillfort of Y Bwlwarcau (SAM Gm 59), with its pentagonal internal enclosure, and Llangynwyd Castle (SAM Gm 85), a medieval ringwork castle, with 12th and 13th century phases. There are also a number of deserted medieval settlements predominantly of the platform house type within the area; ranged along the upper western fringe of the area, close to the boundary of the open mountain of Mynydd Margam, these were associated with the management of cattle/sheep grazing on the grasslands of the open mountain.

A9.3.254 Also characteristic of the area is the varied evolved/irregular field pattern, which includes remnant medieval strip fields and surviving corridors of Ancient and other broadleaved woodland. The character area, with its small nucleated-organic settlement centred on its medieval church, cemetery (early medieval foundation) and two holy wells, Ffynnon Gynwyd and Ffynnon Fair, retains a number of post-medieval vernacular buildings of interest, some of which are listed such as the Old House Inn (17th century core with thatched roof, listed grade II), Gilfach Ganol (16th century, with later additions, listed grade II), Llwydiarth (16th/17th century, listed grade II*), home of the Powell family, undersherifs to the Mansels of Margam during the 16th and 17th centuries and praised by Dafydd Benwyn (Tir Iarl poet fl 16th century), and Pentre Farmhouses (early-mid 17th century with attached farm range, listed grade II). Also of interest is the Corner House Inn, which was formerly the parish tithe barn; between 1761-62 used by Welsh Circulating Charity Schools promoted by the Rev Griffith Jones, Llanddowror. Many of the post-medieval settlements are considered to have medieval precursors, in particular Caer Emi, Gelli Eleanor (Gelli-lenor), and Pentre, among others in the region referred to in the Margam Charters of the 13th and 14th centuries.

A9.3.255 The area has important well-documented historic associations, a literary centre of Glamorgan during the Middle Ages up until the 17th century, in particular, associated with the chief bards of Tir Iarll. Rhys Brydydd, Gwilym Tew, Rhys Goch ap Rhiccert (fl mid-14th century), Rhisiart ap Rhys Brydydd and Dafydd Benwyn, among many others were bardic poets associated with the area. During the 18th century the area was associated with Wil Hopcyn (d 1741), author of one of the most famous of Welsh Love Songs, 'Bugeilio'r Gwenith Gwyn'; the locality being the setting for the famous, tragic romance of the 'Maid of Cefn-Ydfa'. A memorial to Wil Hopcyn was erected between the Old House and Corner House Inn in 1927. Antiquarians Rice Merrick and Iolo Morgannwg among others visited the area, which is also renowned for its superstitions and traditions such as 'Mari Lwyd, and Gwyl Mab Sant.

HLCA 006 Eglwys Nunydd and Cwrt-y-defaid

A9.3.256 Agricultural and residential area with important historic associations; important ecclesiastic landscape with early origins; post-medieval fieldscape; relict archaeological landscape of early medieval/medieval/post-medieval settlement; interesting post-medieval vernacular buildings; buried archaeological remains in the form of finds (including medieval inscribed stones) and parch/crop marks; important communication corridor (Roman and later)

Historic Background

A9.3.257 The historic landscape area of Eglwys Nunydd and Cwrt-y-defaid is part of the Margam estate adjacent to the main transport corridor in the area, ie Water Street, a coastal route in use since the Roman period, between Neath (Nidum) and Cardiff and ultimately Caerleon. The area is an ecclesiastic landscape of some importance being the site of an early medieval monastic settlement

associated with St Non, Mother of St David in the vicinity of the post-medieval farmstead of Eglwys Nunydd; many of the inscribed stones relocated to the Museum at Margam originated in the area. The ecclesiastic importance of the area continued under the Cistercian Abbey of Margam, when the area was farmed from the medieval monastic grange of Llanfugeilydd, Cwrt-y-defaid or Sheeps Grange with its medieval cemetery.

A9.3.258 Post-medieval features are an important element in today's landscape and comprise agricultural enclosure and settlement. Apart from the remains of Eglwys Nunydd farm, other notable post-medieval settlements include Old Park, a late 17th century L-plan two-storey house, with a kitchen at the outer end of each range and varied stone doorways, including one with an entablature on brackets. The house contains a late 17th century staircase said to have originated from the demolished Margam Abbey mansion.

Historic Landscape Characteristics

A9.3.259 Eglwys Nunydd and Cwrt-y-defaid, set on the low-lying coastal fringe, is characterised as an agricultural and residential area with important historic associations. The area is an ecclesiastic landscape of some importance. The area of the post-medieval farmstead of Eglwys Nunydd is known to be the site of an early medieval monastic settlement associated with St Non, Mother of St David. The ecclesiastic importance of the area is reinforced by the existence of a medieval monastic grange belonging to the Cistercian Abbey of Margam.

A9.3.260 The strongest characteristic of the area today lies in its varied post-medieval fieldscape of both irregular/evolved and regular large fields interspersed with occasional coppices or coverts of broad-leaved woodland. While the area's relict archaeological landscape of early medieval/medieval settlement is of interest, the standing post-medieval agricultural buildings are now the most characteristic visual element in the landscape. The area contains a number of post-medieval vernacular buildings including the Tithe barn, outbuildings and farmhouse at Eglwys Nunydd, the four-unit, central stair-passage house of Old Park (17th century, listed grade II), the barn at Kenfig House, and the 18th century Cwrt-y-defaid Cottages, for example.

A9.3.261 Less visible but nonetheless important characteristics of the area are buried archaeological remains, ranging from finds (including medieval inscribed stones) to parch/crop marks. The area has also formed an important transport/communication corridor since the prehistoric period to the present day, and is bounded by the B4283, route of the medieval Water Street (also known as Heol y Sheet, Heol Las, etc), and the current A48 main road.

A9.3.262 A recent addition to the built character of the area is the dense clustered or nucleated planned 'executive-style' settlement based around converted post-medieval farmstead of Eglwys Nunydd.

HLCA 007 Graig Goch and Heol Newydd

A9.3.263 An agricultural landscape of small evolved/irregular fields; scatter of post-medieval farmsteads and cottages

Historic Background

A9.3.264 The historic landscape area of Graig Goch and Heol Newydd is an area of mixed agricultural enclosure and woodland, part of the post-medieval estate of Margam; large tracts of Margam estate land of similar character exist to the southeast beyond the boundaries of the historic landscape.

The HLCA encompasses the post-medieval farmsteads/settlements of Graig Goch and Heol Newydd, the latter a building shown on an estate map of 1814, and further detailed on the first edition.

Historic Landscape Characteristics

A9.3.265 Graig Goch and Heol Newydd is characterised as an area of low-lying undulating agricultural landscape along the base of the wooded cliffs of Graig-Goch. Typically, the area comprises small evolved/irregular fields, which have in places partially reverting to broadleaved woodland and unmanaged scrub. The area is reminiscent of the landscape to the east around the former monastic grange site of Hafod Heulog. The area contains characteristic irregular hedged field boundaries and a loose dispersed settlement pattern of post-medieval farmsteads and cottages.

HLCA 008 Margam Village

A9.3.266 Post-medieval estate village with 20th century ribbon addition; post-medieval (17th-19th century) vernacular buildings and 20th century suburban residences.

Historic Background

A9.3.267 The historic landscape area of Margam Village comprises the small hamlet with early post-medieval origins, originally named Pound, after the enclosure where stray sheep from Mynydd Margam were held prior to being sold at Taibach market. The main estate village associated with Margam Park, however, lay slightly further to the north at Groes, constructed to rehouse villagers from the earlier post-medieval village within the confines of Margam Park demolished during the 1830s and 40s. Groes, which had been laid-out by Haycock, was in turn entirely removed by the construction of the M4 motorway during the latter half of the 20th century.

Historic Landscape Characteristics

A9.3.268 Margam Village is characterised as a residential area, which has developed from the estate village associated with Margam Abbey/Margam Castle. The original settlement was a loose cluster of post-medieval farms and cottages, in the local vernacular/estate tradition. Characteristic features of the historic landscape area are post-medieval (17th-19th century) vernacular buildings, such as the Old Vicarage (formerly Margam Cottage), Margam (Listed grade II; early 19th century), Margam Cottage (formerly Cwm Cottage), a post-medieval house (Listed grade II; 1693, direct entry, end chimney, hall, outer room, formerly thatched, farm buildings), and Grove Cottages (Listed grade II; mid-late 19th century). During the 20th century, ribbon development of suburban residences augmented the residential nature of the area. Other characteristic features include gardens/cultivation plots.

HLCA 009 Cwm Dyffryn and Cwm Farteg Railway Corridor

A9.3.269 Industrial/public railway/tramroad corridor; industrial railside settlement (terraced housing and large cemetery); former agri-industrial function.

Historic Background

A9.3.270 The historic landscape area of Cwm Dyffryn and Cwm Farteg Railway Corridor reflects the emerging industrialisation of the area from the medieval period. Goytre is known to have been the site of 'Fredulles Mills' (water and fulling) on the Ffrwdwyllt, associated with the monastic grange

of Hafod-y-Porth (HLCA010), one of which was perhaps the 'New Mill' of 1520. These may have been located near the site of the Dyffryn Mill (corn) depicted on the 1st edition OS map of 1884. Following the dissolution, the area had formerly been monastic land farmed from the grange of Hafod-y-Porth, was transferred along with other monastic property to the Margam estate.

Historic Landscape Characteristics

A9.3.271 Cwm Dyffryn and Cwm Farteg Railway Corridor is characterised chiefly as a communications route, primarily the route of the now disused line of the Port Talbot Railway (PTR) between Port Talbot's Dyffryn Junction and Maesteg, via Bryn, built c. 1898. The area also encompasses the route of the earlier Goetre Level Tramroad (1st edition OS 1885) towards Margam Copper Works, west of the area. Other transport features include minor post-medieval road, lanes and tracks.

A9.3.272 Another major characteristic of the area are early 20th century industrial railside settlements, namely at Goetre (East Street and Emroch Street) and at Bryn (Station Terrace and Gallt-y-cwm Terrace); here the earlier 19th century industrial settlement associated with the Bryn Colliery and Tramway was eventually expanded around the later railway (PTR) station. The industrial settlement (early 20th century) is characterised by linear ribbon and grid street patterns; the earliest characteristic building type being the terraced house, those at Goetre (ie East Street and Emroch Street) have chimneys set at an angle to the street frontage. Later 20th century social housing predominates. A significant visual feature at Goetre is its large cemetery (constructed according to plans finalised in 1915). The area also contains industrial remains of the 19th century, such as the disused Goetre Level (coal; 1st edition OS 1885).

HLCA 010 Mynydd Margam Forest

A9.3.273 Extensive 20th century forestry plantation (Ancient and other broadleaved 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.

Historic Background

A9.3.274 The historic landscape area of Mynydd Margam Forest comprises an area of former open mountain and enclosed valleys associated with the Cistercian Abbey of Margam, specifically Hafod-y-Porth Grange (SS 80128 8986), and that of Cryke Grange and Margam Abbey itself, the latter outside the character area boundary. The area retains important remains of a grange and associated chapel at Hafod (Hafod-y-Porth). Following the dissolution of the monasteries the monastic properties of the area became part of the Margam Estate.

Historic Landscape Characteristics

A9.3.275 Mynydd Margam Forest is chiefly characterised by extensive 20th century forestry plantation. The area, now largely masked by modern forestry, encompasses a mixture of formerly unenclosed and evolved/irregular and varied enclosure (Figure 11a) detailed on estate plans of 1814 and the 1st edition OS 6" maps of the 1884/5. The unenclosed areas, formerly open mountain are Mynydd Margam, itself (Figure 11a: HLCA 010C) and Mynydd Bach (Figure 11a: HLCA 010A); the areas of enclosed land (Figure 11a: HLCA 010B and D).

A9.3.276 The area is also characterised by tracts of Ancient Woodland, notably within the valleys which cut the flanks of Mynydd Margam, notably Cwm Maelog (partly replanted with conifers in 1858), Nant Cwm-y-Garn, and Cwm Nant-y-Glo, with further broadleaved woodland within Nant Cwm Wernderi (1st edition OS 1884). The higher ground, formerly open heath was planted under the auspices of the Forestry Commission following World War II. The area, part of the extensive monastic lands associated with Margam Abbey and farmed from granges at Hafod (Hafod-y-Porth) and Cryke at Margam itself, was formerly open mountain grazing/grouse moor with adjacent areas of enclosed, but marginal land.

A9.3.277 The most important characteristic of the area is as a relict archaeological landscape of multiperiod date, with remains dating from the prehistoric, medieval, and post-medieval period, primarily: settlement and fields, prehistoric funerary and ritual, and prehistoric military features. Principal sites include Bronze Age cairns as at Ergyd Uchaf (SAM Gm 159) and at the head of Cwm Cynffig, ie a ring cairn, the site of the Bodvoc stone (SAM Gm 443) and Twmpath Diwlith (PRN 00754w), and the scheduled prehistoric site, an oval enclosure known as the 'Danish Camp' (SAM Gm 056). The area is also significant as an early and well-established communication corridor, based on ridgeway routes, which have been used from the prehistoric period to, in some cases, up to the present day. The most important of these routes is Ffordd-y-gyfraith, (also known as Cefn Ffordd), which runs along the ridge of Mynydd Margam via Rhyd Blaen-y-cwm and southeast towards Mynydd Baedan (RCAHMW 1976, Vol I, II and III; Rees 1932; Yates 1799 map). It is considered that impact of clearance and climatic change towards the end of the Bronze Age resulted in environmental conditions conducive to the formation of blanket peat; this affected the dissected plateaux of Mynydd Margam as elsewhere in the upland Glamorgan (Caseldine 1990); there is some potential for survival of environmental and other indicators associated with the Bronze Age and earlier landscape. Afforestation with its associated drainage, during the latter half of the 20th century may have had a detrimental impact on the survival of environmental material.

A9.3.278 Archaeological features throughout the area are otherwise predominantly associated with either post-medieval upland agriculture and subsistence practice, typified by farms, farmsteads, barns, sheepfolds, and at least one potential pillow mound, or associated with industrial use; the latter include quarries, gravel pits, collieries (all old coal levels depicted on the 2nd edition OS map of 1900) and charcoal burning sites. The area is also associated with minor water supply. Boundary stones, delineating post-medieval (or even earlier) land divisions, are also numerous landscape features.

A9.3.279 The visible settlement pattern of the area, while essentially post-medieval in its final phase, comprising a loose dispersed scatter of farmhouses and cottages, including Blaen-Maelwg, Llan Ton-y-Groes, and Nant-y-Glo farmsteads, and farm buildings at Wernderi and Hafod, is considered likely to have medieval precursors.

HLCA 011 Waun-y-Gilfach

A9.3.280 20th century forestry plantation; former unenclosed 'Waun'; footpaths and tracks.

Historic Background

A9.3.281 The historic landscape area of Waun-y-Gilfach comprises a small, discreet area of forested hilltop formerly open mountain moorland or 'waun' associated with surrounding farms (Gilfach-uchaf,

Gilfach-ganol, and Gilfach-isaf and Foel-fach). The area was divided between the landed estates of Margam and Gadlys from at least the early 19th century, if not before.

Historic Landscape Characteristics

A9.3.282 Waun-y-Gilfach is characterised as an area of 20th century forestry plantation on land formerly unenclosed 'waun'. The area, a low hilltop south of Cwm Cae-lloi, contains little in the way of known archaeological remains, apart from minor communication features such as tracks and footpaths. The area is also bounded and subdivided by high dry-stone walls of 18th/19th century date. Its main importance is as a setting for the scheduled medieval Llangynwyd Castle in the adjacent area HLCA 005.

HLCA 012 Nant y Gadlys and Nant Bryncynan

A9.3.283 Ancient and other broadleaved woodland; medieval/post-medieval agricultural settlement/fields; post-medieval vernacular buildings; industrial (milling) archaeology.

Historic Background

A9.3.284 The historic landscape area of Nant y Gadlys and Nant Bryncynan is a complex of wooded stream valleys associated with the Gadlys estate. Located within the area is Gadlys; the gentry house at centre of the estate, dating from between the 16th and 18th centuries. The house belongs to the Renaissance group: central stair-passage type with gable-entry stone stairs (without outshut), broach stops on ceilings beams, thatched roof, and bakehouse. Documentary references indicate the existence near Gadlys Farm of a chapel (and associated cemetery) dedicated to the early medieval Welsh Saint, St Illtud (Ylltit), and a holywell at Gilfach-isaf during the medieval period.

A9.3.285 Nant y Gadlys contains a network of leats and other remains associated with the area's past use for milling, the factory known as the Gadlys is mentioned in the Margam charters as Tal-y-Fedw; the grist mill at Tal-y-Fedw, Cwmfelin, appearing in the early Margam manuscripts. The corn mill is mentioned in several 16th and 17th century manorial surveys (the only mill recorded for the manor until 1689). One survey dated 1666, indicated one 'Welsh acre' of underwoods and rough grazing went with the mill. By the 19th century the site was in use as a flannel/woollen mill, abandoned and partly destroyed by its proprietor, John Joseph, during the 1840s, it was later adapted for use as a brewery and subsequently as a chemical works for a time. Later the site was returned to woollen production when John Jones, owner of the Cwmfelin woollen factory relocated his plant to Tal-y-Fedw, following agreement with the Llwydarth Tinplate Co. The factory appears to have closed during the 1920s and was in ruin by 1949 (Richards, B 1989).

Historic Landscape Characteristics

A9.3.286 Nant y Gadlys and Nant Bryncynan is characterised as an area of surviving Ancient Woodland with other broadleaved woodland within deeply entrenched stream valley. The character of the area, which lies at the heart of the Gadlys Estate, is largely dependent on its post-medieval agricultural fieldscape and associated scatter of vernacular buildings. An important characteristic element of this landscape is in the form of industrial archaeological remains associated in particular with corn milling, and later the woollen industry; features include millraces. Other landscape features include the area's network of footpaths and tracks.

HLCA 013 Upper Cwm Kenfig

A9.3.287 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.

Historic Background

A9.3.288 The historic landscape area of Upper Cwm Kenfig comprises a remnant of a formerly much more extensive area of upland grazing, part of the Margam Estate during the post-medieval period and previously held by the Cistercian Abbey of Margam. The most visible remains in the area are relict prehistoric and medieval features, such as the impressive Iron Age Camp or Hillfort of Caer Blaen y Cwm (SAM Gm 58; RCAHMW. Glamorgan Inventory, Volume 1, Part 2), which dominates the upper portion of Cwm Cynffig, the Kenfig Valley. This site is one of a number in the vicinity, which appear to be controlling access between the valleys, ridgeway routes and the higher pastures of Mynydd Margam.

A9.3.289 Finds of flint tools (PRNs 05028w; 05029w; and 02102w) dating from the Mesolithic to the early Bronze Age, and several funerary and ritual features, specifically, burial mounds or cairns of Bronze Age date, such as Twmpath Diwlith (PRN 754w), among several excavated on behalf of the National Museum of Wales in 1921 (RCAHMW. Glamorgan Inventory, Volume 1, Part 1), indicate a considerable period of use if not occupation, prior to the establishment of the hillforts of the area during the late Bronze or Iron Age.

A9.3.290 Other characteristic landscape features within the area are the ridgeway routes, such as Heol-y-Moch, and Ffordd-y-gyfraith, (also known as Cefn Ffordd); the latter runs along the ridge of Mynydd Margam via Rhyd Blaen-y-cwm and southeast towards Mynydd Baedan (RCAHMW 1976, Vol I, II). The area is also crossed by the route of the former parish road from Taibach to Llangynwyd via the 'Cross of the Hand' (George Yates Map of 1799); this 'diverted' (ie closed off to public use) in 1829 to avoid crossing Margam park. Many of the stretches of 'intrenchments' (1st edition 6-inch OS map) and Holloways in the area can be interpreted as the remnants, and variations, of these important routes.

Historic Landscape Characteristics

A9.3.291 Upper Cwm Kenfig is characterised by its enclosed and partly semi-improved pasture. The area represents a surviving fragment of the once extensive open upland grazing of Margam Mountain. The overriding characteristic of the area is as an important surviving relict archaeological landscape with a long continuity of use. The area is a multiperiod, multi-functional upland palimpsest, which comprises prehistoric and medieval settlement/fields, prehistoric funerary and ritual features, including burial cairns of the Bronze Age, eg Twmpath Diwlith and prehistoric enclosures, upland agricultural landscape aspects, such as Caer Blaen y Cwm Iron Age Camp or Hillfort (SAM Gm 58) with associated hollow way and crossridge dyke. Other relict features include prehistoric and medieval trackways, such as Heol y Moch, Ffordd-y-gyfraith, while industrial features, such as quarries, associated tracks and a tramroad (2nd edition 6-inch OS map) attest to characteristic exploitation of the uplands during the post-medieval period. The area also contains buried archaeological remains in the form of parchmarks and find-scatters.

A9.3.292 It is considered that impact of clearance and climatic change towards the end of the Bronze Age resulted in environmental conditions conducive to the formation of blanket peat; this affected the dissected plateaux of Mynydd Margam as elsewhere in the upland Glamorgan (Caseldine 1990); potential exists for survival of environmental and other indicators associated with the Bronze Age and earlier landscape.

HLCA 014 Moel Ton Mawr

A9.3.293 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.

Historic Background

A9.3.294 The historic landscape area of Moel Ton Mawr comprises a small, detached area of 20th century plantation, formerly part of the extensive open mountain pasture of Mynydd Margam and once similar in character to HLCA 013. The area was formerly part of the property of the Cistercian Abbey of Margam and later part of the Margam Estate during the post-medieval period.

Historic Landscape Characteristics

A9.3.295 Moel Ton Mawr is characterised as 20th century forestry plantation on former open unenclosed mountain, similar to HLCA010. Although disparate, features typical of the wider upland landscape are retained within the area's coniferous forest; these are primarily relict in the form of a single known funerary and ritual feature, a Bronze Age cairn (PRN 00755w), and an intrenchment (PRN 03883w), or Holloway, similar to those in HLCA 013 and HLCA 015, the remains of former upland trackways. It should be noted that the area contains peat deposits with the potential for environmental and other indicators relating to the Bronze Age and earlier landscapes; however, afforestation may have impacted on the quality of the surviving record.

HLCA 015 Upper Park and Ton-y-grugos

A9.3.296 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: parchmark.

Historic Background

A9.3.297 The historic landscape area of Upper Park and Ton-y-grugos encompasses the former Upper Park, part of the Margam Estate's former post-medieval deer park; the area is identified as distinct and separate from the rest of Mynydd Margam, enclosed by at least the early 19th century, if not before. The enclosure, which surrounds the western part of Upper Park from that immediately north of Ton mawr, appears to respect the lines of early intrenchments or hollow ways; a medieval or earlier date for the boundaries could be postulated and these may even reflect the line of earlier stock controlling barriers associated with adjacent late prehistoric enclosures.

A9.3.298 Between 1814 and the 1870s the western part of the park has been further subdivided along regular lines by 'cloddiau' or stone-faced banks into rectangular enclosures. Place name evidence also suggests the established use of part of the area as layland (Ton-y-grugos); the area is shown partly enclosed at the time of Hall's estate survey of 1814, fully established by the publication of the first edition OS.

A9.3.299 The overriding significance of the area, however, is based on its relict archaeology: specifically the nationally important prehistoric 'defended' enclosures, the camp E of Ton mawr and Caer Cwm Phillip (both scheduled) and numerous entrenchments or hollow ways of some antiquity.

A9.3.300 The location of the post-medieval cottage of Ty'n-y-parc on the edge of the enclosed land adjacent to Ton mawr and alongside the track to Llangynwyd is interesting and is typical of a squatter or landless estate worker's settlement.

Historic Landscape Characteristics

A9.3.301 Upper Park and Ton-y-grugos is characterised by enclosed improved and semi-improved upland grazing (formerly deer park associated with Margam Park) set out as large regular enclosures with distinctive field boundaries, including hedge banks, cloddiau and drystone walls. The area is an important relict landscape with characteristic fields and associated settlement dating to the prehistoric, medieval and post-medieval periods. The prehistoric settlement element comprises exclusively 'defended' enclosures, such as the scheduled single-banked enclosure or camp to the E of Ton mawr (SAM Gm 090) and the angular defended enclosure of two polygonal banks with annex, known as Caer Cwm Phillip (SAM Gm 057), both of which date to the Iron Age. Aerial photographs indicate other associated features surviving as parchmarks. The area is closely related to the adjacent area to the northeast, HLCA013, not only in terms of prehistoric settlement/agricultural use, but also by common usage as a communication corridor from the prehistoric period to post-medieval period connecting Margam with Llangynwyd, important centres from at least the early medieval period if not earlier. A particularly striking element of the landscape are the numerous 'intrenchments' noted on the 1st edition OS map extending SW-NE through the area; dates ranging from prehistoric, early medieval and medieval has been postulated for these features which appear to represent a mixture of hollow ways or trackways and possibly stock controlling barriers. The Moel Ton Mawr Tramway (2nd edition OS map 1900) demonstrates the continued importance of the area as a communications corridor during the 20th century.

HLCA 016 Ton Mawr

A9.3.302 Enclosed agricultural landscape with possible medieval (or earlier origins); post-medieval settlement/fields; distinctive field boundaries; Ancient Woodland; footpaths and tracks.

Historic Background

A9.3.303 The historic landscape area of Ton Mawr, part of the Margam estate lands, once associated with Margam Abbey, encompasses an area traditionally layland (ie 'Ton', or 'Tir Porfa'), that is grazing land left fallow on a rotational basis. The field layout of the area, established by the early 19th century has evolved since; regular and linear fields are depicted on the 1814 survey with numerous quillies or strip fields shown, probably of medieval or early post-medieval date. By the publication of the 1st edition OS 6" map many of the latter have been amalgamated and the field pattern rationalised to produce the system in evidence today. Boundaries of medieval date are likely to remain fossilised in the surviving field pattern.

Historic Landscape Characteristics

A9.3.304 Ton Mawr is characterised as an enclosed post-medieval agricultural landscape with possible medieval (or earlier origins). The area's archaeological resource is largely unknown, although its proximity to neighbouring areas of high archaeological content such as HLCA 001 Margam Abbey

and Castle and HLCA 015 Upper Park and Ton-y-grugos might indicate significant, as yet unrealised potential. Post-medieval settlement, ie Ton Mawr Farm, and evolved but relatively regular medium sized fields, ranged along the lower SW facing slopes of Moel Ton Mawr are the dominant characteristics, along with distinctive field boundaries, including hedged banks, dry-stone walls and hedges. While an important tract of Ancient Woodland, Coed Ton-mawr defines the southern edge of the area along Graig-goch. Other characteristic features comprise agricultural footpaths and tracks.

HLCA 017 Cwm Dyffryn: Southern Valley Sides

A9.3.305 Post-medieval settlement/fields; varied field pattern and distinctive field boundaries; settlement pattern: dispersed and minor ribbon development; minor communications.

Historic Background

A9.3.306 The historic landscape area of Cwm Dyffryn: Southern Valley Sides comprises an area of enclosed agricultural land on the north-western flanks of Mynydd Margam, which has escaped afforestation. The area, part of the Margam Abbey Estate during the post-medieval period was farmed during the medieval period from Margam Abbey's grange at Hafod-y-porth. Though another monastic grange site has also been suggested at the site of the post-medieval farmstead of Gallt-y-cwm (Evans 1982, 21). Since the break-up of the Margam Estate during the mid-20th century the area's holdings appear to have become fragmented, some farmsteads have even been abandoned, for example Lletty-piod, a post-medieval direct entry, end chimney house with thatched roof.

Historic Landscape Characteristics

A9.3.307 Cwm Dyffryn: Southern Valley Sides, the surviving portions of enclosed agricultural landscape, along the southern side of Cwm Dyffryn, is characterised by post-medieval enclosure with a varied field pattern, dominated by evolved/irregular and small regular fields with distinctive and varied field boundaries, including stone-faced banks, stone faced-banks with hedges, hedges, earth banks and post and wire fencing. Settlement in the area is exclusively post-medieval in date and typically comprises loosely dispersed and minor ribbon development of farms and cottages; a pattern typical of settlement along the industrial urban fringe. Smallholdings appear to make up a significant portion of the overall land holdings and there is a notable concentration of corrugated iron outbuildings. Minor communication features make up the area's othr characteristic features, ie: footpaths, tracks and winding lanes.

Appendix C – Criteria for Determining Relative Importance

A9.3.308 The Scheduled Monument-based evaluation criteria for determining relative importance or value in Stage 4, steps (a), (b) and (c) set out below are derived from criteria applied in a historic landscape assessment of part of the Gwent Levels landscape of outstanding historic interest¹¹, and from work by the Gwynedd Archaeological Trust. These are examples of the types of criteria that may be used, however the determination of relative importance is a matter of professional judgement.

A9.3.309 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.

Table A9.65: Rarity

Rarity Value	Description
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.

A9.3.310 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.

Table A9.66: Representativeness

Representativeness value	Description
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.

A9.3.311 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.

Table A9.67: Documentation

Documentary Value	Description
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.

A9.3.312 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.

Table A9.68: Documentation

Group Value	Description
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.

A9.3.313 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.

¹¹ 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

Table A9.69: Survival

Survival Value	Description
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.

A9.3.314 Condition relates to the condition of elements in the landscape.

Table A9.70: Condition

Condition	Description
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.

A9.3.315 Coherence relates to how well the historic meaning and significance of the landscape is articulated by the historic themes, which 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.

Table A9.70: Coherence

Degree of coherence	Description
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.

A9.3.316 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.

Table A9.71: Integrity

Degree of integrity	Description
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.

A9.3.317 Potential relates to the potential within the landscape for future historic landscape study and analysis.

Table A9.72: Potential

Potential for further study	Description
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.

A9.3.318 Amenity relates to the potential value of elements to be developed as a public educational and recreational amenity.

Table A9.73: Amenity

Amenity Value / Potential	Description
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;

Amenity Value / Potential	Description
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.

A9.3.319 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.

Table A9.74: Associations

Value of associations	Description
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).

Appendix D – Gazetteer of Historic Assets Within Registered Landscape

Table A9.75: Gazetteer of Historic Assets within registered landscape

Reference	Name	Designation status	Condition (non-designated assets only)
GM056	Danish Camp	Scheduled Monument	
GM058	Roman Camp	Scheduled Monument	
GM545	Margam Medieval Bath House	Scheduled Monument	
GM488	Chain Home Low Radar Station, Margam	Scheduled Monument	
GM057	Camp N of Tonmawr	Scheduled Monument	
GM090	Camp 530m E of Tonmawr	Scheduled Monument	
GM159	Ergyd Uchaf Round Barrow	Scheduled Monument	
GM443	Site of Bodvoc Stone	Scheduled Monument	
GM477	Half Moon Camp	Scheduled Monument	
GM005	Margam Abbey	Scheduled Monument	
GM011	Margam Inscribed & Sculptured Stones	Scheduled Monument	
GM085	Llangynwyd Castle	Scheduled Monument	
GM160	Ergyd Isaf Round Barrows	Scheduled Monument	
GM162	Mynydd y Castell Camp	Scheduled Monument	
GM163	Hen Eglwys	Scheduled Monument	
GM557	Twmpath Diwlith Round Barrow	Scheduled Monument	
GM059	Y Bwlwarcau	Scheduled Monument	
GM52	Margam Park	Grade I Registered Park and Garden	
	Margam Park	Conservation Area	
	Llangynwyd	Conservation Area	
11243	Church of St Cynwyd	Grade II* Listed Building	

Reference	Name	Designation status	Condition (non-designated assets only)
11256	Llwydarth farmhouse	Grade II* Listed Building	
11352	The Old House Inn PH	Grade II Listed Building	
11353	Telephone call box in front of the Old House PH	Grade II Listed Building	
11373	Pentre Farmhouse, with attached farm range.	Grade II Listed Building	
11375	Gilfach-ganol farmhouse	Grade II Listed Building	
14148	St Mary's Abbey Church	Grade I Listed Building	
14149	Ruins of Chapter House and Vestibule of St Mary's Abbey	Grade I Listed Building	
14150	Ruined Undercroft at St Mary's Abbey	Grade I Listed Building	
14151	Alms-houses	Grade II Listed Building	
14152	Margam Orangery	Grade I Listed Building	
14153	Ivy Cottage including Facade of Former Banqueting House	Grade I Listed Building	
14155	Hen Eglwys	Grade II* Listed Building	
14157	Barn at Eglwys Nunydd	Grade II Listed Building	
14158	Old Park	Grade II* Listed Building	
14161	Churchyard Walls and Gate Piers to St Mary's Abbey Church	Grade II Listed Building	
14162	Kitchen Garden Walls including Vinery Glasshouse	Grade II Listed Building	
14163	Terrace Walls and Screen at Margam Castle	Grade II* Listed Building	
14164	Middle Lodge	Grade II Listed Building	

Reference	Name	Designation status	Condition (non-designated assets only)
14165	Cwm Cottage	Grade II Listed Building	
14166	Margam Cottage	Grade II Listed Building	
14167	2 Grove Cottages	Grade II Listed Building	
14168	Piers and Gates at East Lodge and Flanking Walls	Grade II Listed Building	
14169	Gateway and Quadrant Walls Leading to Twyn yr Hydd	Grade II Listed Building	
14170	Margam Castle	Grade I Listed Building	
20429	The Hopcyn Cross	Grade II Listed Building	
20430	Two chest tombs on S side of the Church of St Cynwyd	Grade II Listed Building	
20431	Group of five tombs S of the tower of the Church of St Cynwyd	Grade II Listed Building	
20432	Bee boles and stile in garden wall at Gilfach-uchaf farm	Grade II Listed Building	
20433	Ty'n-y-waun farmhouse	Grade II Listed Building	
20434	Group of 4 Hopkin and Jenkins tombs within iron railings on the W side of the path to the S porch	Grade II Listed Building	
20435	Group of nine memorials on the W side of the path to the S porch, Church of St Cynwyd	Grade II Listed Building	
20436	Jenkins Monument in the churchyard, Church of St Cynwyd	Grade II Listed Building	
20437	Churchyard walls around the graveyard, Church of St Cynwyd	Grade II Listed Building	
23263	Twyn yr Hydd	Grade II Listed Building	
23264	Citrus House	Grade II Listed Building	
23265	Retaining Wall adjoining Citrus House	Grade II Listed Building	
23266	Stone Steps in Terraced Garden	Grade II Listed Building	

Reference	Name	Designation status	Condition (non-designated assets only)
23267	Terrace with Pools and Flower Beds Fronting Margam Orangery	Grade II* Listed Building	
23268	Turbine House	Grade II Listed Building	
23269	Stones Museum	Grade II Listed Building	
23270	War Memorial	Grade II Listed Building	
23271	Pair of Gate Piers to the Former Margam House	Grade II Listed Building	
23272	Ornamental Pool	Grade II Listed Building	
23273	Former Changing Room	Grade II Listed Building	
23274	Monastic Baths	Grade II* Listed Building	
23275	Broadwalk Steps	Grade II Listed Building	
23276	Arch over Culvert	Grade II Listed Building	
23277	Farm Building at Twyn yr Hydd	Grade II Listed Building	
23278	Service Buildings including Courtyard Walls at Margam Castle	Grade II* Listed Building	
23279	Kitchen Garden Wall and Glass House at Twyn yr Hydd	Grade II Listed Building	
23280	Garden Wall at Twyn yr Hydd	Grade II Listed Building	
23281	Entrance to Twyn yr Hydd and Flanking Walls	Grade II Listed Building	
23285	Milepost near Margam Park Entrance	Grade II Listed Building	
23286	Milepost near Old Park	Grade II Listed Building	
23293	3 Grove Cottages	Grade II Listed Building	
01435.0m	Port Talbot Railway	Non-designated	Destroyed
GGAT00112m	Llest-wen (Cae Banc field) Platform, Maesteg	Non-designated	Near intact
GGAT00113m	Llest -wen 1 enclosure, Maesteg	Non-designated	Damaged

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT00114m	Lluest -wen 2 Platform, Maesteg	Non-designated	Damaged
GGAT00115m	Y BWLWARCAU WEST ROUND BARROW	Non-designated	Near destroyed
GGAT00116m	Y Bwlwarcau Hillfort, Llangynwyd Middle	Non-designated	Damaged
GGAT00117m	Y BWLWARCAU CAIRNFELD	Non-designated	Damaged
GGAT00118m	near Y Bwlwarcau Platform, Llangynwyd	Non-designated	Not known
GGAT00120m	EARLY CHRISTIAN MONUMENT AT LLANGYNWYD CHURCH	Non-designated	Damaged
GGAT00121m	FFYNNON GYNWYD, LLANGYNWYD	Non-designated	Not known
GGAT00122m	FFYNNON FAIR	Non-designated	Not known
GGAT00123m	CADAIREDDWARD	Non-designated	Not known
GGAT00124m	Llangynwyd Castle	Non-designated	Near destroyed
GGAT00274.0m	Hollow Ways, Gilfach-Uchaf	Non-designated	Not known
GGAT00362w	STAFFORD KNOT STONE	Non-designated	Moved
GGAT00733w	Pillow Mound, Tai Bach	Non-designated	Near intact
GGAT00741w	ERGYD ISAF 1	Non-designated	Damaged
GGAT00742w	ERGYD ISAF 2	Non-designated	Damaged
GGAT00743w	Earthwork in Tai Bach	Non-designated	Damaged
GGAT00745w	Half Moon Camp, Margam	Non-designated	Damaged
GGAT00746w	FYNNON PEDR	Non-designated	Near Intact
GGAT00749w	ERGYD UCHAF 3	Non-designated	Damaged
GGAT00750w	RHYD LLECHWS	Non-designated	Near destroyed
GGAT00751w	LLYNDWR FAWR SOUTHEAST	Non-designated	Damaged
GGAT00752w	LLYNDWR FAWR EAST	Non-designated	Damaged
GGAT00753w	BODVOC STONE RING CAIRN	Non-designated	Near destroyed

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT00754w	TWMPATH DIWLITH ROUND BARROW	Non-designated	Damaged
GGAT00755w	MOEL TON MAWR	Non-designated	Not known
GGAT00756w	Mynydd y Castell Hillfort, Margam	Non-designated	Not known, DAMAGED
GGAT00757w	Geulan Las Enclodure, Mynydd Margam	Non-designated	Near intact
GGAT00758w	Caer Cwmphilip or Moel Ton Mawr Earthwork, Margam	Non-designated	Near destroyed
GGAT00759w	Caer Blaen-y-cwm Enclosure, Margam	Non-designated	Near Destroyed
GGAT00760w	Hafod y Porth Grange/Chapel	Non-designated	Not known
GGAT00761w	Llanfugeil Ydd Mound	Non-designated	Damaged
GGAT00762w	Field Boundary, Margam	Non-designated	Not known
GGAT00763w	PORT TALBOT TUMULUS	Non-designated	Damaged
GGAT00764w	The Bath	Non-designated	Not known
GGAT00765w	Hen Eglwys Chapel/Cryke Chapel	Non-designated	Not known, DAMAGED
GGAT00766w	Cryke Mill	Non-designated	Damaged
GGAT00767w	CONBELIN STONE	Non-designated	Moved
GGAT00768w	THE GRUTNE STONE	Non-designated	Moved
GGAT00769w	MARGAM ORANGERY	Non-designated	Restored
GGAT00770w	ST MARY'S CHURCH AT MARGAM	Non-designated	Not known
GGAT00771w	ST MARY'S ABBEY, MARGAM (MARGAM ABBEY)	Non-designated	Damaged
GGAT00772w	Mynydd Margam Platform	Non-designated	Near intact, DAMAGED
GGAT00773w	Farmstead, Mynydd y Castell	Non-designated	Damaged

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT00774w	Danish Camp (Cwm Philip West), Margam	Non-designated	Damaged
GGAT00775w	Nant Cwm Philip Long Hut, Margam	Non-designated	Not known
GGAT00776w	Enclosure 530m E of Tonmawr	Non-designated	Damaged
GGAT00777w	Earthwork, Margam	Non-designated	Near intact
GGAT00778w	THE ENNIAUN STONE	Non-designated	Moved
GGAT00779w	EARLY CHRISTIAN MONUMENT AT MARGAM	Non-designated	Not known
GGAT00780w	STONE CROSS AT MARGAM	Non-designated	Moved
GGAT00782w	THE ILQUICI STONE	Non-designated	Moved
GGAT00783w	THE ILCI STONE	Non-designated	Not known
GGAT00808w	EARLY CHRISTIAN MONUMENT IN MARGAM STONES MUSEUM	Non-designated	Not known
GGAT00809w	BODVOC STONE	Non-designated	Moved
GGAT00885w	MARGAM VILLAGE	Non-designated	Destroyed
GGAT00910m	ST CYNWYD'S CHURCH AT LLANGYNWYD	Non-designated	Not known
GGAT00948.0w	DEER PARK	Non-designated	Not known
GGAT00949w	ERGYD ISAF	Non-designated	Near destroyed
GGAT00992m	Mound, Y Bwlwarcau Fort	Non-designated	Not known
GGAT01018.0w	Earthwork, MARGAM PARK	Non-designated	Not known
GGAT01069.0w	CEFN CRUGWYLLT	Non-designated	Not known
GGAT01076.0w	Road - Margam to Llangynwyd	Non-designated	Not known
GGAT01092w	Earthwork, Margam	Non-designated	Intact
GGAT01093w	Medieval Field, Margam	Non-designated	Intact
GGAT01094w	Craig Goch Platform, Margam	Non-designated	Damaged
GGAT01095w	Ridge and Furrow, Margam	Non-designated	Damaged

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT01096w	Quarry, Margam	Non-designated	Intact
GGAT01097.0w	PORT TALBOT	Non-designated	Not known
GGAT01099w	Ponds, Margam	Non-designated	Intact
GGAT01100w	Quarry, Margam	Non-designated	Intact
GGAT01101w	Ornamental Gardens, Margam Country Park	Non-designated	Intact
GGAT01140m	MEOL-TROED-Y-RHIW	Non-designated	Not known
GGAT01141m	MOEL-TROED-Y-RHIW	Non-designated	Damaged
GGAT01155m	MOUND AT Y BWLWARCAU HILL FORT	Non-designated	Not known
GGAT01155w	Circular mound, Mynydd Margam	Non-designated	Not known
GGAT01156w	WICKED WELL	Non-designated	Not known
GGAT01157w	LADY'S WELL, MARGAM	Non-designated	Damaged
GGAT01158w	Ffynnon Gyffyr	Non-designated	INTACT
GGAT01277m	GELLI LENOR	Non-designated	Not known
GGAT01323m	House Platforms, Y Bwlwarcau	Non-designated	Damaged
GGAT01378w	BROMAIL COAL LEVEL	Non-designated	Not known
GGAT01412w	CROSS BASE IN MARGAM PARK	Non-designated	Not known
GGAT01433m	FFYNNON IAGO	Non-designated	Not known
GGAT01561w	Ceramics find spot	Non-designated	Moved
GGAT01616m	CARVED STONE FROM SYCHBANT FARM	Non-designated	Not known
GGAT01739w	BLAENCYNEIRON	Non-designated	Not known
GGAT01875w	MARGAM CASTLE	Non-designated	Near intact
GGAT01993w	House Platform, Tai Bach	Non-designated	Near destroyed
GGAT01994w	Mynydd Brombil (PH49)	Non-designated	Not known

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT01995w	Quarry, Tai Bach	Non-designated	Not known
GGAT01996w	Half Moon Enclosure, Margam	Non-designated	Not known
GGAT02034m	Old House Inn, Bridgend	Non-designated	Near intact
GGAT02044w	Cwm Maelog Long Hut, Margam	Non-designated	Damaged
GGAT02102w	Group of tools, Neath Port Talbot	Non-designated	-
GGAT02183w	MARGAM ALMSHOUSE	Non-designated	Near intact
GGAT02184w	OLD VICARAGE	Non-designated	Restored
GGAT02208w	Find, MARGAM PARK	Non-designated	Not known
GGAT02209w	Finds, MARGAM PARK	Non-designated	Not known
GGAT02334m	GILFACH UCHAF	Non-designated	Intact
GGAT02341m	Gilfach Ganol Farmhouse, Bridgend	Non-designated	Intact
GGAT02365m	Pentre, Farmhouse, Maesteg	Non-designated	Intact
GGAT02610w	TAI BACH	Non-designated	Not known
GGAT02724w	WERNDERI	Non-designated	Near intact
GGAT02725w	CWRTYDEFAID COTTAGES	Non-designated	Near destroyed
GGAT02728w	LLETYPIOD	Non-designated	Intact
GGAT02729w	MARGAM COTTAGE	Non-designated	Intact
GGAT02735w	EGLWYS NUNYDD	Non-designated	Not known
GGAT02738w	MARGAM PARK (PART OF ROMAN ROAD RR60)	Non-designated	-
GGAT02739w	MARGAM ABBEY	Non-designated	Destroyed
GGAT02793w	MARGAM PARK	Non-designated	Near intact
GGAT02794m	GILFACH UCHAF FARM	Non-designated	Not known
GGAT02898w	ST MARY ABBEY, MARGAM (MARGAM ABBEY)	Non-designated	Near Destroyed

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT02945w	Cropmark, Pond, MARGAM PARK	Non-designated	Not known
GGAT02946w	Cropmark, MARGAM PARK	Non-designated	Not known
GGAT02947w	MARGAM PARK, BOUNDARY WALL OF FORMAL GARDEN	Non-designated	Not known
GGAT02948w	MARGAM PARK, COTTAGE (1 OF 2)	Non-designated	Not known
GGAT02949w	MARGAM PARK, COTTAGE (2 OF 2)	Non-designated	Not known
GGAT02950w	MARGAM PARK, FISHPOND (1 OF 2)	Non-designated	Not known
GGAT02951w	MARGAM PARK, FISHPOND (2 OF 2)	Non-designated	Not known
GGAT02952w	Features, MARGAM PARK	Non-designated	Not known
GGAT02978w	Event record	Non-designated	-
GGAT02979w	Drainage system, MARGAM PARK	Non-designated	Not known
GGAT02995w	Chain Home Low Radar Station, Margam	Non-designated	Not known, NEAR DESTROYED
GGAT03303w	SITE 11:	Non-designated	Not known
GGAT03329.0w	Trackway	Non-designated	Not known
GGAT03330.0w	S1 MANSELL ESTATE AVENUE	Non-designated	Not known
GGAT03331w	Fishponds, Margam	Non-designated	Not known
GGAT03332w	E3	Non-designated	Not known
GGAT03333w	E4, stone lined drain	Non-designated	Not known
GGAT03372m	MYNYDD MARGAM BOUNDARY STONE IV	Non-designated	Not known
GGAT03373m	MYNYDD MARGAM BOUNDARY STONE V	Non-designated	Not known

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT03374m	MYNYDD MARGAM BOUNDARY STONE VI	Non-designated	Not known
GGAT03375m	MYNYDD MARGAM BOUNDARY STONE VII	Non-designated	Not known
GGAT03478.0w	EGLWYS NUNNYDD	Non-designated	Not known
GGAT03654.0w	WATER STREET, HEOL Y SHEET, HEOL LAS, HEOL Y SPLOT	Non-designated	Damaged
GGAT03880w	MOEL TONMAWR QUARRY	Non-designated	Intact
GGAT03881w	MOEL TONMAWR OLD QUARRY	Non-designated	Intact
GGAT03883w	MOEL TONMAWR TRENCH	Non-designated	Not known
GGAT03884w	MOEL TONMAWR TRIG POINT	Non-designated	Not known
GGAT03885w	MYNYDD MARGAM TRIG POINT	Non-designated	Intact
GGAT03886w	MYNYDD MARGAM BOUNDARY STONE III	Non-designated	Not known
GGAT03887w	MYNYDD MARGAM BOUNDARY STONE II	Non-designated	Not known
GGAT03888w	MYNYDD MARGAM BOUNDARY STONE I	Non-designated	Not known
GGAT03889w	MYNYDD MARGAM TRIG POINT	Non-designated	Not known
GGAT03890w	CWM PHILIP SHEEPFOLD	Non-designated	Damaged
GGAT03892w	BLAEN-MAELWG GRAVEL PITS	Non-designated	Intact
GGAT03894w	BROMBIL SHAFT	Non-designated	Not known
GGAT03895w	BROMBIL OLD GRAVEL PIT	Non-designated	Not known
GGAT03896w	BROMBIL WATER-WELL	Non-designated	Not known
GGAT03898w	CWM FARMSTEAD	Non-designated	Damaged
GGAT03899w	BLAEN-MAELWG ENCLOSURE	Non-designated	Not known
GGAT03900w	RHYD LLECHWS STRUCTURE	Non-designated	Not known

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT03901w	BROMBIL COLLIERY TRAMWAY	Non-designated	Not known
GGAT03905w	NANT-Y-GLO FARMSTEAD	Non-designated	Damaged
GGAT03906w	BRYNALLWYN SHEEPFOLD	Non-designated	Near destroyed
GGAT03908w	MYNYDD BACH OLD COAL LEVEL	Non-designated	Destroyed
GGAT03909w	MYNYDD BACH CAIRN	Non-designated	Not known
GGAT03910w	HEOL Y MOCH ENCLOSURE	Non-designated	Not known
GGAT03911w	HEOL Y MOCH BOUNDARY STONE I	Non-designated	Not known
GGAT03912w	HEOL Y MOCH BOUNDARY STONE II	Non-designated	Not known
GGAT03913w	HEOL Y MOCH BOUNDARY STONE III	Non-designated	Not known
GGAT03914w	HEOL Y MOCH BOUNDARY STONE IV	Non-designated	Not known
GGAT03915w	HEOL Y MOCH BOUNDARY STONE V	Non-designated	Not known
GGAT03916w	HEOL Y MOCH BOUNDARY STONE VI	Non-designated	Not known
GGAT03917w	MAES-DWFN OLD QUARRY	Non-designated	Not known
GGAT03920w	FARTEG-FACH ENCLOSURE I	Non-designated	Not known
GGAT03921w	FARTEG-FACH STRUCTURE	Non-designated	Not known
GGAT03923w	FARTEG-FACH COAL LEVEL I	Non-designated	Not known
GGAT03924w	FARTEG -FACH COAL LEVEL II	Non-designated	Not known
GGAT03925w	BLAEN-CYNEIRON ENCLOSURE	Non-designated	Near intact
GGAT03926w	MAES-DWFN ENCLOSURE	Non-designated	Not known
GGAT03927w	FYNNON Y FOEL STRUCTURE	Non-designated	Near destroyed
GGAT03943w	TYN-Y-FFORD STRUCTURE	Non-designated	Not known

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT03944w	TYN-Y-FFORD LEVEL	Non-designated	Not known
GGAT03945w	CWM-Y-GARN QUARRY I	Non-designated	Not known
GGAT03946w	CWM-Y-GARN QUARRY II	Non-designated	Not known
GGAT03947w	MOEL GALLT-Y-CWM TRIG POINT	Non-designated	Not known
GGAT04171w	CWM FARTEG QUARRY	Non-designated	Intact
GGAT04172w	CWM GOBLYN SHEEPFOLD	Non-designated	Near destroyed
GGAT04173w	NANT-Y-GLO TY UN NOS	Non-designated	Damaged
GGAT04174w	NANT-Y-GLO STRUCTURE	Non-designated	Destroyed
GGAT04175w	NANT-Y-GLO SHEEPFOLD	Non-designated	Near destroyed
GGAT04176w	CWM STRUCTURE	Non-designated	Damaged
GGAT04215w	FARTEG FACH STRUCTURE	Non-designated	Not known
GGAT04216w	MYNYDD BACH QUARRY	Non-designated	Intact
GGAT04270m	TY-HWNT STRUCTURE	Non-designated	Near destroyed
GGAT04294w	CWM GOBLYN TRAMWAY	Non-designated	Not known
GGAT04539w	MOEL TON MAWR TRAMWAY	Non-designated	Not known
GGAT04545w	RHYD BLAEN-Y-CWM ENTRENCHMENT	Non-designated	Not known
GGAT04585w	Brickyard Plantation, Margam	Non-designated	NOT KNOWN, Damaged
GGAT04586w	NEW POND	Non-designated	Intact
GGAT04587w	NURSERY DYWYLL	Non-designated	Intact
GGAT04588w	Sawmill	Non-designated	Destroyed
GGAT04589w	FURZEMILL POND	Non-designated	Intact
GGAT04590w	Rifle Range	Non-designated	Not known
GGAT04591w	TWYN-YR-HYDD	Non-designated	Intact
GGAT04592w	HEOL NEWYDD	Non-designated	Destroyed

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT04593w	LODGE UCHAF	Non-designated	Destroyed
GGAT04594w	LODGE ISAF	Non-designated	Destroyed
GGAT04595w	Coal levels and quarries, Margam	Non-designated	Destroyed
GGAT04596w	Gravel Pit, Margam	Non-designated	Not known
GGAT04597w	LADY'S SEAT	Non-designated	NOT KNOWN
GGAT04598w	YNYS	Non-designated	Destroyed
GGAT04599w	Gravel pit	Non-designated	Destroyed
GGAT04600w	MARGAM CIRCLE	Non-designated	NOT KNOWN, Intact
GGAT04601w	Stone Circle, Margam	Non-designated	Intact
GGAT04608m	FFYNNON Y GILFACH	Non-designated	Not known
GGAT04629m	LLANGYNWYD CHURCHYARD	Non-designated	Not known
GGAT04664w	Mill Race	Non-designated	Destroyed
GGAT04684m	Maesteg Landscape	Non-designated	Not known
GGAT04782w	Neolithic or Bronze age Flints, Margam	Non-designated	-
GGAT04790w	CRAIG CWM MAELWG POSSIBLE CHARCOAL-BURNING PLATFORM	Non-designated	Not known
GGAT04791w	CRAIG CWM MAELWG POSSIBLE CHARCOAL-BURNING PLATFORM	Non-designated	Not known
GGAT04792w	CRAIG CWM MAELWG POSSIBLE CHARCOAL-BURNING PLATFORM	Non-designated	Not known
GGAT04793w	CRAIG CWM MAELWG	Non-designated	Damaged
GGAT04796w	The Bath House, Margam	Non-designated	Not known
GGAT05028w	Mixed Lithics	Non-designated	-
GGAT05029w	Bronze Age Lithic Artefacts	Non-designated	-

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT05203w	LLANFUGEILYDD GRANGE, POSSIBLE SITE AT CWRT-Y-DEFAID	Non-designated	Not known
GGAT05224m	EDWARD II COMMEMORATIVE STONE	Non-designated	Near Intact
GGAT05242w	MARGAM CHURCHYARD	Non-designated	Not known
GGAT05269w	HAFOD Y PORTH CHAPEL	Non-designated	Damaged
GGAT05275w	CHURCHYARD OF CAPEL MAIR/HEN EGLWYS	Non-designated	Not known
GGAT05276w	CHURCHYARD OF HAFOD-Y-PORTH CHAPEL	Non-designated	Not known
GGAT05328w	BROMBIL FARM, MARGAM 1	Non-designated	Damaged
GGAT05334w	BROMBIL FARM, MARGAM 2	Non-designated	Near intact
GGAT05346w	BROMBIL FARM, MARGAM 8	Non-designated	Not known
GGAT05355w	BROMBIL FARM, MARGAM 9	Non-designated	Not known
GGAT05359w	BROMBIL FARM, MARGAM 7	Non-designated	Near destroyed
GGAT05360w	BROMBIL FARM, MARGAM 6	Non-designated	Near destroyed
GGAT05362w	BROMBIL FARM, MARGAM 4	Non-designated	Near destroyed
GGAT05363w	BROMBIL FARM, MARGAM 3	Non-designated	Not applicable
GGAT05776w	Old Quarry at Taibach	Non-designated	Intact
GGAT05777w	Old Quarry at Taibach	Non-designated	Intact
GGAT06014m	Y Bwlwarcau Bomb Craters, Mynydd Margam	Non-designated	NEAR INTACT
GGAT06030m	Castell Farm Buildings, LLangynwyd, Maesteg	Non-designated	INTACT
GGAT06031m	Castell Farm Cloddiau Boundary, Llangynwyd, Maesteg	Non-designated	NEAR INTACT
GGAT06058w	Trackway, Margam Park	Non-designated	Near Intact
GGAT06067w	Hen Gastell	Non-designated	Near Destroyed

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT06068w	Platform at Mynydd y Castell	Non-designated	Not known
GGAT06150m	Llwydarth Farm, Maesteg	Non-designated	Converted
GGAT06171w	Ironstone Working, Mynydd Margam	Non-designated	Not known
GGAT06457m	Road, Llangynwyd, Maesteg Valley	Non-designated	NOT KNOWN
GGAT06571m	Tramway, Llangynwyd	Non-designated	NOT KNOWN
GGAT06572m	Tramway, Llangynwyd	Non-designated	NOT KNOWN
GGAT06573m	Tramway, Maesteg	Non-designated	NOT KNOWN
GGAT06574m	Tramway, Maesteg	Non-designated	NOT KNOWN
GGAT06576m	Tramway, Maesteg	Non-designated	NOT KNOWN
GGAT06692w	Quarry at Margam	Non-designated	Not known
GGAT06693w	Ton-y-grugos Quarry	Non-designated	Not known
GGAT06694w	Quarries at Margam	Non-designated	Not known
GGAT07274w	Structure	Non-designated	NOT KNOWN
GGAT07275w	Structure	Non-designated	NOT KNOWN
GGAT07278w	Bronbil Colliery and Tramway	Non-designated	NOT KNOWN
GGAT07305w	Tank	Non-designated	NOT KNOWN
GGAT07307w	Gravel Pit	Non-designated	NOT KNOWN
GGAT07308w	Ynys	Non-designated	NOT KNOWN
GGAT07309w	Ffynnon y Drych-fanau	Non-designated	NOT KNOWN
GGAT07310w	Tyn-y-coed	Non-designated	NOT KNOWN
GGAT07312w	Well	Non-designated	NOT KNOWN
GGAT07313w	Structure	Non-designated	NOT KNOWN
GGAT07314w	Structure	Non-designated	NOT KNOWN
GGAT07315w	Fishpond	Non-designated	NOT KNOWN

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT07738w	Glenhafod Colliery	Non-designated	NOT KNOWN
GGAT07903m	Hawker Hurricane Mk I W 9123 crash site	Non-designated	NOT KNOWN
GGAT08016w	Westland Lysander Mk IIIA V9793 crash site	Non-designated	NOT KNOWN
GGAT08212w	Celluloid works, Goytre, Port Talbot	Non-designated	NOT KNOWN
GGAT08213w	Linear features: Mynydd Margam site 2	Non-designated	NOT KNOWN
GGAT08214w	Possible ditches: Mynydd Margam site 4	Non-designated	NOT KNOWN
GGAT08215w	Drain: Mynydd Margam site 5	Non-designated	NOT KNOWN
GGAT08216w	Linear features: Mynydd Margam site 9	Non-designated	NOT KNOWN
GGAT08217w	Hollow: Mynydd Margam site 10	Non-designated	NOT KNOWN
GGAT08388w	Lower Enclosure, Lowest Clump, Margam Park	Non-designated	NEAR DESTROYED
GGAT08389w	Trackway, Nursery, Margam Park	Non-designated	NOT KNOWN
GGAT08390w	Trackway, Lowest Clump, Margam Park	Non-designated	INTACT
GGAT08391w	Stream, west of Furzemill Pond, Margam Park	Non-designated	INTACT
GGAT08392w	Internal Park Boundary, Nursery, Margam Park	Non-designated	RESTORED
GGAT08393w	Inner Park Boundary, Great Park, Margam Park	Non-designated	NEAR INTACT
GGAT08394w	Upper Enclosure, Lowest Clump, Margam Park	Non-designated	DESTROYED
GGAT08395w	Nursery Enclosure, Margam Park	Non-designated	DAMAGED
GGAT08396w	Pond, Lowest Clump, Margam Park	Non-designated	INTACT

Reference	Name	Designation status	Condition (non-designated assets only)
GGAT08397w	Outer Park Boundary, Margam Park	Non-designated	INTACT
GGAT08398w	Sunken Trackway, Nursery, Margam Park	Non-designated	INTACT
GGAT08399w	Trackway, Nursery, Margam Park	Non-designated	DAMAGED
GGAT08401w	Tree Avenue (north), Nursery, Margam Park	Non-designated	NEAR INTACT
GGAT08412m	Royal Observer Corps Monitoring Post, Maesteg	Non-designated	INTACT
GGAT08887w	Trig Point Mynydd Margam	Non-designated	NOT KNOWN,NEAR INTACT
GGAT09087w	Brombil Reservoir	Non-designated	NOT KNOWN,NEAR INTACT
GGAT09560w	Margam Park Enclosure	Non-designated	DAMAGED
GGAT09561w	New pond earthworks	Non-designated	DAMAGED
GGAT09562w	Engine house Plantation earthworks, Margam Park	Non-designated	DAMAGED
GGAT09563w	Margam inscribed & sculptured stones, Margam Park	Non-designated	MOVED
06058w	Trackway, Margam Park	Non-designated	Near Intact
01077.0w	HEOL Y MOCH (The Pigs' Way)	Non-designated	Not known
01076.0w	Road - Margam to Llangynwyd	Non-designated	Not known
01069.0w	CEFN CRUGWYLLT	Non-designated	Not known
00274.0m	Hollow Ways, Gilfach-Uchaf	Non-designated	Not known
01097.0w	PORT TALBOT	Non-designated	Not known