

Chapter 9

Cultural Heritage

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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	'Assessment of the Significance of the Impact of Development On Historic Landscape' – 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.
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)	An assessment of the likely significant environmental effects as a result of a proposed development. The applicant is required to carry out the assessment by law, in this case under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.
Environmental Statement (ES)	The report on the results of the EIA.
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.

Term	Definition
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)	'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.' ² 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).
Listed Building	A building or structure which is considered to be of 'special architectural or historic interest' ³ .
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.
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).

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 (2011) *Conservation Principles*

³ Wales. Cadw (2018) *Understanding Listing in Wales*

Term	Definition
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: Conservation Principles (Cadw 2011)	<i>‘The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape.’</i> 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. 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.

Term	Definition
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).
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.

List of Abbreviations

Abbreviation	Description
AOD	Above Ordnance Datum
ASIDOHL	Assessment of the Significance of the Development on the Historic Landscape
BCE	Before Common Era
BCBC	Bridgend County Borough Council
C	Century
c.	Circa
CA	Conservation Area
CE	Common Era
CEMP	Construction Environment Management Plan
CIfA	Chartered Institute for Archaeologists
CRAPW	Central Register of Aerial Photographs Wales
DBA	Desk-based Assessment
DNS	Development of National Significance
EIA	Environmental Impact Assessment
EIA Regulations	Environmental Impact Assessment (Wales) Regulations 2017
ES	Environmental Statement
GGAT	Glamorgan Gwent Archaeological Trust
GWR	Great Western Railway
ha	Hectare
HER	Historic Environment Record
HLCA	Historic Landscape Character Area
ISA	Inner Study Area
LiDAR	Light Detection and Ranging
LVIA	Landscape and Visual Impact Assessment
NPTCBC	Neath Port Talbot County Borough Council
NRHE	National Record of the Historic Environment
NRW	Natural Resources Wales
OS	Ordnance Survey
OSA	Outer Study Area
PEDW	Planning Environment Decisions Wales
PPW	Planning Policy Wales
RCAHMW	Royal Commission on the Ancient and Historic Monuments in Wales
SMRs	Sites and Monuments Records
SM	Scheduled Monuments
SP	Strategic Policy
TAN	Technical Advice Note
WHS	World Heritage Sites

Abbreviation	Description
WSI	Written Scheme of Investigation (project design or method statement)
ZTV	Zone of Theoretical Visibility

9.1 INTRODUCTION

- 9.1.1 This chapter presents an assessment of the effects of Y Bryn Wind Farm (the proposed development) on the historic environment. The assessment was undertaken by Headland Archaeology (UK) Ltd. The objectives of this assessment are to:
- Describe the location, nature and extent of any known historic assets or areas of archaeological potential which may be affected by the proposed development;
 - Provide an assessment of the importance of these assets;
 - Assess the likely scale of any impacts on the historic environment posed by the proposed development through construction and operational effects;
 - Outline suitable mitigation and enhancement measures to avoid, reduce or offset significant adverse effects;
 - Provide an assessment of any residual effects remaining after mitigation and enhancement; and
 - Consider cumulative impacts.
- 9.1.2 Planning Policy Wales (PPW) (Edition 11, 2021) defines the historic environment as comprising ‘*all the surviving physical elements of previous human activity*’⁴. It is made up of individual historic features which are collectively known as historic assets. Examples of what can constitute a historic asset include: listed buildings; conservation areas; historic assets of special local interest; historic parks and gardens; townscapes; historic landscapes; World Heritage Sites (WHS); and archaeological remains (including scheduled monuments (SM)).
- 9.1.3 The majority of historic assets are not designated. Some undesignated assets are recorded in Historic Environment Records or Sites and Monuments Records (HERs/SMRs) maintained by local authorities and other agencies. However, many historic assets are currently unrecorded, and the information contained in HERs and SMRs 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.
- 9.1.4 Some historic assets may coincide with visual receptors or landscape character areas, which are assessed in Chapter 8: Seascape, Landscape and Visual Impact Assessment), and in such cases it is important to recognise the difference in approach between these two topics. The cultural heritage assessment addresses effects on the cultural heritage significance of historic assets, which may result from, but are not equivalent to, visual impacts. Similarly, an effect on a landscape character area does not equate to an effect on the cultural heritage significance of historic assets within it.
- 9.1.5 This assessment concludes that following mitigation there would be construction effects of negligible adverse significance to two non-designated historic assets (a trackway and an area of tip scree) and construction effects of minor adverse significance to one non-designated historic asset (Heol y Moch).
- 9.1.6 The assessment has also considered operational effects and concludes that there will be effects of minor adverse significance to 13 designated assets (Y Bwlwarcu SM, Zoar Chapel listed building, Church of St David listed building, Port Talbot Memorial Park registered park and garden, Llangynwyd conservation area, Hen Eglwys, Mynydd Castell and Ergyd Isaf scheduled monuments, Margam Castle listed building, Holy Cross Church listed building, Church of St Mary listed building, Church of St Cynwyd listed building and Margam registered park and garden) and an effect of moderate adverse significance to one designated historic asset (Mynydd Margam registered landscape). Only the effect on the Mynydd Margam registered landscape is considered to be significant in Environmental Impact Assessment (EIA) terms. Mitigation measures are proposed although levels of significance of effect will remain the same.

⁴ Wales. Welsh Government (2021) Planning Policy in Wales. Edition 11 (p.125).

⁵ UK. The Ancient Monuments and Archaeological Areas Act: Queen Elizabeth II. 46. (1979).

9.2 POLICY AND GUIDANCE

- 9.2.1 The assessment has been undertaken with reference to relevant legislation, policy and guidance relating to cultural heritage.

Legislation

- 9.2.2 The Ancient Monuments and Archaeological Areas Act 1979, Planning (Listed Buildings and Conservation Areas (CA)) Act 1990 and the Historic Environment (Wales) Act 2016 provide the legislative framework for the protection and sustainable management of the historic environment in Wales.
- 9.2.3 SM and listed buildings are protected by statute. Legislation regarding SMs is contained within The Ancient Monuments and Archaeological Areas Act 1979⁵. Legislation regarding LB is contained in The Planning (LB and CAs) Act 1990⁶. Under this legislation it is an offence to carry out works which affect the fabric of a SM or LB without the prior written consent of the Welsh Ministers.
- 9.2.4 The 1979 Act makes no reference to the settings of scheduled monuments. However, with regard to Listed Buildings, Section 66 of the 1990 Act states (in part):
- ‘In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting’.*
- 9.2.5 The 1990 Act also places a duty on planning authorities with regard to CA, requiring that:
- ‘Special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area’.*
- 9.2.6 The Protection of Military Remains Act 1986⁷ provides protection for the wreckage of military aircraft and designated military vessels. The primary reason for designation is to protect the last resting place of British servicemen (or other nationals). The wreckage of all military aircraft (British or other nations) that crashed in the United Kingdom, in United Kingdom territorial waters or in United Kingdom controlled waters are automatically protected irrespective of whether there was loss of life or whether the wrecking occurred during peacetime or in a combat. Some such crash sites may also qualify as historic assets (those from WWI or WWII for example).
- 9.2.7 No other types of historic asset are protected or controlled by statute.

Planning Policy

- 9.2.8 PPW provides the national planning policy framework for the consideration of the historic environment, and this is supplemented by guidance contained in Technical Advice Note (TAN) 24: The Historic Environment, and in associated best practice notes issued by Cadw. In general terms, policy is concerned with the protection of the significance of historic assets (including the contribution made by setting to that significance) and it affords greater protection to assets with statutory and non-statutory designations.
- 9.2.9 Heritage and conservation forms one of the core planning principles of PPW (paragraph numbers are provided):
- (6.1.5) *‘The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved’.*
- 9.2.10 PPW confirms that:

⁶ UK. The Planning (Listed Buildings and Conservation Areas) Act: Queen Elizabeth II. 9.(1990).

⁷ UK. Protection of Military Remains Act: Queen Elizabeth II. 35. (1986).

(6.1.5) 'the planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations'; and

(6.1.7) 'It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.'

9.2.11 PPW lays out specific objectives for the historic environment (6.1.6):

- Protect the Outstanding Universal Value of the WHS;
- Conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy;
- Safeguard the character of historic buildings and manage change so that their special architectural and historic interest is preserved;
- Preserve or enhance the character or appearance of conservation areas, whilst at the same time helping them remain vibrant and prosperous;
- Preserve the special interest of sites on the register of historic parks and gardens; and
- Protect areas on the register of historic landscapes in Wales.

Listed Buildings:

'There should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. For any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of special architectural or historic interest which it possesses.' (PPW11, 6.1.10).

Conservation Areas:

'There should be a general presumption in favour of the preservation or enhancement of the character or appearance of conservation areas or their settings' (PPW11, 6.1.14).

'There is a strong presumption against the granting of planning permission for developments, including advertisements, which damage the character or appearance of a conservation area or its setting to an unacceptable level' (PPW11, 6.1.15).

Historic Parks and Gardens

'Planning authorities should value, protect, conserve and enhance the special interest of parks and gardens and their settings included on the register of historic parks and gardens in Wales.' (PPW11, 6.1.18); and

'The effect of a proposed development on a registered park or garden, or its setting, is a material consideration in the determination of planning applications.' (PPW11, 6.1.19).

Historic Landscapes:

'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); and

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

Scheduled Monuments

'When considering development proposals that affect scheduled monuments or other nationally important archaeological remains, there should be a presumption in favour of their physical preservation in situ, i.e. a presumption against proposals which would involve significant alteration or cause damage or would have a significant adverse impact causing harm within the setting of the remains'. (TAN24, 4.2); and

'It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument (or an archaeological site shown to be of national importance) or has a demonstrably and unacceptably damaging effect upon its setting.' (PPW11, 6.1.24).

Undesignated Archaeological Remains

'The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.' (PPW11, 6.1.23); and

'In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.' (PPW11, 6.1.25).

9.2.12 For the Neath Port Talbot County Borough Council (NPTCBC) area the built environment and historic heritage (Policy SP21) is covered by LDP Objectives: OB 2, OB 23 and OB 24. This states that [It] will, where appropriate, be conserved and enhanced through the following measures:

- Encouraging high quality design standards in all development proposals;
- Protecting arterial gateways from intrusive and inappropriate development;
- Safeguarding features of historic and cultural importance; and
- The identification of the following designated sites to enable their protection and where appropriate enhancement:

(a) Landscapes of historic interest;

(b) Historic parks and gardens;

(c) Conservation areas;

(d) Scheduled ancient monuments; and

(e) Listed buildings and their curtilage.'

9.2.13 Conservation of the Built and Historic Environment Strategic Policy for the Bridgend County Borough Council (BCBC) area are found within Strategic Policy (SP) 5 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 the following historic assets:

- SP5(1) Listed buildings and their settings;
- SP5(2) Conservation areas and their settings;
- SP5(3) Scheduled monuments;
- SP5(4) Sites or areas of archaeological significance;
- SP5(5) Historic landscapes, parks and gardens or;
- SP5(6) Locally significant buildings.'

Guidance

- 9.2.14 The Welsh Government issues TANs and Circular Letters to provide guidance in how to apply planning policy. Guidance on the assessment of heritage significance through consideration of the component heritage values of an asset, and further guidance on the assessment of significance as part of the planning application process is contained in *Technical Advice Note 24: The Historic Environment*⁸, and in best practice guides produced by Cadw, including *The Setting of Historic Assets in Wales*⁹ and *Conservation Principles*¹⁰.
- 9.2.15 Standards and Guidance published by the Chartered Institute for Archaeologists (CIfA) have been followed in preparing this assessment, in particular the ‘Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment’ (2014)¹¹ and the ‘Standard and guidance for historic environment desk-based assessment’ (DBA) (2014)¹².

9.3 METHODOLOGY

The Assessment Process

- 9.3.1 This cultural heritage assessment has been carried out in the following stages:
- Desk-based study leading to the identification of historic assets potentially affected by the proposed development;
 - Definition of baseline conditions, based on results of the desk-based study and visits to assets;
 - Assessment of the importance of historic assets potentially affected by the proposed development;
 - Identification of potential impacts on historic assets, informed by baseline information, site visits, Zone of Theoretical Visibility (ZTV) mapping, wireframes and photomontages, as well as a 3D computerised virtual-model;
 - Proposal of mitigation and enhancement measures, to eliminate, reduce or offset adverse effects;
 - Assessment of the magnitude of residual effects;
 - Assessment of the significance of residual effects, broadly a product of the asset’s importance and the magnitude of the impact; and
 - Assessment of cumulative effects.

Consultation

- 9.3.2 In addition to the responses to the scoping request, throughout the EIA on-going consultation has been undertaken with relevant stakeholders, including Cadw, Glamorgan Gwent Archaeological Trust (GGAT), NPTCBC’s conservation officer, BCBC’s conservation officer and local archaeological interest groups, to ensure that the approach to the EIA is considered acceptable.
- 9.3.3 Table 9.1 sets out the consultation responses received and the approach taken in the EIA as a result of these responses. Appendix 3 in Volume 3 of the ES contains a copy of the scoping report, scoping direction and any additional consultation relevant to cultural heritage.

Table 9.1: Consultation responses

Consultee	Comment	Response
The Planning Inspectorate (now Planning and Environment Decisions Wales (PEDW))	Recommend that GGAT is engaged in consultation to agree the proposed methodology and the cumulative impact study area.	Cadw has been consulted regarding the scope and findings of the DBA and Stage 1 Setting Assessment, and on specific heritage viewpoints for assessment as well as the scope of the cumulative assessment.
NPTCBC: Landscape and Visual Impact Assessment (LVIA) Consultant	As regards the scoping report Talbot Memorial Park, Port Talbot – a Grade II registered Historic Park and Garden appears to be missing from all the Designated Historical Assets Plans.	As a small park it was not visible on the figures submitted with the scoping report but Talbot Memorial Park, Port Talbot has been included in the baseline.
GGAT	As regards the scoping report they have assessed the documents on the NPT website, and also on the Development of National Significance (DNS) website but have been unable to see a copy of the Cultural heritage assessment on either, only the figures. To meet the current professional standards, there should have been a methodology agreed between GGAT as the Council’s advisors and Headland Archaeology prior to the assessment being undertaken ¹³ .	The heritage sections of the scoping report were re-sent to GGAT on 23 rd June 2021 and Written Scheme of Investigation (WSI) for the DBA and stage 1 setting assessment was submitted to GGAT on 16 September 2021.
	Agreed that micrositing the turbines, access roads, compounds etc. is appropriate and would hopefully enable most/all of the known sites to be preserved in-situ 30/11/21.	No response needed.
	Potential peat and historic hedgerow/field boundaries that may require sampling/recording. The aircraft crash sites have the potential for a much larger ‘site’ than may be anticipated due to the debris spread. The site has potential for undiscovered sites, particularly prehistoric features or those associated with an early monastic community. Other windfarms in productive forestry have encountered if not intact, then remarkably well preserved structures. 30/11/21.	Potential impacts on deep peat deposits have been considered in the EIA. The potential extent of debris from the crash sites has been considered in the EIA. The potential for currently undiscovered remains has been considered in the EIA.
Cadw	Agree that the methodology for the proposed desk-based and field study assessments, including the data sources and the study areas are appropriate.	Cadw has been consulted further on the findings of the Stage 1 setting

⁸ Planning Policy Wales 11 *Technical Advice Note 24: The Historic Environment* (Welsh Government 2021) https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf [Accessed 31/03/2023]

⁹ Wales. Cadw (2017) *The Setting of Historic Assets in Wales*.

¹⁰ Wales. Cadw (2011) *Conservation Principles*.

¹¹ CIFA (2020) *Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*. Reading: CIfA.

¹² CIFA (2020) *Standard and guidance for historic environment desk-based assessment*. Reading: CIfA.

¹³ CIFA (2020) *Standard and guidance for historic environment desk-based assessment*. Reading: CIfA paragraph 3.2.1.

Consultee	Comment	Response
	Confirm that a full Assessment of the Significance of the Development on the Historic Landscape (ASIDOHL2) is required. Cadw will be the Curator for the ASIDOHL process and will be able to assist in its' preparation, in particular by agreeing which Historic Landscape Character Areas (HLCAs) should be included.	assessment and a draft of the ASIDOHL assessment. Cadw has confirmed that the appropriate methodology for assessing impacts to the Mynydd Margam Registered Landscape is that set out in the 'Guide to good practice on using the register of landscapes of historic interest in Wales in the planning and development process' but that for any Registered Landscapes in the Outer Study Area (OSA), the methodology set out in 'The Setting of Historic Assets' should be followed.
BCBC	The levels of heritage significance set out in Table 14.1 indicate that conservation areas are only of medium importance. In the case of Llangynwyd, with its concentration of Grade II Listed buildings and structures and recognition as a HLCA, this is considered to be too low. This should be included as an additional viewpoint and should be used to help inform the level of effects in addition to the study and site visits.	The importance of Llangynwyd Conservation Area has been increased to High within the EIA. A viewpoint has been included of the conservation area.
	Reference should also be made to the document 'Managing Conservation Areas in Wales' (2017) which supplements PPW and TAN 24: The Historic Environment. It should be noted that the 'Guide to good practice on using the register of landscapes of historic interest in Wales in the planning and development process' (2007), is published by Cadw, CCW (now Natural Resources Wales (NRW)) and Welsh Assembly Government, now Welsh Government.	These documents have been referred to in the EIA.
	It is not known if, (or agreed that), the inner study area (ISA) is low-medium in terms of archaeological potential (14.3.4). In Paragraph 14.3.5 of the Scoping Report, reference should be made to Archaeologically Sensitive Areas (including Maesteg and Kenfig).	The archaeological potential of the ISA has been fully assessed within the DBA.
	In carrying out the ASIDOHL 2 assessment the HLCAs should be assessed. Past experience is that in assessing wind energy or any structure that is disproportionately tall in comparison to the extent of its physical footprint can affect findings. Under these circumstances, the ASIDOHL2 methodology can produce results that show a development having less impact than is really the case, because as the	Cadw has confirmed that the methodology as set out in the 'Guide to good practice on using the register of landscapes of historic interest in Wales in the planning and development process' (2007) should be followed and not altered. (Post scoping consultation).

Consultee	Comment	Response
	methodology stands, visual impacts are weighed up with physical impacts, which in the case of wind turbines are relatively small, especially in this case with very large turbines. The assessor should take this into account and give more weight to the visual impacts through use of ZTV data and likely adverse visual effects within each HLCA. These should take account of forest management and clearance due to the project as well as the overall Forest Management Plan.	
	Consideration should additionally be given to place-names as well as potential artistic or literary associations, sacred space, or local traditions and customs. Welsh language literary sources should be considered in this context, including early poetry associated with the Abbey and with the estate which followed it. Aeron Afan's Cyfansoddiadau Buddugol yn Eisteddfod Iforaidd Aberafan Mehefin 23, 1853 (Caerfyrddin: William Thomas) captures the culture of the area in the early stages of industrialisation.	The DBA has considered evidence of place names, known artistic and literary associations and local customs etc. This text is referenced in the DBA.
	In relation to scope, it is suggested that the effects of the proposed grid connection would be scoped out if it used underground cable. This may have an adverse effect on archaeological remains in the ground and therefore this should not be scoped out.	It was only proposed to scope underground cable out of assessment of visual / setting effects, any direct physical effects will still be considered.
	Mitigation and enhancement of cultural heritage assets should be put forward in line with good practice and national guidance. As with LVIA mitigation, whilst these may be considered benefits they are likely to be very minor in comparison to the level of cultural heritage effects. Whilst they need to be set out clearly with appropriate commitments, they should not be used to obscure the overall residual effects.	Mitigation and enhancement measures are assessed as: (i) mitigation that reduces the level of harm to a historic asset (e.g. avoidance of physical impacts, alterations to the layout to avoid effects to the setting of a historic asset) (ii) mitigation that off-sets the harm to a historic asset but does not reduce the residual effect (e.g. archaeological investigation and recording) (iii) mitigation or enhancement measures to assets not directly affected by the proposed development as a benefit of the proposed development. (iv) Residual effects are considered after mitigation measures (in line with the EIA regulations) but any enhancement measures are detailed separately.

Consultee	Comment	Response
Letter to Coriolis from residents of Hafod Farm, 7/7/2021	Raised the important local legend of a battle between Romans and local tribes 'Cwm Lladdfa' battlefield.	This has been referenced in the DBA.

Study Areas

- 9.3.4 The ISA corresponds to the site boundary plus a 2 km buffer (Figure 9.3 in Volume 2 of the ES). Within Y Bryn site boundary, all historic assets are assessed for construction and operational effects. Decommissioning effects have been scoped out during the scoping process with consultees (See Appendix 3 for copy of scoping report and scoping direction).
- 9.3.5 The OSA extends to 20 km from the Y Bryn site boundary, which is taken as the maximum extent of potentially significant effects on the settings of historic assets. Within the outer study area, assets have been included in the assessment based on the level of importance assigned to the asset (see paragraphs 9.3.17-24), so as to ensure that all significant effects are recognised:
- Up to 2 km from Y Bryn site boundary: minimum Grade II LBs, and any undesignated asset of local importance which has a wider landscape setting that contributes substantially to its cultural significance;
 - Up to 5 km from Y Bryn site boundary: minimum Grade II LBs, CA, registered historic landscapes, historic parks and gardens, and undesignated assets of recognised regional importance;
 - Up to 10 km from Y Bryn site boundary: WHS, Grade I and II* LBs, SMs and undesignated assets of national importance; and
 - Up to at least 20 km from Y Bryn site boundary: any asset which is considered exceptionally important, and where long-distance views from or towards the asset are thought to be particularly sensitive, in the opinion of the assessor and with reference to consultation responses.

Data Sources

- 9.3.6 The baseline for the assessment has been informed by a comprehensive desk-based study based on all readily available documentary sources, and a Stage 1 setting assessment (Appendix 9.1). These followed the ClfA 'Standard and Guidance for historic environment desk-based assessment' and *The Setting of Historic Assets in Wales*¹⁴. The following sources of information were referred to:
- Designation data from Cadw, provided as a digital data extract on 3 March 2021;
 - Descriptions of designated historic assets provided on Cadw's *CofCymru* website¹⁵
 - Archaeological records held by GGAT HER obtained as a digital data extract on 3rd March 2021;
 - Aerial photographs in the Central Register of Aerial Photographs Wales (CRAPW);
 - Historic Landscape Characterisation as provided by GGAT HER;
 - Historic maps and plans which are available on-line including the National Library of Wales online collection of the maps;
 - Natural Resources Wales Light Detection and Ranging (LiDAR) data;
 - Geological data available online from the British Geological Survey;
 - Portable Antiquities Scheme data; and
 - Readily available published sources and unpublished archaeological reports.

- 9.3.7 This information was supplemented with site visits carried out on 10 March 2021, 4 – 6 May 2021 and 22 February 2022. These examined the current conditions of the site and sought to confirm the locations of previously identified historic assets and the potential for currently unknown assets as well as examining the baseline setting of the historic assets within the study area.

Definition of Baseline Conditions

Known Historic Assets Within the Inner Study Area

- 9.3.8 Historic assets within the ISA have been assigned an asset number (prefixed HA for Historic Asset). A single asset number can refer to a group of related features, which may be recorded separately in the HER and other data sources. Assets within the Inner Study Area are shown in Figure 9.1-9.7 in Volume 2 of the Environmental Statement (ES), with detailed descriptions compiled in a gazetteer (Appendix 9.1, Tables 9.9-5 to 9.9-9).

Potential for Unknown Historic Assets within the Inner Study Area

- 9.3.9 The likelihood that undiscovered historic assets may be present within the Inner Study Area is referred to as archaeological potential. Overall levels of potential can be assigned to different landscape zones, following the criteria in Table 9.2, while recognising that the archaeological potential of any zone will relate to particular historical periods and types of evidence. The following factors are considered in assessing archaeological potential:
- The distribution and character of known archaeological remains in the vicinity, based principally on an appraisal of data in the GGAT HER;
 - The history of archaeological fieldwork and research in the surrounding area, which may give an indication of the reliability and completeness of existing records;
 - Environmental factors such as geology, topography and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution of archaeological remains;
 - Land-use factors affecting the survival of archaeological remains, such as ploughing or productive forestry planting; and
 - Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation, which can conceal upstanding features, and superficial deposits such as peat and alluvium which can mask archaeological features.

Table 9.2: Archaeological potential

Potential	Definition
High	Undiscovered historic assets of high or medium importance are likely to be present.
Medium	Undiscovered historic assets of low importance are likely to be present; and it is possible, though unlikely, that assets of high or medium importance may also be present.
Low	The study area may contain undiscovered historic assets, but these are unlikely to be numerous and are highly unlikely to include assets of high or medium importance.
Negligible	The study area is highly unlikely to contain undiscovered historic assets of any level of importance.
Nil	There is no possibility of undiscovered historic assets existing within the study area.

¹⁴ Wales. Cadw (2017) *The Setting of Historic Assets in Wales*

¹⁵ Cadw, (ND). *Cof Cymru*. [Online]. Available from - <https://cadw.gov.wales/advice-support/cof-cymru> [Accessed 31/03/2023]

Historic Assets in the Outer Study Area

9.3.10 Assets that meet the initial criteria for assessment are described briefly in paragraphs 9.4.11-24 with full details within Appendix 9.1 and shown in Figures 9.8 and 9.9. SMs and LBs are identified by their Cadw reference; Landscapes, parks, gardens and CA are identified by name; non-designated assets are identified by their GGAT HER reference or in the case of assets identified during this assessment by a unique identifier pre-fixed HA (Historic Asset).

Identification of Potential Impacts

9.3.11 Effects on the historic environment can arise through direct physical impacts, impacts on setting or indirect impacts:

- Direct physical impacts describe those development activities that directly cause damage to the fabric of a historic asset. Typically, these activities are related to construction works and will only occur within the application site;
- An impact on the setting of a historic asset occurs when the presence of a development changes the surroundings of a historic asset in such a way that it affects (positively or negatively) the heritage significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Where relevant these have been included in the assessment. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to lead to significant effects during the prolonged operational life of the proposed development; and
- Indirect impacts describe secondary processes, triggered by the proposed development, which lead to the degradation or preservation of historic assets. For example, changes to hydrology may affect archaeological preservation; or changes to the setting of a building may affect the viability of its current use and thus lead to dereliction.

9.3.12 No assets have been identified where night time lack of illumination contributes to their significance and therefore aviation lighting effects has not been considered.

9.3.13 Potential impacts on unknown historic assets are discussed in terms of the risk that a significant effect could occur. The level of risk depends on the level of archaeological potential combined with the nature and scale of disturbance associated with construction activities and may vary between high and negligible for different elements or activities associated with a proposed development, or for the proposed development as a whole.

9.3.14 Potential impacts on the settings of historic assets require a four stage process in assessment of impacts in line with Cadw's Managing the Setting of Historic Assets in Wales¹⁶.

- Stage 1: Identify the Historic Assets;
- Stage 2: Define and Analyse the Setting;
- Stage 3: Evaluate the Potential Impact of Change or Development; and
- Stage 4: Consider Options to Mitigate the Impact of a Proposed Change or Development.

9.3.15 Potential setting impacts are identified from an initial desk-based appraisal of data from Cadw, National Monuments Record for Wales and the GGAT HER, and consideration of current maps and aerial images available on the internet. Where this initial appraisal has identified the potential for a significant effect, the asset has been visited to define baseline conditions and identify key viewpoints. Visualisations have been prepared by the visual consultants to illustrate changes to key views, where potentially significant effects have been identified.

Mitigation and Enhancement Measures and Identification of Residual Effects

9.3.16 Proposed mitigation measures are described in paragraphs 9.5.145-159. The preferred mitigation option is always to avoid or reduce impacts through design, or through precautionary measures such as fencing off historic assets during construction works. Impacts which cannot be eliminated in these ways will lead to residual effects.

9.3.17 Adverse effects may be mitigated by an appropriate level of survey, excavation, recording, analysis and publication of the results, in accordance with a WSI. Archaeological investigation can have a beneficial effect of increasing knowledge and understanding of the asset, thereby enhancing its archaeological and historical interest and offsetting adverse effects.

Impact Assessment Criteria

Heritage Significance

9.3.18 Cultural heritage impact assessment is concerned with effects on the significance of historic assets. Significance, in relation to heritage policy, is defined by Cadw (Conservation Principals Glossary) as '*The sum of the cultural heritage values*'. This use of the word significance should not be confused with the unrelated usage of 'significance of effect' in EIA. Where there is any possibility of confusion between the two usages, the former is referred to as heritage significance.

9.3.19 The assessment of significance is informed by Cadw's 'Conservation Principles, Policies and Guidance' (2011), which proposes a framework for describing historic places in terms of four component heritage values: Evidential, Historical, Aesthetic and Communal. These are defined in detail in Conservation Principals, but briefly, they can encompass: '*the physical remains or surviving fabric of an historic asset (evidential); the contribution of documentary sources, pictorial records and museum collections to forming an understanding of an historic asset (evidential); how historic assets through illustrative or associative values can connect the past with the present (historical); the way in which people draw sensory and intellectual stimulation from an historic asset through its form, external appearance or setting (aesthetic); the social and economic values, and spiritual meanings, that an historic asset has for the people who relate to it (communal).*'

9.3.20 The significance of a historic asset derives both from its physical fabric and from its setting. Setting is defined in Conservation Principals as:

'The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape.'

9.3.21 The contribution of setting to significance is assessed, following the staged approach to setting recommended in '*Setting of Historic assets in Wales*'. Attributes of an asset's setting which can contribute to its significance are listed on page 2 of '*Setting of historic assets in Wales*'. Such attributes may be localised and limited to the immediate surroundings of the asset, or may also include more distant visual relationships, especially where an asset is located at a prominent viewpoint or intended to form a conspicuous landmark.

9.3.22 All historic assets have settings; however, the degree to which setting contributes to the significance of historic assets varies widely and not all assets are equally sensitive to impacts on their settings. In some cases, setting may contribute very little to the asset's cultural significance, or only certain elements of the setting may be relevant.

Heritage Importance

9.3.23 The importance of a historic asset is a measure of the degree to which the heritage significance of that asset is sought to be protected through legislation and planning policy (PCHIA 2021, paragraph A16). The level of importance will therefore reflect any statutory and non-statutory heritage designation or, in the case of undesignated assets, the professional judgement of the assessor as to the degree of importance that the asset has (Table 9.3).

¹⁶ Wales. Cadw (2017) *The Setting of Historic Assets in Wales*.

Table 9.3: Criteria for assessing the importance of historic assets

Importance of the asset	Criteria
Very high	WHS and other assets of equal international importance
High	Grade I and II* Registered Parks and Gardens, Scheduled Monuments, Protected Wreck Sites, Registered Battlefields, Grade I and II* Listed Buildings, and undesignated historic assets of equal importance
Medium	Conservation Areas, Grade II Registered Parks and Gardens, Grade II Listed Buildings, historic assets on local lists and undesignated assets of equal importance
Low	Undesignated historic assets of lesser importance
Negligible	Negligible or no heritage significance
Unknown	Further information is required to assess the potential of these sites

9.3.24 Assets of negligible importance are not included in the assessment as no significant effects would occur. No assets of unknown importance have been identified within the assessment.

Assessment of the Magnitude of Impacts on Heritage Significance

9.3.25 The magnitude of an impact is a measure of the degree to which the significance of a historic asset will be increased or diminished by impacts resulting from the proposed development. This definition of magnitude applies to impacts on the setting, as well as impacts on the physical fabric, of an asset. Impacts on the settings of historic assets are assessed with reference to the factors listed *Setting of historic assets in Wales*. It is important to note that the magnitude of an impact resulting from an impact on setting is not a direct measure of the visual prominence, scale, proximity or other attributes of the proposed development itself, or of the extent to which the setting itself is changed; therefore, LVIA criteria for scale/magnitude cannot be applied directly in determining the magnitude of impact on the setting of a historic asset. It is also necessary to consider whether, and to what extent, the characteristics of the setting which would be affected contribute to the asset’s cultural significance.

9.3.26 Conclusions of the assessed magnitude of impacts are a product of the consideration of the elements of an asset and its setting that contribute to its heritage significance and the degree to which the proposed development would change these contributing elements. The assessment therefore reflects the varying degrees of sensitivity of different assets to change brought about by different types of development.

9.3.27 This definition of magnitude and assessment methodology applies to likely effects resulting from change in the setting as well as likely physical effects on the fabric of an asset.

9.3.28 Magnitude is assessed as high/medium/low, and adverse/beneficial, or negligible, using the criteria in Table 9.4 as a guide.

9.3.29 In assessing the impacts of a development, it is often necessary to take into account various impacts which affect an asset’s significance in different ways, including both adverse and beneficial effects. For instance, there may be adverse effects on an asset’s fabric and on its setting, offset by a beneficial effect resulting from archaeological investigation. The residual effect, given in paragraphs 9.5.161-165 and Table 9.5, is an overall measure of how the asset’s significance is reduced or enhanced.

Table 9.4: Criteria for assessing the magnitude of impacts on historic assets

Magnitude of Impact	Guideline Criteria
High beneficial	Elements of the asset’s physical fabric which would otherwise be lost, severely compromising its heritage significance, are preserved in situ; or Elements of the asset’s setting, which were previously lost or unintelligible, are restored, greatly enhancing its heritage significance.
Medium beneficial	Elements of the asset’s physical fabric which would otherwise be lost, leading to an appreciable but partial loss of heritage significance, are preserved in situ; or Elements of the asset’s setting are considerably improved, appreciably enhancing its heritage significance; or Research and recording leads to a considerable enhancement to the archaeological or historical interest of the asset.
Low beneficial	Elements of the asset’s physical fabric which would otherwise be lost, leading to a slight loss of heritage significance, are preserved in situ; or Elements of the asset’s setting are improved, slightly enhancing its heritage significance; or Research and recording leads to a slight enhancement to the archaeological or historical interest of the asset.
Negligible	The asset’s fabric and/or setting is changed in ways which do not beneficially or adversely affect its heritage significance.
Low adverse	Elements of the asset’s fabric and/or setting which are of very limited relevance to its significance are lost or changed, resulting in a very slight loss of heritage significance; or Elements of the asset’s fabric and/or setting which contribute to its heritage significance are minimally affected, resulting in a very slight loss of heritage significance.
Medium adverse	Elements of the asset’s fabric and/or setting which contribute to its significance are affected, but to a limited extent, resulting in an appreciable but partial loss of the asset’s heritage significance.
High adverse	Key elements of the asset’s fabric and/or setting are lost or fundamentally altered, such that the asset’s heritage significance is lost or severely compromised.

Assessment of the Significance of Effects

9.3.30 The significance of an effect in terms of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (the EIA Regulations) on the heritage significance of a historic asset, resulting from a direct or indirect physical impact, or an impact on its setting, is assessed by combining the conclusions reached regarding the predicted magnitude of the impact with the importance of the historic asset.

9.3.31 The matrix in Table 9.5 provides a guide to decision-making but is not a substitute for professional judgement and interpretation, particularly where the importance or impact magnitude levels are not clear or are borderline between categories. EIA significance may be described on a continuous scale from negligible to major. Where the matrix allows for either ‘Major or Moderate’ or ‘Moderate or Minor’ significance of effect then professional judgement is used to determine the significance taking into account factors such as the duration and reversibility of the impact. The findings of the assessment will therefore be either: Major Effect Significance, Moderate Effect Significance, Minor Effect Significance or Negligible Effect Significance. It is also common practice to identify effects as

significant or not significant, and in this sense major and moderate effects are regarded as significant, while minor and negligible effects are not significant’.

Table 9.5: Criteria for assessing the significance of effects on historic assets

Magnitude of Impact	Heritage Importance				
	Very High	High	Medium	Low	
High beneficial	Major	Major	Major or Moderate	Moderate or Minor	Enhancement
Medium beneficial	Major	Major or Moderate	Moderate or minor	Minor	
Low beneficial	Major or moderate	Moderate or minor	Minor	Negligible	
Neutral/None	Neutral/nil	Neutral/nil	Neutral/nil	Neutral/nil	Neutral/nil Harm
Low adverse	Major or moderate	Moderate or minor	Minor	Negligible	
Medium adverse	Major	Major or moderate	Moderate or minor	Minor	
High adverse	Major	Major	Major or Moderate	Moderate or Minor	

Assessment of Cumulative Effects

- 9.3.32 Cumulative effects on the significance of historic assets may occur where the wind farm results in an effect on the significance of a historic asset and other developments also have an effect on the same asset. A cumulative effect is considered to occur where the magnitude of the combined effect of two or more developments is greater than that of the developments considered separately.
- 9.3.33 Cumulative effects are assessed for those assets that have been assessed as receiving an impact of at least Negligible Significance from the proposed development. The cumulative contributor developments are:
 - Single turbines between 20 m and 50 m in height within 5 km of Y Bryn Wind Farm;
 - Major applications within 5km of Y Bryn Wind Farm;
 - DNS and NSIP applications within 10km;
 - Single turbines over 50 m in height and all wind farms within 20 km that are operational, or have been given consent, or have an active application or are undergoing a planning appeal; and
 - Turbines below 20 m in height and wind farms beyond 20 km have been excluded from the assessment of cumulative effects as these are not anticipated to result in significant effects to any historic assets.
- 9.3.34 This is in order to focus the assessment on potentially significant cumulative interactions. It is not considered that domestic scale turbines (less than 50 m height to tip) beyond 5 km from the proposed development will have the potential to result in significant cumulative interactions.
- 9.3.35 The baseline assessment has considered all relevant operational and in construction wind farms. The cumulative assessment has considered the following scenarios:
 - Scenario 1: considers the impact of Y Bryn against a baseline of all relevant operational, in construction and consented developments in accordance with the criteria above; and
 - Scenario 2: considers the additional impact of Y Bryn against a cumulative baseline of all relevant operational, in construction, consented and submitted applications in accordance with the criteria above.

ASIDOHL2

- 9.3.36 Assessment of the Significance of Impact of Development on Historic Landscapes (second edition) (known as ASIDOHL2) is a staged process for the assessment of the significance of the effect of development on historic landscape areas on the register of landscapes of historic interest in Wales. The methodology is set out in the Cadw/Countryside Council for Wales (now NRW)/Welsh Assembly Government (now Welsh Government) ‘Guide to good practice on using the register of landscapes of historic interest in Wales in the planning and development process’ (2007). The ASIDOHL2 process assesses both the direct, physical impacts of the development as well as indirect physical and visual impacts upon the study area and its surroundings.
- 9.3.37 An ASIDOHL2 assessment of the Mynydd Margam Landscape of Special Historic Interest has been completed for the final design of the proposed development. The full results of this are presented in Appendix 9.2. The results of the ASIDOHL2 assessment have informed the assessment of the significance of effects on the Registered Historic Landscape of Mynydd Margam.

9.4 BASELINE CONDITIONS

Archaeological and Historical Overview of the Inner Study Area

Previous Investigations

- 9.4.1 There are 128 previous archaeological investigations within the ISA including nine within Y Bryn site boundary. All but one of the investigations within the ISA took place within the southern section. The single event in the northern section was a field visit by GGAT. Four excavations of cairns and barrows in the south-east corner of the southern section of Y Bryn site boundary were undertaken in 1921, one by Mortimer Wheeler for the Royal Commission on Historic Monuments in Wales (RCAHMW) and three by the National Museum Wales. The remainder of the investigations are recent in date and non-invasive, including a DBA from 2010, historic landscape characterisation of Mynydd Margam in 2003, and two field visits as part of the Prehistoric defended enclosures project (2005 and 2006). All were undertaken by GGAT with the exception of a DBA by RPS Group in 2010 in advance of a proposed development and a DBA and field visit by Dyfed Archaeological Trust in advance of the construction of Margam Park Mountain Bike Trail.
- 9.4.2 Nearly half of the archaeological investigations outside of Y Bryn site boundary were non-invasive including 29 DBAs and ES chapters, the majority relating to power generation. There were two geophysical surveys, one by Terra Nova in Margam Park in 2004 and the other by Archaeological Investigations in 2002 in relation to a proposed small wind turbine cluster by Community Power Ltd at land at Ton Mawr Farm near Margam and Castle Farm on the south-east of Mynydd Margam. The remainder being field visits and surveys carried out by GGAT, Cadw, RCAHMW and Trysor contracted by the RCAHMW between 1960 and 2016.
- 9.4.3 There have also been eight evaluations, 11 excavations and 19 watching briefs within the ISA, the majority are located to the south in Margam Park and nearby built-up areas. A number of the latter are associated with the Nantgarw-Margam pipeline. In addition to these formal archaeological investigations, the Llynfi Valley Historical Society has carried out walkover surveys of Mynydd Margam which have identified a number of historic assets¹⁷.

Geology and Geomorphology

- 9.4.4 Bedrock geology of Y Bryn site boundary is South Wales Upper Coal Measures Formation – Mudstone, Siltstone, Sandstone, Coal, Ironstone and Ferricrete. There is generally no superficial geology recorded with some pockets of Till, Devensian – Diamicton associated with valleys on the very northern tip of the south section and in the southern edge of the north section and in the Nant Cynon valley. There are also dispersed pockets of peat within the south section (see Chapter 10). The superficial geology dates from the Quaternary Period¹⁸.

¹⁷ Howells, W. (2010) *The Antiquities of Margam Mountain*: Maesteg. Llynfi Valley Historical Society

¹⁸ British Geological Survey. <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [Accessed 03/04/2023]

Archaeological and Historical Background

9.4.5 A full archaeological and historical background is presented in the DBA and Stage 1 Setting Assessment (Appendix 9.1). In summary, there is evidence of human activity within the inner study area from the Mesolithic period onwards, although evidence before the Bronze Age is rare. Monuments of Bronze Age date (mainly ritual and funerary monuments such as cairns or barrows) are common on the higher ground. There are also examples of Iron Age hillforts and enclosed settlements on the higher ground, but although the lower slopes were likely settled at this time any evidence of this has been obscured by the later development of the valleys. There is more limited evidence of Roman era activity, but the presence of a Roman road through the ISA indicates that the area continued to be used in this period. In the medieval period the study area was more rural in character than it is now, with dispersed farms following the Hendre/Hafod pattern. The greatest influence on the ISA during the medieval period was the presence of the monastery at Margam. The area developed considerably during the post medieval period as the mineral resources of Mynydd Margam and the surrounding areas began to be exploited.

Known Historic Assets Within the Wind Farm Site Boundary

9.4.6 There are six designated SMs of high or national importance within Y Bryn site boundary. Three are located within the north section comprising:

- Cae'r Mynydd Ventilation Furnace and Mine (SM GM547) dating from the 19th century;
- Nant Herbert Camp (SM GM244) prehistoric enclosures; and
- Cefn yr Argoed Camp (SM GM245), another prehistoric enclosure.

9.4.7 Three SMs are located within the south section, two in a similar area in the south-east boundary within this section; these are:

- Ergyd Uchaf prehistoric round barrow (SM GM159);
- Twmpath Diwlith prehistoric round barrow (SM GM557); and
- Site of the Bodvoc Stone (SM GM443) which comprises a bronze age barrow and the site of an early medieval memorial stone (a replica now stands on the site; the original having been relocated to Margam Stones museum).

9.4.8 Three SMs are immediately adjacent to the proposed development, (although technically they overlap Y Bryn site boundary this is by an insignificant amount of up to 7 m and most likely results from a digitising error):

- Ergyd Isaf Round Barrows (SM (GM160);
- Y Bwlwarcu (SM GM059) prehistoric hill fort; and
- Roman Camp (SM GM058) hillfort;

9.4.9 The south section of Y Bryn site boundary is wholly within the Mynydd Margam Registered Landscape of Special Interest. The registered landscape is a non-statutory designation aimed at sustaining the historic character and provides information for decision makers and managers.

9.4.10 There are also 205 non-designated known historic assets of low importance which have been recorded within Y Bryn site boundary. These are detailed in Appendix 9.1. These are mainly industrial remains of processing, extraction and transportation of resources from the post medieval period. Also within Y Bryn site boundary is a section of the Port Talbot railway which runs through a tunnel between the north and south sections. There are also 31 boundary stones within the site which are known from historic mapping which recorded the line of community boundaries and trackways through the sites. The other remains are mainly agricultural and domestic in origin, including a farmhouse and 13 dwellings although only one is recorded as intact. LiDAR provided evidence of industrial extraction within the site sections.

9.4.11 The site survey found some features of the post medieval and modern date which are mainly agricultural or domestic in origin and included a commemorative stone and a former Eisteddfod structure.

9.4.12 Also within the site are two WWII era aeroplane crash sites. These are protected by statute¹⁹.

Potential for Undiscovered Historic Assets within the Site

9.4.13 Y Bryn site boundary has been subject to a walkover survey however, mature dense forestry and recent replanting in other previously open areas has made identifying historic assets on the ground difficult and it is possible that further, unrecorded remains are present within the site boundary. These are most likely to include the remains of prehistoric sites and post-medieval agricultural features and structures. Such remains may have been truncated by forestry activities and may only survive as below ground features. Outside the forested areas the likelihood of undiscovered archaeological remains is lower as upstanding earthworks will probably have already been identified, although below ground remains could exist. Surviving remains of medieval or earlier date if present within the proposed development site would likely be of at least medium importance for their evidential value as they would contribute to the archaeological research framework for Wales. Upstanding earthwork prehistoric remains are presumed to be of high importance if they survive in good condition, damaged prehistoric earthworks or below ground remains are more likely to be of low or medium importance. Below ground and earthwork remains of post-medieval date, such as field boundaries, agricultural structures and industrial sites are likely to be of low importance for their evidential value which contributes to a sense of place.

9.4.14 Overall the archaeological potential for the site is as follows:

- For previously unknown remains is low to medium from most periods;
- For the potential for unknown prehistoric remains is medium;
- Modern remains is low; and
- Roman remains low to negligible.

Historic Assets in the Outer Study Area Considered for Operational Phase Effects

9.4.15 Full details of the historic assets within the 10 km study area are presented in Appendix 9.1: Desk Based Assessment and Stage 1 Setting Assessment. In summary the following assets are considered to merit detailed assessment of operational phase effects.

World Heritage Sites

9.4.16 There are no WHS within 10 km of Y Bryn site boundary. The closest is Blaenavon Industrial Landscape which is over 40 km north-east of Y Bryn site boundary and is sufficiently far removed from the proposed wind farm to be unaffected by it.

Scheduled Monuments

9.4.17 There are six SMs within Y Bryn site boundary which will be assessed for both construction phase and operational phase effects. These are:

- Cae'r Mynydd Ventilation Furnace and Mine (SM GM547);
- Nant Herbert Camp (SM GM244);
- Cefn yr Argoed Camp (SM GM245);
- Ergyd Uchaf prehistoric Round Barrow (SM GM159);
- Twmpath Diwlith barrow (SM GM557); and

¹⁹ UK. Protection of Military Remains Act: Queen Elizabeth II. 35 (1986).

- the site of the Bodvoc Stone (SM GM443).

9.4.18 Of the 103 SMs outside Y Bryn site boundary but within 10 km, 16 were identified by the Stage 1 Setting Assessment (Appendix 9.1) as meriting detailed assessment of operational phase effects. These are:

- GM005 Margam Abbey;
- GM056 Danish Camp;
- GM057 Camp N of Tonmawr;
- GM058 Roman Camp;
- GM059 Y Bwlwarcau;
- GM085 Llangynwyd Castle;
- GM090 Camp 530 m E of Tonmawr;
- GM098 Pen-y-Castell;
- GM160 Ergyd Isaf Round Barrows;
- GM162 Mynydd y Castell Camp;
- GM163 Hen Eglwys;
- GM393 Bont Fawr Aqueduct;
- GM418 Maesteg blast furnaces;
- GM477 Half Moon Camp;
- GM488 Chain Home Low Radar Station, Margam; and
- GM545 Margam Medieval Bath House.

Listed Buildings

9.4.19 There are no LBs within Y Bryn site boundary, those outside of the site have been assessed for operational effects.

9.4.20 There are 12 Grade I LBs, 55 Grade II* and 490 Grade II LBs within the 10 km study area. Of these, six Grade I, 17 Grade II* and 74 Grade II LBs lie within 2 km of the proposed development.

9.4.21 The Stage 1 Setting Assessment (Appendix 9.1) has identified 65 LBs which merit detailed assessment of operational phase effects. These are:

- 14170 Margam Castle I
- 14148 St Mary's Abbey Church I
- 14149 Ruins of Chapter House and Vestibule of St Mary's Abbey I
- 14150 Ruined Undercroft at St Mary's Abbey I
- 11227 Church of St James, Pyle with Kenfig I
- 11246 Church of St David I
- 18626 Church of St David, Bettws I
- 14152 Margam Orangery I
- 14153 Ivy Cottage including Facade of Former Banqueting House I
- 11256 Llwydarth farmhouse II*
- 14163 Terrace Walls and Screen at Margam Castle II*
- 23278 Service Buildings including Courtyard Walls at Margam Castle II*
- 11216 Tythegston Court II*

- 11243 Church of St Cynwyd II*
- 14155 Hen Eglwys II*
- 18493 Bethania Capel y Bedyddwyr Neillduol II*
- 18495 Salem Welsh Baptist Chapel II*
- 23274 Monastic Baths II*
- 11248 Church of St Mary Magdalen, Pyle with Kenfig. II*
- 11767 Church of Saint Cattwg II*
- 11776 Old Town Church of St Thomas II*
- 18635 Church of St Cein II*
- 23022 Bont Fawr Aqueduct (partly in Pelenna Community) II*
- 14163 Terrace Walls and Screen at Margam Castle II*
- 11373 Pentre Farmhouse, with attached farm range. II
- 11375 Gilfach-ganol farmhouse II
- 23263 Twyn yr Hydd II
- 11356 Siloh Independent Chapel II
- 11367 Tabor Eglwys Presbyteriadd Cymru II
- 18496 Capel Saron II
- 18500 Church of St Michael and All Angels, Llangynwyd II
- 18501 Zoar Chapel II
- 18502 Church of St David, and surrounding churchyard railed wall. II
- 22166 Jerusalem Baptist Chapel II
- 22889 Jerusalem Chapel II
- 23019 Tabernacle Chapel II
- 23020 Penuel Chapel II
- 23248 Holy Cross Church II
- 11364 Former Horeb Welsh Presbyterian Church II
- 11799 Bethania Baptist Chapel II
- 11801 Soar Maes-yr-haf Congregational Chapel and forecourt railings II
- 19366 Tabernacl Capel yr Annibynwyr aka Welsh Congregational Chapel II
- 22802 Church of St Mary II
- 22803 Church of St Joseph II
- 23062 Hermon Chapel II
- 23063 Bethania Chapel II
- 23064 New Road Methodist Church II
- 23066 Horeb Chapel II
- 23070 Tabernacle Chapel II
- 23075 Gorphwysfa Chapel II
- 23252 Bethany Chapel II
- 23254 Grove Place Chapel II

- 23024 Pontrhydyfen Viaduct II
- 14151 Almshouses II
- 14164 Middle Lodge II
- 14165 Cwm Cottage II
- 14166 Margam Cottage II
- 14167 2 Grove Cottages II
- 23264 Citrus House II
- 23268 Turbine House II
- 23269 Stones Museum II
- 23273 Former Changing Room II
- 23277 Farm Building at Twyn yr Hydd II
- 23279 Kitchen Garden Wall and Glass House at Twyn yr Hydd II
- 23293 3 Grove Cottages II

Conservation Areas

9.4.22 There is 13 CA within 10 km of Y Bryn site boundary but only Margam Park and Llangynwyd were considered by the Stage 1 Setting Assessment to have potential for adverse effects as a result of the proposed development.

Registered Parks and Gardens

9.4.23 There are 11 Registered Parks and Gardens within 10 km of Y Bryn site boundary.

9.4.24 The Stage 1 Setting Assessment identified that in addition to Margam Park which lies immediately adjacent to Y Bryn site boundary three other registered parks and gardens merited detailed assessment – they are:

- Port Talbot: Talbot Memorial Park;
- Bryngarw; and
- Tythegston Court.

Registered Historic Landscapes

9.4.25 The entirety of the southern section of the proposed wind farm and the AIL access from the M4, lies within the Mynydd Margam Registered Landscape of Special Interest in Wales (HLW (WGI/MGI) 2). The vast majority of the southern section is made up of the Registered historic landscape character area HLCA 010 Mynydd Margam Forest. A very small area on the south-west side is within HLCA 002 Cefn Crugwyllt and Cwm Maelwg, and another small area further south is within HLCA 003 Cwm Brombil and Graig Fawr. Part of the access track between the northern and southern sections is within HLCA005 Llangynwyd. All HLCAs have predicted visibility of the turbines. The full ASIDOHL assessment is presented in Appendix 9.2, summary results are included in the Construction Phase and Operational Phase assessment of this chapter.

9.4.26 The Registered Landscape of Outstanding Historic Interest of Merthyr Mawr, Kenfig & Margam Burrows (HLW (MGI) 1) is located 3.3 km to the south of Y Bryn site boundary and based on the ZTV produced in September 2021 would have visibility of up to 15 turbines in its northern area. This landscape has been included within the assessment for potential impacts resulting from change in its setting, but (in agreement with Cadw) has not been subject to a full ASIDOHL assessment.

Undesignated Historic Assets

9.4.27 There are 831 historic assets recorded in the GGAT HER within the ISA; there are 70 duplicates of designated assets leaving 761 undesignated assets. The earliest assets date from the Mesolithic, with others from the

Neolithic, Bronze Age and Iron Age. There are two Roman records, some early Medieval, Medieval and modern sites as well as sites of unassigned date, but the majority are post-medieval.

9.4.28 The Stage 1 Setting Assessment (Appendix 9.1) has identified that only two merit further assessment – these are parts of or closely associated with SMs and are therefore considered with their respective designated assets.

Future Baseline

9.4.29 Within Y Bryn site boundary, for the foreseeable future, the site will continue to be used for productive forestry in line with the forestry design plans. Beyond Y Bryn site boundary, landscape and visual resources will continue to evolve and change over time. Operational wind farms and solar farms in the wider study area are likely to be decommissioned/re-powered or may be considered for 'life extensions'. Consented and submitted wind farms and other developments may add to the operational developments that are visible or likely to be experienced in the wider study area.

Information Gaps

9.4.30 The current forested land use of the proposed wind farm makes identification of above ground features difficult due to lack of access and visibility. There is therefore an information gap regarding potential upstanding or earthwork remains of archaeological interest within Y Bryn site boundary. It has also not been possible to carry out geophysical survey or trial trenching of Y Bryn site boundary due to this land use, resulting in an information gap regarding potential buried archaeological remains.

9.4.31 The likelihood of such remains has been assessed within the EIA based on the available information and professional judgement.

9.5 IMPACT ASSESSMENT

Identification of Potential Impacts

9.5.1 The following considers construction and operational impacts on historic assets. The assessment has taken into consideration the micro-siting allowance of 50 m for infrastructure and the conclusions reflect this allowance.

Construction Impacts

9.5.2 Construction of the proposed wind farm may result in direct physical impacts to 14 historic assets including the registered landscape of Mynydd Margam and 13 non-designated assets. There will be no physical impacts on any of the SMs within Y Bryn site boundary, nor to the majority of the non-designated historic assets. Construction of the proposed development may also result in impacts to two designated assets (protected military crash sites), the extents of which are unknown, and may also impact on currently undiscovered archaeological remains.

9.5.3 No physical impacts are predicted to the non-designated Port Talbot Railway (01435.0m) (Figure 9.2 in Volume 2 of the ES) as the section of this asset which will be crossed by the access track is within the Cwmceryn Tunnel. A possible mineshaft (HA28) is close to the temporary construction compound but will not be impacted by the proposed compound. No impacts are predicted to an area of pillow mounds or squatter settlements (00949w&00733w) along the access track in the south-east, as no earthworks or upgrades to the existing road are planned in proximity to these assets. Heol y Moch enclosure (GGAT03910w) is within an area of felling, but this will result in no physical impacts as the felling will require no groundworks. Therefore, these assets are not discussed further.

Mynydd Margam Registered Landscape

9.5.4 The full text of the ASIDOHL2 assessment for this asset is included in Appendix 9.2. The ASIDOHL2 assessment found that there would be direct physical effects on the 'Mynydd Margam', 'Llangynwyd', 'Mynydd Brombil a Erygd Isaf' and 'Cwm Brombil and Graig Fawr' HLCAs as a result of construction of the proposed development.

- 9.5.5 Although no turbines are proposed for construction within HLCA003 Cwm Brombil and Graig Fawr, 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 hectare (ha). The development footprint within this HLCA equates to 0.6 ha. No elements of this HLCA will be affected by direct physical impacts and the overall magnitude of direct physical impacts on HLCA003 is Very Slight (using the ASIDOHL terminology). Indirect physical impacts may also occur through an increased risk of erosion to Tai Bach house platform which lies close to this track, the magnitude of this indirect impact is judged to be Moderate (in ASIDOHL terms). The relative importance of HLCA003 is judged to be Considerable (the fourth level on a six point scale from Very Low to Very High (Appendix 9.2)).
- 9.5.6 Similarly, no turbines are proposed within HLCA004 Mynydd Brombil a Ergyd Isaf, but approximately 990 m of access track is proposed to cross this HLCA – with 790 m of this utilising the existing tracks of the Mynydd Brombil Wind Farm which lies within this HLCA. The development footprint within this HLCA equates to 0.48 ha. Elements within the development footprint within HLCA004 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 and the overall magnitude of direct physical impacts in ASIDOHL terms on HLCA004 is Very Slight. Indirect physical impacts may occur to two elements of the HLCA – the pillow mounds may experience an increased risk of erosion and there may be increased risk of vibration impacts on the section of dry stone wall. These impacts are judged to be of Slight magnitude in ASIDOHL terms and the relative importance of this HLCA is judged to be Considerable (Appendix 9.2).
- 9.5.7 No turbines are proposed within HLCA005 Llangynwyd, but a section of access track extends into this HLCA, the total development footprint within this HLCA is 0.25 ha out of a total of 704 ha of land that makes up this HLCA. No elements will be physically impacted by the proposed development and the overall magnitude in ASIDOHL terms of direct physical impacts is assessed as Very Slight. The relative importance of Llangynwyd HLCA is judged to be Very High (Appendix 9.2)
- 9.5.8 The majority of the proposed development lies within HLCA010 Mynydd Margam. A total of 88.55 ha of this 1,640 ha HLCA will be physically impacted by the construction of the proposed development. A length of prehistoric trackway known as Heol y Moch will be impacted by the widening of the access tracks and one boundary stone may be lost. The overall magnitude of direct physical impacts is judged to be Moderate (in ASIDOHL terminology). There would be an indirect impact on the group of boundary stones as a result of the proposed development which would disrupt the functional relationship between these assets by removing one of their number. The coherence of the remains of an airplane crash could also be impacted, although the mapped location of these remains is over 200 m from the nearest part of the construction footprint and the magnitude of impact is judged to be Very Slight in ASIDOHL terms. The relative importance of this HLCA is judged to be Considerable (Appendix 9.2).
- 9.5.9 The ASIDOHL assessment methodology stands alone and is not directly comparable with the EIA methodology. Impacts to the registered landscape are largely confined to within one HLCA and therefore the essential integrity and coherence is no harmed.

Heol y Moch (The Pigs Way) (GGAT01077.0w)

- 9.5.10 The AIL route linking the north and south sections runs along part of Heol y Moch (The Pigs Way) (GGAT01077.0w) where the possible prehistoric trackway runs along an existing road. Upgrading or widening of the access track could impact on the old routeway resulting in the loss of the physical remains in this area. The degree to which the original track survives is unknown. This would be a **Low Adverse** magnitude of impact on a **Medium** Importance asset, resulting in an effect of **Minor Significance** and not significant. This trackway passes through an area of construction felling which will result in no physical impacts to the trackway as the felling will require no groundworks.

Post Medieval Trackway (07293w)

- 9.5.11 A post medieval trackway (07293w) runs along the existing roadway and over part of Heol y Moch. Upgrading or widening of the access track could also impact on this routeway resulting in the loss of the physical remains in this area. The degree of survival of the original track is unknown. This would be a **Low Adverse** magnitude of impact on a **Low Importance** asset, resulting in an effect of **Negligible Significance** and not significant. This trackway moves off the modern road and passes through an area of construction felling which will result in no physical impacts to the trackway as the felling will require no groundworks.

Penhydd Trackway (01078.0w)

- 9.5.12 A medieval trackway (01078.0w) which connected with the monastic grange of Penhydd is crossed by access tracks to Turbines 2 and 3. A stretch of 84 m of the trackway 01078.0w is affected. This results in a loss of 1.5% of the total trackway length. The degree of survival of the original track is unknown. This would be a **Low Adverse** magnitude of impact on a **Low** Importance asset, resulting in an effect of **Negligible Significance** and not significant.

Area of Tip Scree (HA22)

- 9.5.13 A section of internal access track cuts through a tip scree (HA22) which is also in an area requiring felling prior to construction. The access track will diverge from the existing road here, but the area of the tip impacted is less than 1% of the total scree. The Penhydd Entrance compound will also be partially located on the tip scree, impacting just over 4% of the area. These will have a **Low Adverse** magnitude of impact on an asset which is of **Negligible** Importance, resulting in an effect of **Negligible Significance** and not significant.

Boundary Stones

- 9.5.14 The AIL route linking the north and south sections will pass close to one of the Heol y Moch boundary stones (GGAT03911w). In addition, boundary stones (GGAT03912w and GGAT03915w) are located in proximity to the associated access tracks around turbines 10 and 11. Mynydd Margam boundary stone III (GGAT03886w) is close to the access track to Turbine 18. It is uncertain whether this or any of the boundary stones recorded in Y Bryn site boundary are extant as none were located during the site walkover, but they could be present within areas of forestry. A number of boundary stones along Heol y Moch (GGAT03911w, GGAT03912w & GGAT03915w) are located close to access tracks including the tracks around turbines 10 and 11. Mynydd Margam boundary stone III (GGAT03886w) is close to access to Turbine 18. The following boundary stones are located within areas of felling: GGAT03886w, GGAT03912w, GGAT4002w, GGAT4003w, GGAT4004w GGAT4005w, GGAT4012w. All of these stones have the potential to be accidentally damaged due to their proximity to the works.
- 9.5.15 If the assets were to be destroyed during works, this would result in a **High Adverse** magnitude of impact on the stones individually and a **Medium Adverse** magnitude of impact on their respective boundaries as a whole. As the assets are of **Low** Importance this would result in an effect of at most **Moderate Significance** to the individual assets and **Minor Significance** to the boundaries as a whole and not significant.

Dry Stone Wall (05328w)

- 9.5.16 The AIL route from the M4 in the south-west will pass through a well preserved short line of dry stone walling (05328w) along an existing track, there is the potential for accidental damage from traffic. This would result in a **Medium Adverse** magnitude of impact on a **Low Importance Asset**, resulting in an effect of **Minor Significance** and not significant.

House Platform (GGAT01993w)

- 9.5.17 A post medieval house platform (GGAT01993w) is also present along the south-west access track. Planned earthworks or upgrading does not impinge on it but they will be immediately adjacent to the asset and have the

potential to damage the earthworks. This would be a **Medium Adverse magnitude of impact** on a **Low Importance** asset, resulting in an effect of **Minor Significance** and not significant.

Potential Assets

9.5.18 There are two air crash sites within the southern section of Y Bryn site boundary. A Hawker Hurricane (GGAT07903m) crashed into a hill top in the east of this area in 1940, the pilot survived. In 1942 a Westland Lysander (GGAT08016w) hit high voltage cables in the west of Y Bryn site boundary, the two occupants were killed. As Protected Sites under the Protection of Military Remains Act these could be considered to be designated historic assets²⁰ and are therefore considered to be of **High Importance**. It is possible that fragments of these crashes could be encountered during the construction phase of the proposed development, as debris, particularly from the plane which crashed into power lines (GGAT08016w), has the potential to have been scattered over a wide area. The nearest turbine to the Westland Lysander is Turbine 12 which is 400 m away. The Hawker Hurricane is 1.5 km distance to the closest turbine (Turbine 11). At these distances it is unlikely that large fragments will be encountered. If fragments of these crashes are disturbed by the proposed development this would result in a very slight reduction in the heritage significance of the crash site(s) equating to a **Low Adverse** magnitude of impact on these assets of **High Importance** and resulting in an effect which is judged to be of **Minor Significance** and not significant.

Currently Unknown Assets

9.5.19 There is the potential for currently unknown assets to be present which could be directly impacted by construction of the proposed wind farm. The potential for archaeological remains from the early medieval and medieval periods is low to medium. These could include extant features such as stone crosses and trackways, buried remains such as the foundations of former buildings or house platforms, or evidence for activities in the area related to the abbey such as agriculture, water management, transport or industrial processes. These would be of at least **Low Importance** and some assets such as stone monuments could be higher. Direct impacts on these could result in a worst case scenario in up to **High Adverse** magnitude of impact on assets of up to **High Importance** and resulting in an effect of up to **Major Significance** and therefore significant.

9.5.20 The potential for further post medieval remains is also low to medium. These could include buried and extant remains, including ruinous agricultural structures and industrial activity. These are most likely to be of **Low** or **Negligible Importance**, however they could be up to **Medium Importance**, although this is unlikely. Direct impacts could result in a worst case scenario of up to **High Adverse** magnitude of impact on assets up to **Medium Importance** resulting in an effect of up to **Major Significance** but more likely up to **High Adverse** magnitude on assets of up to **Low** importance resulting in an effect of up to **Moderate Significance** which would be significant.

9.5.21 The potential for previously unknown prehistoric remains is medium. These are most likely to be funeral or ritual in nature such as cairns from the Bronze Age although there could also be small enclosures from the Iron Age. They are more likely to be buried remains although extant remains are possible. These previously unknown remains will likely be of low importance but could be up to high importance and may have relationships with other assets. Again direct impacts on these could, in a worst case scenario, result in up to **High Adverse** impacts on assets of up to **High Importance** and producing an effect of up to **Major Significance**. If other assets are connected to these, the relationship could also experience on a lesser adverse impact and less effect on significance.

9.5.22 The potential for previously unknown remains from the modern period is low. These remains are more likely to be extant although could also be buried. They are most likely to be of low or negligible importance, although it is possible, though unlikely, for them to be of medium importance depending on any historic significance. They could be evidence of leisure and recreational use of the area and industry. Any direct impacts could result in up to **High**

Adverse impacts if the remains were destroyed. The effect on an asset of up to **Medium Importance** would be up to **Major or Moderate Significance**.

9.5.23 The potential for Roman remains is low to negligible. These are likely to be of low importance, but medium or high importance remains are possible, if unlikely. They are also more likely to consist of buried remains than upstanding assets. A direct impact could result in destruction of the remains which would be a **High Adverse** impact. If the assets were of **High Importance** this would result in an effect of up to **Major Significance**.

9.5.24 The above instances provide a worst case scenario of total destruction of high or medium importance remains, although the assets, if present, are more likely to be of low importance resulting in lower significance of effects.

Operational Impacts

9.5.25 To summarise the Stage 1 setting assessment, the assets which have been assessed in detail are:

- The large group of designated and undesignated asset making up Margam Park – a total of 21 designated assets including Margam Castle, Hen Eglwys, Margam Abbey, Margam village, St Mary's Abbey Church (LB 14148), Ruins of chapter house and vestibule of St Mary's Abbey (LB 14149) and ruined Undercroft (LB 14150), Margam Orangery, Ivy Cottage, terrace walls and screen, Margam Cottage, Cwm Cottage, citrus house, stones museum, former changing rooms, Twyn yr Hydd registered garden, Twyn yr Hydd farmhouse, farm building at Twyn yr Hydd and kitchen garden wall and glass house at Twyn yr Hydd;
- Mynydd Margam Registered Landscape;
- Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape;
- Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), SM;
- Y Bwlwarcau hill fort (SM GM059), SM;
- Roman Camp (SM GM058), SM;
- Danish Camp (SM GM056), SM;
- Camp north of Tonmawr (SM GM057), SM;
- Ergyd Isaf Round Barrows (SM GM160), SM;
- Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), SM;
- Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), SM;
- Maesteg Blast Furnaces (SM GM418, LB 18492), SM and Grade II LB) and Maesteg Sports Centre, The Cornstores (LB 11257), Grade II* LB;
- Church of St James, Pyle with Kenfig (LB 11227), Grade I LB;
- Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* LB;
- Church of St David (LB 11246), Grade I LB;
- Church of St David, Bettws (LB 18626), Grade I LB;
- Bethania Chapel y Bedyddwyr Neillduol (LB 18493), Grade II* LB;
- Llangynwyd Castle (SM GM085), SM;
- Llwydarth farmhouse (LB 11256), Grade II* LB;
- Chain Home Low Radar Station (SM GM488), SM;
- Bont Fawr Aqueduct / Viaduct (SM GM393, LB 23022), SM and Grade II* LB;
- Llangynwyd CA;

²⁰ Historic England, (ND). *Protected Wrecks*. Available from - <https://historicengland.org.uk/advice/hpg/has/protectedwrecks/> [Accessed 02/04/2023]

- Church of St Cynwyd (LB 11243), Grade II* LB;
- Tythegston Court (LB 11216 and GM15), Grade II* LB And Grade II Registered Park & Garden;
- Bryngarw Park (GM5), Grade II Registered Park & Garden;
- Port Talbot: Talbot Memorial Park (GM45), Grade II Registered Park & Garden;
- Pontrhydyfen Viaduct (LB 23024) Grade II LB;
- Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II LB;
- Gilfach-ganol farmhouse (LB 11375), Grade II LB;
- Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II LB;
- Zoar Chapel (LB 18501), Grade II LB;
- Church of St David, and surrounding churchyard railed wall (LB 18502), Grade II LB;
- Jerusalem Baptist Chapel in Bryn village (LB 22166), Grade II LB;
- Church of St Mary (LB 22802), Grade II LB;
- Church of St Joseph (LB 22803), Grade II LB;
- Jerusalem Chapel in Pontrhydyfen (LB 22889);
- Penuel Chapel (LB 23020), Grade II LB;
- Holy Cross Church (LB 23248), Grade II LB;
- Bethany chapel (LB 23252), Grade II LB;
- Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II LB;
- Tabernacle Chapel (LB 23019), Grade II LB; and
- Capel Saron (LB 18496), Grade II LB.

Group of Assets forming Margam Park

- 9.5.26 The Grade I registered park of Margam Park comprises a 320 ha area, dominated to the east by the former hunting park on Mynydd y Castell and includes the scheduled Mynydd y Castell camp (an Iron Age hillfort), and a group of inscribed and sculptured stones which are also scheduled as well as the scheduled and Grade I listed Margam Abbey ruins and the scheduled and Grade II* listed Hen Eglwys ruins. The park also encompasses the majority of the Margam CA which protects the character of Margam village and includes the majority of the listed buildings within the park (including the Grade I listed Margam Castle, St Mary's Abbey Church, Margam Orangerie and Ivy Cottage and the Grade II* listed terrace walls, terrace with pool and service buildings). It also includes the registered garden of Twyn yr Hydd which contains four Grade II LBs (Twyn yr Hydd house, a farm building, kitchen garden wall and glass house and the garden wall). The park also includes a large number of undesignated historic assets including further features within the gardens west of Margam Castle and the remains of iron workings within the park to the east.
- 9.5.27 Together these assets form a multi-layered site of outstanding historical significance. Margam has evidential value intrinsic to the individual historic assets and as a whole for the way that the park has developed over time, with assets ranging from prehistoric to industrial in date. Individual buildings within Margam have aesthetic value – in particular Margam Castle, the Orangerie and the ruins of the Abbey – both individually and as a group which adds to their significance as elements within the designed landscape, albeit some (such as the abbey ruins) pre-date the creation of the park associated with Margam Castle. The park as a whole has communal value as a visitor attraction and also has historical value for documented associations with important figures including the Cistercian monks, Mansel and Talbot families, Frank Kingdon-Ward (who designed the gardens at Twyn yr Hydd) and Lord Nelson and Lady Hamilton who visited the park in 1803.

9.5.28 The site visits confirmed that most of the assets within the park are experienced only within their immediate surroundings and this setting contributes to their significance by allowing their aesthetic and evidential value to be appreciated, this includes the Orangerie, the scheduled Abbey remains and the group of LBs at Twyn yr Hydd. Although turbines are predicted to be theoretically visible from most locations within the park the presence of turbines in the wider area will not adversely affect the ability to appreciate this aesthetic and evidential value of the majority of the assets. This includes the group of assets to the west of Margam Castle (the orangerie, abbey ruins, ivy cottage, terrace walls, terrace, pool and service buildings) as the significance of these draws on their group value as part of the designed landscape around Margam Castle and the evidential value inherent in their fabric, particularly for the abbey ruins which pre-date the designed landscape and were repurposed as attractive ruins within the park. These elements of their significance will be unaffected by the presence of turbines in the wider area and although the ZTV predicts visibility of turbines from around these assets the vegetation planting in the northwest of the park will serve to substantially filter or screen views of turbines, the assets will continue to be appreciated within the designed landscape, and their individual and group evidential and aesthetic value will be unharmed. Similarly, Twyn yr Hydd (Grade II LB 23263) and its associated Grade II registered garden, will be unaffected by the presence of turbines within its setting as the significance of the house is appreciated only within its gardens and immediate surroundings and the garden does not draw on views beyond its walls for its aesthetic interest. These individual assets of **Medium** and **High Importance** will experience **Negligible Adverse** impacts resulting in effects of **Negligible Significance**.

9.5.29 Those assets within the Margam Park registered park for which the site visits found that longer range views either of or from the asset contribute positively to their significance are:

- Margam Castle;
- Mynydd y Castell Camp hillfort; and
- Hen Eglwys.

9.5.30 **Hen Eglwys** derives significance from its evidential value as the ruins of the former parish church of Margam serving the wider population who could not worship within the abbey. It also has aesthetic value as a ruined building. The church is located on south-east facing slopes above Margam village and although it is not a prominent or skyline feature its gables are visible above the trees and backdropped by higher ground when approaching along the access to Margam from south-west past the cricket club at a range of c700 m from the ruins. This setting contributes to our understanding of the remains as distinct from the Cistercian abbey remains which are on the lower lying ground (and not visible in conjunction with Hen Eglwys in this view) and also emphasises the aesthetic value of the ruins. No existing wind farms are visible in the important views of Hen Eglwys from the southwest that contribute to its significance because topography screens views of the Mynydd Brombil turbines which are 2.0 km-2.7 km north-northwest of the church and all other operational wind farms are more distant and also screened by topography and / or behind the viewer in this view.

9.5.31 The Newlands wind farm is 2.9 km to the south-southeast of the church and the Parc Stormy Down and Newton Down turbines are between 7.5 km and 8.7 km from the church in the same direction. These would theoretically be visible in views from the church ruins but these views are filtered by the surrounding trees on the slopes below the church and visibility of turbines at this range does not adversely affect the way that the relationship between Hen Eglwys and the ruins of the Cistercian abbey is appreciated.

9.5.32 The proposed turbines would be located north-east of the ruins at a range of 2.61 km to 7.8 km, the ZTV and virtual model indicate that up to 10 turbines will be visible from the area east of the church ruins and that eight turbines would be visible to the far right of the ruins when viewing from the southeast. The movement of the turbines will cause some visual distraction from the view of the monument, but the turbines will not obstruct views of the church ruins and will not alter its relationship with the other assets on the lower lying ground. It will continue to be experienced as an attractive ruin glimpsed through the trees on the hillside and its evidential and aesthetic value as a ruin will be unharmed. The magnitude of impact resulting from this visual distraction is considered to be **Low**

- Adverse** on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant.
- 9.5.33 **Mynydd y Castell Camp** derives significance from its evidential value as the buried and earthwork remains will contain archaeological evidence of the construction and use of this Iron Age hillfort. This value is enhanced by the group value with other scheduled hillforts and prehistoric enclosures further to the east and north-east – Danish Camp, Roman Camp, Camp N of Tonmawr, and Y Bwlwarcau. Intervisibility between these contemporary earthworks is likely to have been important in the selection of their locations. The earthworks of Mynydd y Castell Camp are not readily appreciated in the wider area but the summit which they enclose is distinctive and is visible behind Margam Castle when entering the park from the south-west and in views from south and south-east of Margam Castle within the park. This visibility is greatest in the winter as tree cover on the slopes of the hill filters the view and partly obscures the shape of the summit in the summer months. The distinctive summit is also appreciated from the east, particularly from Moel Ton-mawr and the three SMs on its western slopes (Danish Camp, Camp N of Tonmawr and Camp 530 m E of Tonmawr).
- 9.5.34 No operational turbines are visible in views of the hillfort from the south within the park which contribute to its significance. The Mynydd Brombil turbines are visible to the far right of the hillfort in views from the east, but this visibility of turbines within the setting of the monument does not impact on how its evidential value as a prehistoric hillfort is appreciated, the distinctive form of the summit is not obscured and the topographic position of the hillfort as a strategic location is not altered or diminished. The operational Mynydd Brombil turbines are visible 2.1 km to 2.8 km to the northwest in views from the monument and the Newlands windfarm is 2.7 km to the south with the Parc Stormy Down and Newton Down turbines 7.6 km to 8.6 km in the same direction and the Haregrove Farm turbine is 8.1 km to the south-southeast. None of these adversely affect the ability to appreciate the evidential value of Mynydd y Castell as a hillfort.
- 9.5.35 The proposed turbines will be located north/north-east of the hillfort at a range of 2.18 km to 7.29 km. The southern-most turbines would be visible to the right of the hillfort when viewing from the south with the blade of one turbine visible above the hillfort but filtered by trees (**Figure 8.61**) and ten turbines would be part visible beyond and to the left of the hillfort when viewing from the south-west (**Figure 8.67**), in these views the proposed turbines will be the only wind turbines visible. The proposed development would be located to the far left of views from Mynydd y Castell Camp when looking east towards the other hillforts and to the far right of views when looking back towards Mynydd y Castell from these monuments including views in which the Mynydd Brombil turbines are visible. Although the movement of the turbines will cause some visual distraction, they will not obstruct intervisibility between these monuments and it will still be possible to appreciate them as a group of contemporary earthworks in a chain along neighbouring summits. The turbines will compete visually with the Mynydd y Castell earthwork somewhat in views from the south-west, mostly in the winter when there will be less vegetation screening (which it should be noted would also apply in other directions, bringing other existing built infrastructure in the wider surroundings into greater relief), as they will introduce new skyline features around the hillfort in these views, however the distinct shape of the summit will still be apparent, there will be no physical impact to this monument and it will still be possible to appreciate how its topographic position was chosen for strategic importance and the intervisibility between Mynydd Castell and the other monuments will not be altered. The magnitude of impact as a result of this visual competition is considered to be **Low Adverse** on the significance of this asset of **High Importance**, resulting in an effect of **Minor Adverse Significance** and not significant.
- 9.5.36 **Margam Castle** derives significance from its evidential value as an example of an early 19th century mansion in Gothic style and from its historic value due to its connections to the Mansel Talbot family. It also has aesthetic value inherent in its fabric and communal value as a tourist attraction managed by NPTCBC and as a film location. Although now considered the principal building within Margam Park, the Grade I LB is one of the latest features within the park. The site visit confirmed that it is experienced within the park with key views of the building being from the south/south-west across open grassland and from the west looking up the steps from the gardens. The former being the view most appreciated by the majority of visitors, although the latter is one of the designed views of the house and is frequently photographed for weddings which take place at the Orangery. The top of the tower of Margam Castle can be seen from the current park entrance to the south-west where it appears above the trees backdropped by Mynydd y Castell and with the cricket pitches and associated buildings in the foreground and middle distance (**Figure 8.67a**). Historic mapping however shows that the original main approach to the mansion was from the north-west along a carriage drive that skirted the north side of a lake north of the mansion and afforded filtered views of the north front of the house. Although no longer used as the main approach this drive still exists and views to the north façade of the building across the lake also contribute to its aesthetic value. No existing wind turbines are visible in these views of the castle. The tip of one of the Mynydd Brombil turbines is predicted to be visible from the southwest entrance to the park when looking northwest but these views are partially filtered by vegetation and the turbine is not readily apparent (**Figure 8.67d**). The castle is oblique to these views and the Mynydd Brombil turbines do not impact on the evidential, aesthetic, historic or communal value of the castle which is appreciated when looking northeast to the castle from this location.
- 9.5.37 The Newlands, Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are also predicted to be visible from the southwest entrance to the park when looking southeast away from the castle.
- 9.5.38 Similarly, the operational Hargreave Farm turbine and the operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are predicted to be visible from the area south of Margam Castle when looking east, the Newlands turbine is predicted to be visible from here when looking south, and the Queens Docks turbines and the Swansea Bay WWTW turbine are predicted to be visible from this part of the park when looking west however these views are partially filtered by mature vegetation within the park (**Figure 8.61b**). These turbines would all be behind the viewer when looking towards the castle from this location where the aesthetic and evidential value of the castle is best appreciated.
- 9.5.39 The proposed turbines will be located north-east of Margam Castle at distances of 2.748 km to 7.94 km, the ZTV and virtual model indicate that turbines will be visible to the right of the view when looking at the building from the south and the hubs of six turbines and tips of four more would be visible behind and to the left of the tower in views from the current entrance. No turbines will be visible from the area west of Margam Castle when looking up the steps or to the north façade. The turbines will visually compete with the tower in views from the south-west (**Figure 8.67f**) but in all other views of the building including views from the south it will remain the dominant feature. There will be no physical impact to the castle and the evidential and historical value of the castle will be unaffected by the presence of turbines in the wider landscape. There is not expected to be any reduction in the communal value of the building as either the principal building within Margam Park or as a film location. The magnitude of impact as a result of the visual competition of the turbines in views of the castle from the southwest is considered to be **Low Adverse** on this asset of **High Importance**, resulting in an effect judged to be of **Minor Adverse Significance** and not significant.
- 9.5.40 The park as a whole derives significance from its evidential, aesthetic, historic and communal value which derives from the individual elements within it both individually and as a group. One of these elements is the former deer park in the east of the registered area. In addition to the key views of individual assets detailed above views from the deer park in the east of the park also contribute to the significance of the park. From this area of elevated ground within the park views over the park are possible which allow an appreciation of the multi-layered landscape and its component historic assets, views west also take in the Port Talbot steelworks, the port having been re-named after Christopher Rice Mansel Talbot who developed an ironworks at Margam and constructed Margam Castle. This view (**Figure 8.52**) allows an appreciation of the historical value of the park and its association with Port Talbot. Views out of the park to the north, east and south are also possible from this higher ground in the east, these make a lesser contribution to the significance of the park but do allow an appreciation of the varied surrounding landscape beyond the deer park.
- 9.5.41 The operational Hill House, Ford Motor Company and Haregrove Farm turbines are visible from the area of deer park in the east of the registered park when looking east (as illustrated in **Figure 8.52**), however due to the scale of the turbines, the topography and the distances from the park they are not readily discernible and do not impact on the significance of the park. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome

turbines are visible from the deer park when looking south where they appear towards the distant horizon, the operational Newlands turbine is also visible from here and is clearly visible in the middle distance on the lower ground outside the park as illustrated in **Figure 8.52**. A wireline shows that the operational Queens Docks turbines are just visible above the horizon in a gap between Mynydd y Castell and Mynydd Brombil when viewed from the deer park when looking northwest although this view is dominated by the Port Talbot steelworks and **Figure 8.52** shows that the Queens Dock turbines are obscured by forestry on Mynydd y Castell. In the same view the Mynydd Brombil turbines are visible above the horizon to the northwest from the deer park area along with an electricity pylon. Visibility of the Mynydd Brombil turbines results in an extension of the horizontal and vertical field of view in which modern industrial structures dominate in the views from the deer park, however they have a negligible impact on the ability to appreciate the evidential, historic, aesthetic or communal values of the park. None of the other operational turbines adversely affect the evidential, historic, aesthetic or communal values of the park.

- 9.5.42 The nearest turbine will be located 1.75 km north of the park's eastern end. Turbines are predicted to be visible throughout the park to varying degrees. The turbines will be behind the viewer when looking west / south-west across the park and towards Port Talbot. The turbines will be visible when looking north from the deer park and although they will alter the character of this view it will still be possible to appreciate the difference between the surrounding landscape and the park. The impacts on the three designated assets within the park as detailed above and the overall impact of the change in character of the surroundings of the park when viewed from the deer park in the east of the registered area is considered to result in an impact of **Low Adverse** magnitude on this **High Importance** park as a whole, resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

Mynydd Margam Registered Landscape

- 9.5.43 Mynydd Margam is a distinctive block of South Wales uplands on the south west fringe of the Glamorgan Blaenau. It is divided into 17 HLCAs. The proposed development is located partly within the registered landscape and the ASIDOHL assessment (Appendix 9.2) has concluded that there would be no impact on two HLCAs (HLCA011 and HLCA012) and impacts of between slight and severe significance (using the definition in the ASIDOHL methodology) on the remaining 15 HLCAs as a result of operation of the wind farm., These visual effects will be fully reversed on decommissioning.
- 9.5.44 The overall significance of the impact upon HLCA005 is judged to be Severe in the ASIDOHL methodology which uses a six point scale which ranges from Very Slight to Very Severe. The relative importance of HLCA005 is judged to be Very High (Appendix 9.2). The overall significance of impact on HLCA004 is judged to be Fairly Severe and its relative importance is judged to be Considerable. The significance of impact (in ASIDOHL terms) on a further nine historic landscape character areas (HLCA001, HLCA002, HLCA003, HLCA006, HLCA009, HLCA010, HLCA013, HLCA014 and HLCA015) is considered to be Moderate and the impact on a further four landscape areas (HLCA007, HLCA008, HLCA016 and HLCA017) is judged to be slight. The relative importance of HLCA001 is judged to be High, for HLCAs 002, 003, 006, 010, 013 and 015 it is judged to be Considerable and for HLCAs 007, 008, 009, 014, 016 and 017 the relative importance is judged to be Moderate.
- 9.5.45 The judgement of impacts in the ASIDOHL assessment (Appendix 9.2) 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.
- 9.5.46 The existing Mynydd Brombil turbines have already impacted on Mynydd Margam registered landscape, specifically HLCA001 Margam Abbey and Castle (slight impact), HLCA002 Cefn Crugwyllt and Cwm Maelwg (slight impact), HLCA003 Cwm Brombil and Graig Fawr (moderate impact), HLCA004 Mynydd Brombil and Ergyd Isaf (considerable impact), HLCA006 Eglwys Nunydd and Cwrt-y-defaig (slight impact), HLCA007 Graig Goch and Heol (slight impact), HLCA008 Margam Village (slight impact), HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor (moderate impact), HLCA0010 Margam Forest (slight impact), HLCA013 Upper Cwm Kenfig (slight

impact), HLCA0014 Moel Ton Mawr (slight impact), HLCA015 Upper Park and Ton-ygrugos (slight impact), HLCA016 Ton Mawr (slight impact) and HLCA017 Cwm Dyffryn: Southern Valley Sides (slight impact)²¹. No other operational schemes impact on the registered landscape.

- 9.5.47 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 and the essential integrity and coherence of the landscape character areas will not be materially altered.

Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape

- 9.5.48 Merthyr Mawr, Kenfig and Margam Burrows are two discrete areas of dunes situated on the west coast of Glamorgan. Both areas contain archaeological remains that have been buried by the dunes, including remains of prehistoric to medieval date including the land around the 14th century fortified manor of Candleston Castle at Merthyr Mawr and the early medieval borough and castle at Kenfig. The landscape has evidential value for buried remains and geoarchaeological interest in the formation of the dunes. It also has a degree of aesthetic value as an apparently wild landscape of sand dunes that has buried the archaeological remains.
- 9.5.49 The dune landscapes are experienced between the Vale of Glamorgan and the sea and it is this topographic position which contributes to their significance as it is an appropriate location in which to find such a landscape of sand dunes. Where views inland are possible from the edges of the registered landscape these emphasise the different character of the dunes compared to the inland landscapes, and it is this contrast which contributes to the significance of the registered landscape. These views include the operational Mynydd y Gwair turbines 25 km to the north-northwest, Mynydd y Bettws turbines c.28 km to the north-northwest, the Mynydd Brombil turbines 4.7 km to the north, the Newlands turbine 1.1 km to the north-northeast, the Llynfi Afan turbines 12 km to the north-northeast and the Pant y Wal and Pant y Wal Extension turbines 15 km to the northeast, although only the Mynydd Brombil and Newlands turbines are readily visible in these views (**Figure 8.68a**), The Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are predicted to be visible from the registered landscape in views to the east at a range of 4 km from the southern edge of the landscape but are obscured by vegetation in the representative view (**Figure 8.68b**). The Queens Docks and Swansea Bay WWTW turbines are predicted to be visible in views to the northwest (**Figure 8.68d**) at a range of c.12 km but are not readily discernible at this range due to being backdropped by the urban area of Swansea. None of these existing turbines adversely affect the significance of the Merthyr Mawr, Kenfig and Margam Burrows registered landscape.
- 9.5.50 The turbines are predicted to be visible from the registered landscape and **Figure 8.68** illustrates the typical view from the Wales Coast Path through Kenfig Burrows, the southern turbines will appear as a group above the far, inland horizon from this location at a range of over 5.73 km and will be visible between the existing Mynydd Brombil turbines and the Newlands turbine in this view but will appear as a distinct group of turbines.
- 9.5.51 The presence of turbines in the wider setting of the registered landscape will not materially alter the contribution that this setting makes to its significance, it will still be possible to appreciate the landscape character of the dunes as distinct from the rising ground inland from the coast, the aesthetic and evidential value of the registered landscape will be unaffected and the contribution that setting makes to this evidential and aesthetic value will not be diminished. Visibility of the turbines in the wider setting of Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), Scheduled Monuments

- 9.5.52 Cefn yr Argoed Camp is a small oval enclosure bounded by a substantial bank with external ditch. It is located on the south-west slopes of Cefn yr Argoed within a conifer plantation. Although it was probably originally intervisible

²¹ Pegasus / Cotswold Archaeology 2012 Mynydd Brombil Wind Farm Environmental Statement Appendix 8.3: ASIDOHL2 Assessment (Mynydd Margam).

with Nant Herbert Camp (another small, circular enclosure of prehistoric date) 1.23 km to the west views of and from the monument are now obstructed by the conifer plantation. The theoretic intervisibility between these two monuments is considered to contribute to their significance but it is not possible to appreciate this historic intervisibility now.

- 9.5.53 The forestry screens views out from these monuments and no existing turbines are therefore visible within their current setting. Cefn yr Argoed is located within an area of forestry planned to be felled between 2037 and 2041, Nant Herbert is surrounded by forestry not due to be felled until after 2042. For a period of time following felling there will be increased visibility of the wider landscape from these monuments including existing operational wind farms. This increased visibility would continue until the replacement trees grow to sufficient height to provide screening again, due to the difference in felling times intervisibility between these two monuments if it occurred would last for approximately 5 years.
- 9.5.54 After felling there would be a period when there would be increased visibility of the surrounding landscape from these monuments. This may result in visibility of the Pen y Cymoedd, Llyfi Afan, Meliln Court, and Ffynnon Oer turbines to the north-northeast and east from the felling date of 2037-41 from the felling date of 2042.
- 9.5.55 The turbines will be located over 560 m south and southeast of Cefn yr Argoed and over 1.1 km southeast of Nant Herbert, there will be no physical impacts on these monuments and the turbines will not interrupt any potential intervisibility between the monuments. There is considered to be no harm to the significance of these monuments as a result of the presence of turbines in the wider landscape as their evidential value including the contribution that setting makes to this value will be unharmed. Visibility of the proposed turbines in the wider setting Cefn yr Argoed Camp and Nant Herbert Camp is considered to result in a **Negligible Adverse** impact on these two assets of **High Importance** resulting in an effect of **Negligible Significance**.

Y Bwlwarcau hill fort (SM GM059), Scheduled Monument

- 9.5.56 Y Bwlwarcau is a large hill-slope fort with a small central enclosure and widely spaced banks. There are a large number of internal banks suggesting multiple phases of development and its form and location suggest a stock-raising function rather than defence.
- 9.5.57 The monument has evidential value as the buried and earthwork remains will contain information regarding the construction and use of this asset. It is experienced on the south-east facing slopes of Mynydd Margam and as the scheduling description notes it is not readily understood on the ground. As a probably non-defensive earthwork the location off the summit contributes to our understanding of the monument's historic function and this topographic setting therefore contributes positively to the significance of the asset. The pastoral land to the south and east also contributes as it reflects the probable original setting of the enclosure. The proximity of this monument to Roman Camp, another Iron Age enclosure with a probably part defensive part agricultural function, located c200 m west of Y Bwlwarcau, also contributes to the significance of this asset as the group value of these two Iron Age sites with complementary functions increases their associative value, although due to the topography they are not intervisible and the contribution of these associated monuments to the significance of Y Bwlwarcau is therefore limited.
- 9.5.58 The operational Ffynnon Oer and Pen y Cymoedd turbines are visible in views looking towards Y Bwlwarcau from the south (Figure 8.70) but are partly screened by forestry from the monument itself. The operational Llynfi Afan, Pant y Wal, Pant y Wal Extension, Fforch Nest 1 and 2, and Taff Ely windfarms are also visible from the monument. These turbines form three distinct groups when viewed from Y Bwlwarcau looking north, northwest and west. These are all sufficiently removed from the monument that they do not impact on how it is appreciated and do not adversely affect the contribution that its setting makes to its significance. The Hill House, Ford Motor Company, and Hargrove Farm turbines and the Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are all on the lower ground sufficiently removed to the south of the monument that they do not affect the contribution that setting makes to its significance. The Mynydd Brombil turbines are obscured by forestry in views west of Y Bwlwarcau and do not affect the setting of the monument.

- 9.5.59 The wind farm would be located between 300 m north-west and 4.85 km north of the monument. The ZTV and virtual model indicate that the tips of all turbines will be visible from the monument where it is closest to the turbines (although most will be screened by forestry) and up to 12 would be visible above the horizon in views from the central enclosure. They will be behind the viewer when looking down slope across the monument from the north-west and when looking south and east from the monument. The turbines will be to the right of the view when looking from the western edge of Y Bwlwarcau towards Roman Camp. The proximity of the nearest turbines means that they will visually dominate the setting of the earthwork in views to the north-west from the closest parts of the monument, however there will be no physical impacts on the monument and its evidential value as an example of an Iron Age enclosed settlement will be unharmed. It will still be possible to appreciate the monument's topographic setting and there will be no change to the pastoral setting to the south and east of the monument which contributes the most to the significance of the asset. Overall there is considered to be a negligible reduction in the significance of this asset as a result of the presence of the turbines. This equates to an impact of **Low Adverse** magnitude on this asset of **High Importance** resulting in an effect considered to be of **Minor Adverse Significance** and not significant.

Roman Camp (SM GM058), Scheduled Monument

- 9.5.60 The monument comprises the remains of a prehistoric enclosure and cross-ridge dyke at an elevation of 300 m Above Ordnance Datum (AOD) on a broad spur that falls gently to the south. A hollow trail cuts right through the enclosure from north to south. On the north it has breached the defences, but on the south it appears to have utilised the original entrance, which survives as a gap 4.5 m wide through both banks. The remains of a cross-ridge dyke project out to the north from the enclosure. A number of other earthwork banks are associated with the dyke.
- 9.5.61 The significance of the monument derives primarily from its evidential value as the buried and earthwork remains will contain information about the construction and use of this monument. Its proximity to Y Bwlwarcau also contributes to the significance of this asset as the group value of these two Iron Age sites with complementary functions increases their associative value, although due to the topography they are not intervisible. There is likely to have been historic intervisibility between Roman Camp and Camp N of Tonmawr, another Iron Age fort c.1.3 km to the south west, and Danish Camp, a small, defended Iron Age farmstead 250 m west of Camp N of Tonmawr, although the current forestry obstructs these views. The proximity of these monuments and their likely historic intervisibility also contributes to the significance of Roman Camp as it adds group value.
- 9.5.62 The earthworks of Roman Camp are experienced on the west side of a spur of land that projects south with pastoral land to the east (which includes Y Bwlwarcau fort 200 m to the east) and immediate north and west with forestry to the south, and beyond the pasture to the west and north. This topographic setting contributes to the significance of this asset as it allows an appreciation of the monument's likely defensive function (in contrast to Y Bwlwarcau). The pastoral surroundings reflect the likely original setting of the monument, but the forestry does not and this forestry also obscures views between Roman Camp and the two other defensive Iron Age sites to the south-west – Danish Camp and Camp north of Tonmawr. The forestry southwest of Roman Camp is an area of Low Impact Silvicultural System (LISS) which it is anticipated will be retained as such for the duration of the operational life of the wind farm, meaning that the current lack of intervisibility with Camp N of Tonmawr and Danish Camp will remain the case for the life of the proposed wind farm. The operational Pen y Cymoedd and Ffynnon Oer windfarms are predicted to be visible to the northeast of the monument, and Pant y Wal and Pant y Wal Extension as well as Fforch Nest 1 and 2 to the east, Taff Ely, Mynydd Portref and Mynydd Portref Extension to the southeast, Hill House, Ford Motor Company, Haregrove Farm, Newton Down, Parc Stormy Down and Stormy Down Aerodrome to the south and Mynydd Brombil to the west. For most of these only blade tips would be visible at a range of over 4 km and they are not discernible, the exception is the Mynydd Brombil turbines which are visible at a range of c.4.2 km to the west above the forestry.
- 9.5.63 The ZTV and virtual model indicate that the tips of up to 15 turbines will be visible in views north from Roman Camp though the more northerly turbines will be obscured by the forestry where they will form three rows heading

away from the monument and will be visually dominant in views to the north. This view however does not make a substantive contribution to the significance of the monument which derives more from the views south. There will be no physical harm to the monument, it will still be possible to appreciate its topographic setting overlooking the ground to the south, and the defensive function of the monument will continue to be appreciated. Visibility of the turbines in the wider setting of Roman Camp is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**

Danish Camp (SM GM056), Scheduled Monument

- 9.5.64 This scheduled area comprises a small, defended farmstead of Iron Age date. It has evidential value as the earthwork and buried remains will contain archaeological evidence of the construction and function of the enclosure.
- 9.5.65 As noted above there is likely to have been historic intervisibility between Danish Camp and Roman Camp and Camp N of Tonmawr, although the current forestry which entirely surrounds Danish Camp obstructs these views. The proximity of these monuments and their likely historic intervisibility also contributes to the significance of Danish Camp as it adds group value. As also noted above the existing forestry obstructs views between Danish Camp and these two contemporary monuments. The forestry around Danish Camp is planned for felling after 2042, therefore there will be a period of time following construction of the proposed development when there will be increased visibility from this monument and the historic intervisibility with Camp N of Tonmawr may be restored until the replacement trees grow to sufficient height to provide screening again.
- 9.5.66 The existing forestry also obscures views of any existing operational wind turbines from this monument. During the period between felling and re-establishment of the forestry the Mynydd Brombil turbines will be visible northwest of the monument at a range of 3.5 km. The operational Hill House, Ford Motor Company and Haregrove Farm turbines will also become visible to the east. However due to the scale of the turbines, the topography and the distances they will not be readily discernible. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines may also become visible when looking south where they would appear towards the distant horizon. The Newlands turbine will also become visible for this period at a range of 3.2 km to the south-southwest.
- 9.5.67 The turbines will be located over 1.7 km to the north of the monument within the forestry which will obscure views of the turbines from the monument. There will be no physical impacts on this monument and it will continue to be experienced surrounded by forestry for the majority of the operational life of the windfarm. The presence of turbines in the wider landscape within the forestry to the north of the monument will not impact on the significance of this asset or diminish the contribution that setting makes to this significance. Visibility of the turbines in the wider setting of Danish Camp is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**

Camp north of Tonmawr (SM GM057), Scheduled Monument

- 9.5.68 This monument comprises two polygonal earthwork enclosures, the smaller inside the larger. They lie on mostly level ground at 270 m AOD south-west of a stream in a shallow ravine.
- 9.5.69 As noted above there is likely to have been historic intervisibility between Camp north of Tonmawr and Danish Camp and Roman Camp, however this has been obscured by forestry. As noted above for a period of time following the felling of the forestry around Danish Camp (after 2042) this historic intervisibility will be briefly restored. The lack of intervisibility with Roman Camp will however remain as the intervening forestry is LISS.
- 9.5.70 The topographic setting of the monument adds to its significance as a defensive monument and as part of a group of contemporary monuments that together controlled access to the higher ground to the north-west which includes the Y Bryn site boundary. This topographic setting is appreciated from the monument itself and the approaches along the southwest-northeast aligned ridgeline. The Mynydd Brombil turbines are visible above the forestry to the northwest of the monument at a distance of c.4 km. The operational Hill House, Ford Motor Company and

Haregrove Farm turbines are visible to the east. However due to the scale of the turbines, the topography and the distances they are not readily discernible. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are visible when looking south where they appear towards the distant horizon. The Newlands turbine is also visible at a range of 3.2 km to the south-southwest.

- 9.5.71 The turbines will be located over 1.6 km north of the monument and the ZTV and virtual model indicate that up to 15 turbines will be visible above the adjacent forestry in views north from the monument. The historic relationships between this monument and its contemporary monuments will not be altered by the presence of turbines in their surroundings and the turbines will not interrupt views from Camp north of Tonmawr towards these other monuments. There will be no physical impact on this monument and it will still be possible to appreciate the topographic setting of the monument and the way in which this contributes to its significance will be unaltered. There will be no change to the way in which the setting contributes to the significance of this monument. Visibility of the turbines in the wider setting of Camp north of Tonmawr is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Ergyd Isaf Round Barrows (SM GM160), Scheduled Monument

- 9.5.72 The monument comprises the remains two burial cairns, probably dating to the Bronze Age (c. 2300 - 800 BC). The largest cairn measures 16.8 m in diameter by 1.8 m high and has a large central hollow measuring 1.2 m deep. This hollow (probably the result of robbing) reveals that the mound is made up of stones and earth. To the north-east of the largest cairn lies a smaller example measuring 7.9 m in diameter and 0.9 m high. A slight central hollow is surrounded by a stony rim. Both are grass covered and circular in plan. The monument is of national importance for its potential to enhance our knowledge of prehistoric burial and ritual practices. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits, together with environmental and structural evidence. Cairns may be part of a larger cluster of monuments and their importance can further enhanced by their group value.
- 9.5.73 The barrows are located on a summit overlooking the sea to the west. This hilltop prominence contributes to the significance of this pair of barrows as it is a typical location for this type of funerary monument. However the turbines of the operational Mynydd Brombil wind farm are visible to the north and west of the barrows and reduce the prominence of the barrows in views of the summit from the west and north.
- 9.5.74 This pair of barrows are 1.19 km west of the Ergyd Uchaf barrow which is on the west slopes of the next summit. It is likely that the two barrows on Ergyd Isaf were intervisible with the barrow on Ergyd Uchaf when constructed however the existing forestry covering the Ergyd Uchaf summit obstructs views between the monuments and reduces the contribution that this element of the setting makes to the significance of the Ergyd Isaf barrows. When this area of forestry is felled, there will be a short period during which this historic intervisibility may be restored, however at a distance of 1.1 km it may still not be possible to discern Ergyd Uchaf from Ergyd Isaf.
- 9.5.75 The proposed turbines will be located 1.48 km to 6.37 km north-east of the barrows and will be visible from the barrows, this will result in turbines being visible in an arc of view from the barrows extending from the south-west to the east with a gap between the groups of turbines due north. There will be no physical impact on these assets but the turbines of the proposed development will further compete with the hilltop prominence of the barrows in views from the west and this visual competition within one direction of view will result in a slight reduction in the significance of this monument by slightly reducing the contribution that the setting makes to its significance. There will therefore be an impact of **Low Adverse** magnitude to this asset of **High Importance**. This is judged to result in an effect of **Minor Adverse Significance** and not significant.

Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), Scheduled Monuments

- 9.5.76 There are three other scheduled cairns or barrows within the Y Bryn site boundary. All are located in the southern section: Ergyd Uchaf prehistoric Round Barrow (SM GM159); Twmpath Diwlith prehistoric Round Barrow (SM GM557); and site of the Bodvoc Stone (SM GM443). There are also nine undesignated barrows, cairns or cairnfields within Y Bryn site boundary. The scheduled examples and four of the undesignated examples are located along an east-west ridge and were probably intervisible when first constructed although the current forestry has obscured any views between most of them. Ergyd Uchaf may also have been intervisible with the two barrows at Ergyd Isaf when constructed, but as noted above the forestry now means that there is no intervisibility between these monuments.
- 9.5.77 The site of the Bodvoc stone and Twmpath Diwlith round barrow are still intervisible as these are located only 150 m apart within an unplanted area on the southern edge of the forestry. This intervisibility contributes to the significance of these two monuments as it allows an appreciation of them as contemporary ritual, religious or funerary features. There is no intervisibility with the non-designated cairns and barrows due to the forestry. As already noted, visibility between Ergyd Uchaf and Ergyd Isaf may be briefly restored following felling of the intervening forestry. Similarly there may be increased visibility between Ergyd Uchaf and Twmpath Diwlith and the site of the Bodvoc Stone for a period of time following felling, however the area of forest immediately southeast of Ergyd Uchaf is LISS which will constrain any increased visibility and the distance between these monuments (2.4 km) means that they may still not be discernible from each other even after felling. Although currently obscured by forestry the Mynydd Brombil turbines are 1.5 km west of Ergyd Uchaf and will be visible following felling of the forestry west of this monument until the replacement trees grow to sufficient height to provide screening again. Likewise they will be visible at a greater distance (c.4 km) west of Twmpath Diwlith and the site of the Bodvoc Stone for the same period, although the increased distance means that there is more likely to be overlap with the felling dates and therefore a shorter period of visibility is predicted.
- 9.5.78 Turbines 16 and 18 are located within the theoretic line of sight between the Ergyd Isaf round barrows and Ergyd Uchaf round barrow to the west and the site of the Bodvoc Stone, Twmpath Diwlith round barrow and group of undesignated cairns/barrows to the east. Due to the current forestry there is no intervisibility between these monuments and the presence of the turbines will not result in a material change to the way that their setting contributes to their significance. Although there will be areas of felling around the turbines this will not result in any increased visibility between these prehistoric monuments, and they will continue to be experienced within and adjacent to forested areas. There will be no interruption of the views between Twmpath Diwlith and the site of the Bodvoc Stone and no physical impact on these monuments. Visibility of the turbines in the wider setting of Ergyd Uchaf and Twmpath Diwlith barrows and the site of the Bodvoc Stone is considered to result in a **Negligible Adverse** impact on these three assets of **High Importance** resulting in an effect of **Negligible Significance**.

Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), Scheduled Monument

- 9.5.79 The monument comprises the remains of a ventilation furnace dating to the 19th century. The structure housed a brazier for ventilating a nearby drift mine. The entry to a level is immediately adjacent, with the base of a small haulage engine in front of it, and a coal tip downhill of the furnace. The monument has evidential value for its potential to enhance our knowledge of the early nineteenth century coal mining industry. The structures may be expected to contain archaeological information in regard to chronology, building techniques and functional detail.
- 9.5.80 The furnace and mine are relatively low structures (the ventilation chimney stands to a height of 6 m) located in the south of the northern block near to a break of slope at c.200 m AOD with the ground rising steeply to the north. They are within an area of forestry and as such their immediate setting is altered from when they were operational. The topography and vegetation means that the furnace and mine are not prominent features in the wider landscape. Further undesignated remains of the mine are located to the north-east and west within the forestry along the same contour of the Cae'r Mynydd, although due to the vegetation they are no longer intervisible with

one another the proximity of these associated remains adds to the evidential value of the monument. Forestry obscures views from the monument to the wider landscape but following felling there may be visibility of the Mynydd Brombil turbines 5.2 km to the southwest until the replacement trees grow to sufficient height to provide screening again. No other operational turbines are predicted to be visible from the monument.

- 9.5.81 The turbines will be located between 345 m and 1.17 km to the north/northeast and between 2.13 km and 4.0 km to the south / southwest of the furnace and will be visible above the trees but will result in no physical impacts to this monument. Visibility of the turbines could theoretically cause visual competition with the ventilation chimney when the forestry is felled. The forestry north and south of the furnace and mine and around the proposed turbines is not planned to be felled until after 2042, and further forestry with a felling date between 2027 and 2031 lies between this and the nearest proposed turbine. These dates indicate that any period of increased visibility from the monument would be short and that for the majority of the operational life of the wind farm the chimney will continue to be obscured by the trees. There will therefore be no change to the way the setting contributes to significance. Visibility of the turbines in the wider setting of Cae'r Mynydd is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Maesteg Blast Furnaces (SM GM418, LB 18492), Scheduled Monument and Grade II Listed Building) and Maesteg Sports Centre, The Cornstores (LB 11257), Grade II* Listed Building

- 9.5.82 The blast furnaces comprise the remains of the Llynfi Iron Works, first blown in 1839 and closed in 1886. The furnaces here were exceptionally tall (originally 14 m to the charging ramp) due to the strength of the local coke, but the top of the stack has been destroyed.
- 9.5.83 The furnace has evidential value for the information that the surviving remains will contain about the industrial processes carried out here. It is the only surviving blast furnace in this valley which was historically a major iron production area.
- 9.5.84 The monument is experienced on the edge of a car park between a supermarket and the Maesteg sports centre, formerly the 'Cornstores' building, listed at Grade II*, which was built as the blast engine house and became a grain store for the colliery ponies after the closure of the iron works. These two structures have group value for their association with the iron industry.
- 9.5.85 The wider landscape beyond the town is visible above the supermarket building to the right of the furnaces and contributes to the significance of these two assets as these hills were one of the sources of material for the iron works, although it is not possible to discern any of the former mines from this area. No existing wind turbines are visible within this setting due to the built up nature of the surroundings.
- 9.5.86 The northern section of turbines will be located on these hills between 1.8 km and 2.67 km to the north-west of the furnaces. All of the northern turbines will be visible, altering the character of the hillside beyond Maesteg, but not altering the contribution that the hills as a source of materials make to our understanding of the furnaces. The southern section of turbines will be located 2.6 to 4.6 km south-west of the furnaces and will also not alter the contribution that the setting makes to our understanding of the furnaces. There will be no physical impact on these assets and visibility of the turbines in the wider setting of Maesteg furnaces and cornstores is considered to result in a **Negligible Adverse** impact on these two assets of **High Importance** resulting in an effect of **Negligible Significance**.

Church of St James, Pyle with Kenfig (LB 11227), Grade I Listed Building

- 9.5.87 The church of St James is said to have been built to replace the original Norman church of Kenfig when it was threatened with being overwhelmed with sand in the later 14th century. The materials are said to have been carried from the old church, or perhaps the castle, for the purpose. The church was restored in 1877, and again in 1891 by F W Waller, when the organ chamber was added and the chancel reroofed.

- 9.5.88 The building is listed at Grade I as a small but well preserved Glamorgan parish church which is still largely of medieval form and fabric, and with a very fine dated medieval roof. The significance of the building derives mainly from the evidential value of its fabric and its association with a named architect. It also has communal value as a place of worship.
- 9.5.89 The building is experienced within a churchyard on the north side of the historic core of Pyle, on the west side of the road north to Margam. This immediate setting contributes to its significance by providing an appropriate context in which to appreciate the communal value of the building and is also the area in which its evidential value is best appreciated. The communal value is enhanced by group value with a number of Grade II listed memorials and tombs. This built-up setting means that no existing wind turbines are visible within the setting of the church.
- 9.5.90 The church is a landmark on the road to Margam from a range of approximately 275 m when approaching from both the south and north. In closer range views the location of the church near the edge of the settlement is appreciated as views north and west are towards open countryside. A band of woodland to the west of the church obscures it from view from the dunes. It is only glimpsed between houses from the east at a range of under 100 m. This localised landmark quality contributes to the significance of the church as it enhances our appreciation of its communal value as the focal point for the religious and sometimes social life of the parish.
- 9.5.91 The hubs and blades of up to 13 turbines are predicted to be visible from the vicinity of the church however the built up nature of the majority of its surroundings and the distance to the turbines (over 6.4 km to the north) means that visual competition with the church tower as a landmark in these relatively close range views is not anticipated. There will be no physical impact to the church, and it will continue to be appreciated within its churchyard close to the edge of the settlement. The contribution that this localised setting makes to the significance of the building will not be diminished and the church will remain a landmark in views from the south and north when approaching along the road to / from Margam. Visibility of the turbines in the wider setting of Church of St James is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* Listed Building

- 9.5.92 The church is of 13th century origin, reputed to have been built between 1245 and 1265, and restored in 1878 by John Pritchard at the cost of £500, and the chancel rebuilt in 1891-4 by Waller & Son of Gloucester. It was a chapelry to the first St James' church Kenfig, which is now under the sand, and which is recorded in a charter of 1149-1183 as having been built c.1150. The tower may be an addition to a single cell building of c.1300. Internally the building includes a Norman font, said to have been relocated from the Church of St James, as well as a large number of memorials.
- 9.5.93 The church derives most of its significance (and its reason for listing at Grade II*) from its evidential value because of this early fabric and its association with known architects and with the original parish church. It also has communal value as a place of worship.
- 9.5.94 The church is experienced within a raised curvilinear churchyard on a high prominence above the former site of Kenfig, by the junction of the side road into Maudlam village. This immediate setting contributes to its significance by providing an appropriate context in which to appreciate the communal value of the building and is also the area in which its evidential value is best appreciated. The communal value is enhanced by group value with a Grade II listed chest tomb.
- 9.5.95 The church tower is seen above the surrounding houses at a range of approximately 225 m from the south-east and within 200 m from the north-east. In views from the north and north-west the church is appreciated in an open setting, with little in the way of nearby settlement. This apparently isolated setting contributes to our understanding of the church as a former chapelry. Views of the church from the south are restricted by the topography to views from the public footpath less than 100 m south of the church.

- 9.5.96 The operational Mynydd Brombil turbines are visible from the road north of the church when looking north, and the Port Talbot Steelworks are visible beyond the church from the road adjacent to the churchyard. These structures alter the character of the wider surroundings of the church but do not compete with its prominence and the effect on its significance is neutral.
- 9.5.97 The ZTV predicts that the hubs of up to 13 turbines and the tips of one more will be visible from the areas in which the church is appreciated. At this range (over 7 km to the nearest turbine) visual competition with the limited landmark qualities of the church is not anticipated. There will be no physical impact on the church, and it will continue to be appreciated within a semi-open setting on the edge of the settlement. The contribution that this localised setting makes to the significance of the church as a former chapelry previously isolated from settlement will not be diminished. Visibility of the turbines in the wider setting of Church of St Mary Magdalene is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Church of St David (LB 11246), Grade I Listed Building

- 9.5.98 The nave and chancel probably to the late 13th to 14th century with the tower and south porch being late medieval. The church was restored by Prichard in 1871. The building is the successor to earlier church to St Cewydd at Llangewydd to the north which is now ruined. St David's derives most of its significance (and its reason for listed at Grade I) from the evidential value of its medieval fabric, and its association with a known architect, it also has communal value as a place of worship.
- 9.5.99 The church is located in a roughly circular churchyard in the centre of the village and this immediate setting contributes to the significance of the church by providing an appropriate context in which to appreciate its evidential and communal values. This is enhanced by the group value with a Grade II listed churchyard cross. The built-up surroundings mean that no other wind turbines are visible within this setting of the church.
- 9.5.100 The church tower appears above the surrounding houses in views from the west (at a range of 200 m), east (at a range of 500 m) and south (at a range of 450 m). From the south the tower almost breaks the skyline, and does so when approaching closer, it also forms a skyline feature in views from the north at a range of approximately 200 m. This localised landmark quality contributes to the significance of the church as it allows an appreciation of it as the focal point of the parish and of the settlement (which is also protected as a CA).
- 9.5.101 The ZTV predicts that all 18 turbines will be visible from areas in which the church is appreciated. However, at a range of over 10 km to the nearest turbine visual competition with the church tower is not anticipated and the contribution that setting makes to the significance of the church will not be diminished. There will be no physical impact to the church, and it will continue to be experienced within its village setting as a local landmark. Visibility of the turbines in the wider setting of Church of St David is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Church of St David, Bettws (LB 18626), Grade I Listed Building

- 9.5.102 The church may have an early medieval origin (suggested by the roughly circular churchyard boundary) and is believed to date from the 12th century, it was substantially remodelled in the 15th to 16th century. Until 1885 it was a curacy of Newcastle with revenue paid first to Tewkesbury Abbey and from the 13th century to Margam Abbey. The building was restored in 1893 and a north aisle was added by G. Halliday, the work was paid for by Olive Talbot of Margam. Internally the building includes a Norman font, 19th century holy water stoup within the porch and several monuments to well-known local families and individuals including John Bradford 1690-1780 (who was president of the Gorsedd of Bards in 1760 and taught Iolo Morgannwg), the Trahernes family and Rees Price (d 1723) the Calvinistic preacher.
- 9.5.103 The building derives significance (and its main reason for designation as a Grade I listed building) from the evidential value of this fabric, in particular its medieval west bellcote. It also has a degree of communal value as a place of worship and historical value for its association with Olive Talbot and the architect G. Halliday.

- 9.5.104 It is a modest building that is not a landmark in the wider area. The church is experienced within its churchyard on the south-west corner of the junction between Bettws Road and an un-named road that leads west out of the settlement. This immediate setting contributes to the significance of the building by providing an appropriate context in which to appreciate its evidential and communal value.
- 9.5.105 Due to the space around the church afforded by the churchyard and the wide road junction there are glimpsed views out of the settlement from the north-east of the church around the road junction, though these are largely obscured by evergreen trees within the churchyard. No existing wind turbines are visible within this setting due to the largely built-up nature of the church's surroundings.
- 9.5.106 There will be no physical impact on the church as a result of the turbines. The turbines are predicted to be visible from the road junction and the virtual model suggests that they will be seen to the right of the church when viewing from the east where they will form a cluster on the hills at a distance of over 7.1 km. However the model does not include the churchyard vegetation which will filter these views. Filtered views of the turbines from this location will not affect the ability to appreciate the evidential and communal value of the church nor its historical value, and the contribution that its setting makes to its significance will not be diminished. Visibility of the turbines in the wider setting of Church of St David, Bettws is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Bethania Capel y Bedyddwyr Neillduol (LB 18493), Grade II* Listed Building

- 9.5.107 The chapel was built in 1902 on the site of earlier chapels of 1832 and 1841. It was designed by W. Beddoe Rees of Maesteg who practiced as an architect in Cardiff. The chapel is considered the mother church of the Baptist community in the valley. The building is in Beaux Arts style with Ionic style columns supporting an entablature and a large central 80-pane window between 32-pane sash windows to each side. Internally there is a gallery of four tiers on three sides on iron columns by W A Baker and Co of Newport, Monmouthshire.
- 9.5.108 The building derives significance and its principal reason for listing at Grade II* from its evidential value as one of the best surviving buildings by a major chapel architect. It also has communal value as a place of worship and evidential value for the information it provides about the non-conformist history of south Wales.
- 9.5.109 The building occupies a prominent position facing down Ewenny Road to the east. When approaching from the east up Ewenny Road, the scale of the building and its elevated position means that it dominates the view from the railway bridge westwards (a range of approximately 150 m). It is also dominant in views north and south along Bethania Street at distances of c.50 m but at greater distances it is obscured by the other buildings on the street. This visual dominance of the building in these close range views contributes to its significance by emphasising its importance to the local Baptist congregation and allows its architectural details to be appreciated. The built-up nature of these surroundings means that no existing wind turbines are visible within the setting of the chapel.
- 9.5.110 The ZTV predicts visibility of the hubs of up to eight turbines and the blades of up to eight more from around the chapel and the virtual model indicates that one turbine would be visible above the chapel in the view from near the railway bridge looking east, however the height of the chapel appears not to be fully rendered in the model and it is likely that the turbine would be hidden behind the building. There will be no physical impact to the chapel and the turbines will not compete with the scale of the chapel in views from the east. Its evidential and communal value as a historically significant chapel will therefore not be diminished, there will be no change to the way that the setting contributes to the significance of the building. Visibility of the turbines in the wider setting of Bethania Capel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Llangynwyd Castle (SM GM085), Scheduled Monument

- 9.5.111 This monument comprises the earthwork and buried remains of a medieval motte and bailey castle to the west of the village of Llangynwyd. The monument derives significance from its evidential value as it will contain physical

evidence of medieval settlement and defence. It may also contain evidence of any earlier occupation as the site is thought to have possibly been an Iron Age defensive site.

- 9.5.112 The castle is located west of the village of Llangynwyd on a spur of land above a watercourse and this topographic setting contributes to our understanding of it as a defensive site that controlled this local area. The monument is not publicly accessible and is generally obscured by surrounding vegetation but the earthworks are visible from the south-west at a distance of approximately 50 m. In these views the church of St Cynwyd and the houses of the village can be seen beyond the monument and this contributes to its significance by allowing an appreciation of the relationship between the church, settlement and castle. Views of the surrounding agricultural land make a minor contribution to the significance of the monument as they reflect the likely historic land use around the monument. These views include views of existing electricity pylons approximately 150 m north-east and north of the monument, a water tower approximately 750 m to the north-east of the monument and some of the existing Pen y Cymoedd turbines are visible as two groups approximately 4.7 km north-northeast of the monument. These modern features detract slightly from the rural nature of the surroundings of the castle (in particular the overhead powerlines and pylons) but do not adversely affect the ability to appreciate its significance or its relationship with its surroundings. There are also views towards Y Bwlwarcau hillfort 800 m to the west (although the earthworks are not discernible from here).
- 9.5.113 The turbines will be located 1.9-5.0 km west and north-west of the castle and up to 13 will be visible beyond and to the right of Y Bwlwarcau hillfort. There will be no physical impact on the monument and the turbines will not interrupt views across the castle earthworks towards the village and church or between the castle and the hillfort. It will therefore still be possible to appreciate the strategic importance of the medieval defensive site on its spur of land above a watercourse and to appreciate the relationship between the castle and the settlement. The turbines will introduce new features into the wider landscape around the monument but its immediate setting will remain agricultural and the presence of additional turbines in the wider area will not alter the contribution that the agricultural setting makes to the significance of the monument. Visibility of the turbines in the wider setting of Llangynwyd Castle is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Llwydarth farmhouse (LB 11256), Grade II* Listed Building

- 9.5.114 The farmhouse derives significance from its evidential value as a 16th century farmhouse with detached bakehouse and later alterations. It also derives value from its association with Thomas ap Hywel ap John Coch, whose son Antony Powel was steward to Sir Thomas Mansel in 1605. The bard, Dafydd Benwyn recorded the unstinting generosity of the Llwydarth family. It is this early fabric and association with important local figures which leads to the higher grade of designation compared to most other listed farmhouses in the area.
- 9.5.115 It is located on the edge of Maesteg and is accessed via a trackway from the A4063 to the south. The farmhouse faces south across fields with houses in the valley below and visually this creates an isolated and rural setting which contributes to the significance of the farmhouse by providing an appropriate immediate setting in which to appreciate its evidential value. The rural setting and apparent seclusion of the farmhouse is enhanced by the hedgerows to the south and along a green lane west of the house which enclose it. However noise from the road in the valley below intrudes on this and detracts from the tranquillity of the rural setting. No existing turbines are visible within this setting.
- 9.5.116 The southern block of turbines are predicted to be visible from the farmhouse at a distance of over 3 km to the west. However the site visit found that views west from the farmhouse are constrained by the surrounding vegetation and the virtual model indicates that there would be no visibility of turbines from this asset. There will be no physical impact on this building. The farmhouse will continue to be experienced within an isolated rural setting on the edge of Maesteg, and the contribution that this setting makes to the significance of the building will not be diminished. Visibility of the turbines in the wider setting of Llwydarth farmhouse is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Chain Home Low Radar Station (SM GM488), Scheduled Monument

- 9.5.117 The significance of this asset derives from its evidential value as the surviving remains of a WWII early warning system to alert the military of the approach of enemy planes. It formed part of a network of early warning radar stations around the UK which could detect aircraft flying as low as 150 m (the original Chain Home Stations could only detect aircraft at higher altitudes above 1.5 degrees over the horizon) and could track aircraft over land. The topographic location of these remains on the west facing slopes of Mynydd Margam contributes to their significance by allowing an appreciation of the strategic importance of the Port Talbot area and the Bristol Channel more widely during WWII and the function of this asset which required clear views of the horizon, particularly west over Swansea Bay and at longer ranges south over the Bristol Channel. The Mynydd Brombil turbines are visible above the horizon at a distance of c1.5 km north of the monument but do not detract from the significance of these remains. The Port Talbot steelworks dominates views west from the monument, although there have been some alterations to the steelworks since WWII they were present at the time that the radar station was constructed and were part of the reason for requiring early warning of enemy aircraft, these structures therefore make a neutral to positive contribution to the significance of the monument.
- 9.5.118 There will be no physical impact on this asset. The ZTV predicts the tip of one turbine (but no turbine hubs) will be visible above the horizon at a range of 2.68 km northeast from the radar station. This will not impact on views of the western and southern horizons which contribute most to the significance of the asset and it will still be possible to appreciate the topographic setting and strategic importance of the asset and its physical relationship with Port Talbot, Swansea Bay and the Bristol Channel. The horizon to the northeast will be very slightly altered by the presence of one turbine blade appearing above the horizon but this is not considered to affect the ability to appreciate the clear views of the horizon which the asset needed to function as features below 150 m above the horizon would not have registered to the radar. There will be no change to how the setting contributes to the significance of the monument. Visibility of the turbines in the wider setting of Chain Home Low Radar Station is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Bont Fawr Aqueduct / Viaduct (SM GM393, LB 22890 and 23022), Scheduled Monument and Grade II* Listed Building

- 9.5.119 The aqueduct was constructed in 1824-7 by the ironmaster John Reynolds to supply the waterwheels at Oakwood Ironworks. The investment in outmoded technology (water power) was symptomatic of the failure of the ironworks with the furnaces producing little iron until they were sold c1840 to Governor & Company of Copper Miners. The aqueduct ceased to supply the works and after 1841 a railway was laid across it, this subsequently became a minor road and is now a public footpath closed to vehicles.
- 9.5.120 The aqueduct/viaduct is formed of four bays of rubble stone with tooled dressings, the elliptical arches are carried on wider tapering piers with stepped stone courses against the spandrels. The later parapet has blue-brick saddleback copings and the deck is laid with tarmac.
- 9.5.121 The structure has evidential value as an example of a 19th century aqueduct later converted to a viaduct. It also has historical value for its association with the Oakwood Ironworks and with named individuals/organisations. The structure also has aesthetic value for its decorative design, typical of Victorian engineering which was rarely purely functional in appearance.
- 9.5.122 This aesthetic value is appreciated in views of the structure from its immediate surroundings where it dominates the narrow valley east of Pontrhydyfen. The positive contribution made by setting to the significance of the aqueduct derives from its topographic setting in the Afan Valley and its relationship with the river and surrounding transport infrastructure as well as its historic association with the Oakwood Ironworks (although the sites are not intervisible). No existing turbines are visible within this setting.

9.5.123 The turbines of the northern section will be located 3.45 km to 4.2 km east of the aqueduct and the turbines of the southern section will be located 4.25 km to 6.19 km south-east of the aqueduct. The ZTV and virtual model indicates that blades of one turbine will be visible above the horizon beyond the aqueduct when looking from the west where it will appear between two existing electricity pylons.

9.5.124 There will be no physical impacts on the aqueduct/viaduct and its evidential value will be unharmed. The turbines will introduce a new visual feature within the wider landscape, but the aqueduct/viaduct will still dominate its local surroundings and there will be no harm to its significance. The presence of turbines in the background of views of the aqueduct will not impact on the ability to appreciate its aesthetic value nor will they diminish the contribution that setting makes to its significance, it will still be possible to appreciate the topographic setting within the Afan Valley and the aqueduct's relationship with the river and surrounding transport infrastructure. Visibility of the turbines in the wider setting of Bont Fawr Aqueduct/Viaduct is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Llangynwyd Conservation Area

- 9.5.125 The Llangynwyd CA was designated in 1973²² by Ogwr Borough Council (which became part of BCBC). The village is compact with a number of groups of farms and cottages. One important group lies to the north of the church and includes the Bethesda Independent Chapel and an old public house 'The White Hart.' It is typical of many of the exposed hill villages of Glamorgan with high stone walls enclosing the churchyard and lining the narrow lanes. A memorial in the village centre commemorates several poets, artists and writers of the area and the legend of the 'maid of Cefn Ydfa' (Ann Maddocks) and her lover Will Hopcyn, and a plaque on the east side of the churchyard wall marks the location of the dwelling of Will Hopcyn. A 'heritage garden' south of the vicarage includes St Cynwyd's well. The conservation area includes fields to the north of the village as well as parts of fields to the west. There are some modern dwellings within the village also.
- 9.5.126 The significance of the CA derives from this character and appearance as a hill village focused on its church but with an informal rather than planned character. The CA has evidential value inherent in its buildings as well as historical value for its connections with notable figures. Views out of the conservation area are possible from the churchyard extension east of the church where almost 360 degree views over the surrounding landscape are possible and there are views from here across the core of the CA which lies west of the church. Views out of the conservation area to its immediate agricultural surroundings from the edges of the designated area contribute to its significance by highlighting the rural character of the village. There are also glimpsed views out of the CA between the low buildings from the area west of the church around the memorial cross which include views to the west, south and east.
- 9.5.127 The operational Llynfi Afan turbines are screened from the main area of the CA by the churchyard wall and do not affect the character and appearance of the CA. The operational Mynydd Portref, Mynydd Portref Extension and Taff Ely turbines are visible to southwest of the CA from the edges of the designated area but are screened by buildings and vegetation from the centre of the village (Figure 8.72). These turbines do not result in any harm to the significance of the church which is the most prominent building within the CA. The operational Hill House and Gelli Las Farm turbines are also visible in the distance to the south-southwest when viewing from the edge of the designated area or from the churchyard extension but from the centre of the village they are obscured by houses, they are sufficiently removed that they do not result in any material change to the setting of the CA.
- 9.5.128 All of the turbines will be visible at a range of 2.4 to 5.0 km west and north-west of the village and as described in more detail below will result in some visual competition with the church tower; as illustrated on Figure 8.72 some of the turbines of the southern section will be visible between and above the buildings west of the church from around the memorial cross, the turbines of the northern section will be obscured by the buildings in this view. The character of the surroundings in this direction will alter but the village will generally continue to be appreciated as a typical hill village formed of farms and groups of cottages focused on the church. The presence of turbines on

²² Ogwr Borough Council 1991 *Conservation Areas in Ogwr Borough Council*.

the neighbouring hills will result in a slight reduction in the contribution that the rural surroundings make to the character and appearance of the village and therefore a slight reduction in its heritage significance. There is considered to be an impact of **Low Adverse** magnitude on this asset of **High Importance** resulting in an effect considered to be of **Minor Adverse Significance** and not significant.

Church of St Cynwyd (LB 11243), Grade II* Listed Building

- 9.5.129 The church of St Cynwyd is located in the village and CA of Llangynwyd. It is a 14th century building incorporating the remains of a 13th century porch and was extensively restored by G E Halliday of Cardiff in 1891-3, the cost of £3,000 being funded by Miss Olive Talbot of Margam Castle. The church is built of coursed Pennant sandstone, with some limestone and igneous rock intrusions, and with a slate roof. It consists of a nave with west tower, a south porch of 1893, and a 14th century chancel, largely rebuilt in the 19th century. The tower has one tall stage including the bell chamber above the moulded plinth, quoined for part of its height only, and set back above two string courses, the upper carrying the crenelated parapet with crocketed square pinnacles at the corners.
- 9.5.130 The D-shaped churchyard enclosure and dedication to a 6th century saint (St Cynwyd Cynwydion being a little known saint of the congregation of Cattwg, son of Cynfelyn ap Garthwys) both suggest that there was a much earlier foundation preceding the current building. The churchyard contains memorials to Wil Hopcyn and Ann Thomas (the maid of Cefn Ydfa) – 18th century lovers who were forbidden to marry, she dying in his arms after pining following her forced marriage to Anthony Maddocks.
- 9.5.131 The building has evidential value as an example of ecclesiastical architecture with physical evidence of multiple phases of construction and alteration from at least the 13th century. It also has evidential value of the information it may contain about any earlier structures on the site, including a possible early medieval church. It has historical value for its association with named individuals including Olive Talbot and to the ‘maid of Cefn Ydfa’ as well as communal value as a place of worship and as a focal point for the spiritual life of the parish.
- 9.5.132 The church is experienced within its medieval churchyard, later extension churchyard to the east and the immediate surroundings of the village. This setting contributes to the communal value of the church as the churchyard is a place of burial for people from the village and wider parish. The dominance of the church tower is appreciated in these views which contributes to its evidential value as this emphasises the importance of the church to the local community in the past. In particular the views of the church from the churchyard extension allow an appreciation of the height of the tower and the relationship between the church, its churchyard and the village.
- 9.5.133 The operational Llynfi Afan turbines are just visible over the hill to the north of the church and are sufficiently removed not to result in change to its setting. The operational Mynydd Portref, Mynydd Portref Extension and Taff Ely turbines are visible to southwest of the church from the churchyard extension. They are behind the viewer when appreciating the evidential, aesthetic and historic values of the church and do not result in any harm to its significance. The operational Hill House and Gelli Las Farm turbines are also visible in the distance to the south-southwest of the church, they are sufficiently removed that they do not result in any material change to the setting of the church.
- 9.5.134 There will be no physical impact on the church as a result of operation of the turbines. The turbines of the southern section will be visible at a distance of between 2.6 and 4.8 km west of the church and 3.7 and 4.1 km north-west of the church. The turbines of the northern section will be located between 4.5 km and 5.3 km north-north-west of the church although from the front of the church these will be mainly screened by the buildings of the village, Figure 8.72 is from a point outside the churchyard towards its southwestern corner.
- 9.5.135 The virtual model indicates that all the turbines of the southern section of turbines will be visible on the hilltops beyond and above the church tower in views from the eastern end of the churchyard extension. This will cause visual competition with the prominence of the tower in these views.
- 9.5.136 Other views of the church will be unaffected, including views from the village as the turbines will be behind the viewer or so far to the side that they will not cause visual competition with the church tower. There will be no

physical impacts on the church and it will still be possible to appreciate its relationship with the village. The historical value of the church will be unaffected by the presence of turbines in the wider area and the effect of the visual competition in one direction of view is considered to result in a slight reduction in the significance of the church. There will be an impact of **Low Adverse** magnitude on this asset of **High Importance** which will result in an effect judged to be of **Minor Adverse Significance** and not significant.

Tythegeston Court (LB 11216 and GM15), Grade II* Listed Building And Grade II Registered Park & Garden

- 9.5.137 Tythegeston Court comprises a medieval strong house integrated into a Tudor manor house which was again altered into a late Georgian mansion. The original house was constructed by the Turbevilles in the early 14th century, whilst the mid-16th century alterations were carried out by the Loughors and the latest changes in two phases by Captain Henry Knight (1766-72) and Colonel Henry Knight (1784- c1810). The house now has a courtyard plan with the principal elevation facing south across a carriage circle with a fountain. The house is noted for its rococo plasterwork by John Elson. The house has evidential value as it will contain physical evidence of the phases of construction and also has historical value for associations with named individuals. The house also has a great deal of aesthetic value, particularly its entrance front to the south which is slightly asymmetrical due to the rebuilt medieval tower to the left – Knight senior intended to balance this with a second tower to the right, but his designs were altered by his son. The reasons for listing are given as the level of detail in the Georgian house, the fine interior plasterwork and the earlier origins as a rare medieval tower house.
- 9.5.138 Associated with and lying to the north, east and west of the house is a small landscape park and informal and compartmented garden contemporary with the rebuilding of the house in the late 18th century with some additional planting and alterations to the garden in the late 19th century (yew hedges) and mid-20th century (rose garden). The house occupies the northern part of the Tythegeston conservation area, the remainder of which lies south of the A4106 that bounds the registered park. This very small conservation area also includes the Grade II listed Church of St Tudwg, a scheduled cross in the churchyard and a small group of undesignated houses.
- 9.5.139 Views of Tythegeston Court from the south contribute to its significance as they allow an appreciation of its aesthetic and evidential values, whilst views south from the house towards the village and church contribute to the significance of both Tythegeston Court and the church by allowing an appreciation of the historic relationship between the manor, the church and the village. Views of and from the east of Tythegeston Court are across the gardens and also contribute to its aesthetic value. Views across the park to the north of Tythegeston Court make a lesser contribution to its significance as the service buildings are located in this area and the aesthetic value is less obvious.
- 9.5.140 The Newton Down and Parc Stormy Down and Stormy Down Aerodrome turbines are visible from the western edge of the park looking away from the designed landscape and have a negligible impact on the significance of the registered park, there are no existing turbines visible from the listed building.
- 9.5.141 The turbines will be located over 10 km north of the house and will result in no physical impacts to these assets. The blades of up to five turbines are predicted to be visible from the house although no hubs are predicted to be visible from here; additional blade tips and hubs are predicted to be visible from the areas south of the house as well as from the eastern, western and northern boundaries of the park, although a tree belt along the latter screens views out of the park in this direction. The turbines will be behind the viewer when looking at the north side of Tythegeston Court from the park and will be oblique to views east across the gardens. At this range the turbines will not visually compete with the house in views from the south and will not detract from its aesthetic value, it will still be possible to appreciate the evidential value of the building as an example of a mansion with multiple phases of development and there will be no impact on the historic connections which the building has. Visibility of the turbines in the wider setting of Tythegeston Court is considered to result in a **Negligible Adverse** impact, on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Bryngarw Park (GM5), Grade II Registered Park & Garden

- 9.5.142 Bryngarw consists of extensive informal early-20th-century woodland and water gardens with some oriental features and planting including Japanese maples, magnolias and rhododendrons. The park was laid out in the early 20th century by Captain Onslow Powell Traherne, a well-travelled Victorian industrialist who renovated and extended the house at Bryngarw. The house is first recorded in 1743, but may have begun as a 15th century farmhouse, it was divided into flats in 1961 and was abandoned in 1980 due to dry and wet rot before being renovated in 1993 (it is not listed). Captain Traherne introduced many exotic species to the park, including rhododendron, magnolia, tulip trees, handkerchief trees, sugar maple, paperbark, dogwood, sequoia and ginko biloba. This planting gives the park its aesthetic and evidential value.
- 9.5.143 The park has been a public country park since 1986. The park has aesthetic value as a designed landscape and evidential value in the number of exotic species, it also has communal value as a visitor attraction and public space.
- 9.5.144 The aesthetic and evidential value of the park is only experienced from within its boundaries due to surrounding vegetation and walls. Views out to the wider landscape are limited by the topography and only limited areas of the park are predicted to have visibility of the turbines. The wider setting does not contribute to the evidential value of the park but the proximity of built up areas does contribute to its communal value as a country park. No existing turbines are visible from the park due to the dense planting, as this vegetation gives the park a large part of its significance it can be expected that it will be maintained for posterity so far as possible.
- 9.5.145 The turbines will be located over 7.8 km north-west of the park and will result in no physical impacts to the park. The turbines are predicted to be visible only from the central part of the park and they will not impact on the evidential and aesthetic values of the park which are appreciated from within the registered area and at this range will not materially alter the contribution that the setting makes to the significance of the park, as it will continue to be experienced as a country park close to areas of settlement. Visibility of the turbines in the wider setting of Bryngarw Park is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Port Talbot: Talbot Memorial Park (GM45), Grade II Registered Park & Garden

- 9.5.146 Talbot Memorial Park, also known as Taibach Park, is a small, well-preserved urban park close to the centre of Port Talbot. The park's war memorial (Grade II* listed) takes the form of a bronze sculpture of victorious peace on a granite pedestal and was unveiled on 4th July 1925 by Field Marshal Sir William R Robertson. The memorial remembers those from the area who gave their lives in both World Wars and the commemorative character of the park is emphasised by the main gate (Grade II listed) which is dedicated to Rupert Price Hallows, who received the Victoria Cross for his actions at Hooges in 1915. The park also includes a bandstand near the war memorial in the centre of the park, a Grade II listed fountain in honour of the local late 19th and early 20th century doctor John Hopkin Davies and two Grade II listed gate lodges. The park has evidential value as an example of this form of public space war memorial which became common across the UK following the Great War 1914-18. It also has historical value for its associations with named individuals and a great degree of communal value as the memorial is dedicated to local people who will in many cases still have family living in the area. The land for the park was given by the Margam estate which adds to the historical and communal value because of this connection. In addition the park has aesthetic value as a designed landscape, albeit a simple one, in particular for the war memorial and bandstand which are located on the central north-north-east aligned axis of the park. Recently a banner with a poem by the actor Richard Burton has been erected in the park with a flower bed in front of it to the west of the bandstand. This unpublished poem (titled Portrait of a Man Drowning) includes an evocative description of dusk falling on mountains grazed by sheep and cows and of the peace that has descended on the area. The poem has a somewhat melancholy tone in describing the loss of "hub-bub of activity" and of leaving the area. It is

not known whether the poem was inspired by a specific view from the park or of another location entirely – it is believed to have been written in the 1960s whilst Burton was filming *The Night of the Iguana*²³ in Mexico).

- 9.5.147 The park is generally experienced only within its boundaries, although there is a clear designed view into the park and along its central axis from the main entrance at the south-south-west this view is constrained by the entrance gateway to a narrow vista along the axial path and is terminated by the bandstand. Views out from the park are towards the adjacent streets of houses, the Grade II* listed Church of St Theodore to the south-west, to the Mynydd Brombil to the north-east and east beyond the adjacent housing and towards Mynydd Emroch to the north beyond a rugby field that is not included in the registered park and the M4 motorway flyover. This latter view is along the central axis of the park beyond the bandstand and therefore contributes the most to the aesthetic value of the park. All of these views contribute to our understanding of the park as an urban park. Views of the hills beyond the park contribute to the understanding of the Richard Burton poem and may have inspired some of the imagery it describes. No operational turbines are visible from within the registered area or its immediate surroundings.
- 9.5.148 The ZTV predicts that the blades of up to three turbines will be visible from the northern corner of the park but these will be features on distant hilltops as the turbines will be located between 3.41 km east and 7.5 km north-east of the park, they will have no physical impact on the park and will not alter the evidential or historical values of the park. The turbines will have a negligible effect on the aesthetics of the park as they will not be visible within the main designed view from the entrance of the park. The communal value of the park will be unaffected by the presence of turbines in the wider landscape and there will be no impact on the historic associations with significant local figures. The turbines will introduce new features to the mountains above the park and the movement of the blades will introduce an active element to this landscape which is in contrast to the description in the Richard Burton poem of a loss of activity, however the hills will continue to be grazed as described in the poem, this change to the character of the landscape around the park will slightly affect the ability to appreciate the connection between Burton's poem and its surroundings from a small part of the park resulting in a very slight loss of significance to this recent element within the registered park. The impact of **Negligible Adverse** magnitude on this asset of **Medium Importance** will result in an effect of **Negligible Adverse Significance** and not significant.

Pontrhydyfen Viaduct (LB 23024) Grade II Listed Building

- 9.5.149 Approximately 300 m west of Bont Fawr Aqueduct is the Pontrhydyfen Viaduct. This is a 19th century railway viaduct constructed in red brick in 1897-8 by Topham, Jones and Railton. It was built as part of a branch line by the Port Talbot Railway and Docks Co. to link the docks with the coal producing areas to the north but was absorbed by the Great Western Railway (GWR) soon after it was finished. The railway closed in 1964 and the route is now a footpath named after the Hollywood actor Richard Burton who was born in Pontrhydyfen. The structure has evidential value as an example of 19th century railway engineering and can also be considered to have a degree of communal value as a footpath named after a famous local.
- 9.5.150 Similarly to Bont Fawr the ten arch viaduct visually dominates its immediate setting in views from the Afan valley and adjacent roads where its curving plan and tall round arches can be appreciated. The positive contribution made by setting to the significance of the aqueduct derives from its topographic setting in the Afan Valley and its relationship with the river and surrounding transport infrastructure as well as with the coalfields to the north and Port Talbot (although the sites are not intervisible). No existing turbines are visible within this setting.
- 9.5.151 The turbines of the northern section will be located 3.73 km to 4.49 km east of the viaduct, and the turbines of the southern section will be located 4.40 km to 6.37 km south-east of the aqueduct. The ZTV and virtual model indicate that the blades of two turbines will be visible above the horizon beyond the viaduct in views from the west on the B4286. This will introduce new visual features into these views but the evidential value of the viaduct as an example of 19th century engineering will be unaltered, there will be no physical impact to the viaduct and its communal value as a footpath will also be unaffected and it will continue to visually dominate its setting in the Afan Valley. There will be no alteration to the topographic setting or to the relationship between the viaduct and the river and

²³ Burton R., (1995). *Portrait of a man dying*. Available from - <https://jbsandown.wordpress.com/2014/05/25/portrait-of-a-man-drowning-a-poem-by-richard-burton-1965/> [Accessed 03/04/2023]

surrounding transport infrastructure which contributes to the building's significance. Visibility of the turbines in the wider setting of Pontrhydyfen Viaduct is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II Listed Building

- 9.5.152 The farmhouse derives significance from its evidential value as a well preserved 17th century farmhouse retaining internal structural features such as chamfered tie beams a stone stair and oak partitions. The farm is located east of Llangynwyd in Cwm Cerdin and faces north-east down this small valley. The immediate agricultural setting contributes to the significance of the farmhouse as it is an appropriate setting in which to experience the evidential value of this historic farmstead. Although the operational Pen y Cymoedd and Ffynnon Oer turbines are predicted to be visible from this asset at a range of 5 km to the north / northeast no existing turbines are visible within the setting of Pentre Farmhouse. Overhead powerlines supported on pylons cross to the immediate west of the farmhouse resulting in a negligible reduction in the contribution that the rural agricultural surroundings make to the significance of this asset.
- 9.5.153 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV predicts visibility of the hubs of up to 8 turbines and the blades of a further five turbines at a range of over 2 km west of the farmhouse. Although they will introduce new features into the wider landscape around the farmhouse, they will not alter the character of its immediate agricultural surroundings and it will still be possible to appreciate the evidential value of the farmhouse and its original function. The contribution that setting makes to the significance of the building will therefore be unaltered. Visibility of the turbines in the wider setting of Pentre Farmhouse is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Gilfach-ganol farmhouse (LB 11375), Grade II Listed Building

- 9.5.154 This Grade II listed building began as a single-unit dwelling with gable entry from the west beside an axial stack. It was modified by being subdivided into a hall and inner room and a newel stair to an attic room c.1700 and extended by a small chamber to the rear. It was further extended in the 19th and 20th centuries. It is of local stone, roughcast and whitewashed with an asbestos slate roof of 1996. The building is listed because despite its later alterations it retains the character of a small regional farmhouse with original details. These original details include two deeply chamfered cross beams in the original living room, a circular stone stair behind the chimney stack, and various small openings in the walls, including a cupboard beside the secondary fireplace inserted c.1700 in the inner room. The principal façade is to the south. Within the garden to the east of the house are bee-boles set into the wall which are separately listed.
- 9.5.155 The building derives significance from this evidential value as an example of a small farmhouse with later extensions and alterations. As a farmhouse the rural surrounding, in particular its immediate farmland surroundings, contribute to its significance by providing an appropriate context in which to appreciate its historic function. As well as having evidential value of their own as a rare survival of this type of structure the bee-boles add to the significance of the farmhouse through group value.
- 9.5.156 The farmhouse is located on the break of slope between higher ground to the south and west and lower ground to the east and north. This topographic setting contributes to the significance of the building as this is likely to have been the transition between cultivated land on the lower slopes and grazing land on the higher ground, and as such is an appropriate and typical location in which to find farmhouses of this date.
- 9.5.157 The Pant y Wal and Pant y Wal Extension turbines are visible from the road west of the farmhouse at a range of 10 km to the northeast, the Llynfi Afan turbines at a range of 9.5 km, and the Pen y Cymoedd and Ffynnon Oer turbines are visible at a range of c.9.5 km to the north.
- 9.5.158 The turbines will be located over 2.3 km north-east of the farmhouse. The turbines will be visible within the setting of the farmhouse and the ZTV predicts that the hubs of up to four turbines and the blades of a further three will be

visible above the horizon in views of the farmhouse from the south where they will be behind and to the left of the farmhouse and from the west where they will be to the right of the farmhouse. There will be no physical impact on the building and its evidential value will be unharmed.

- 9.5.159 Although the turbines will introduce new visual features within the wider landscape around the farmhouse, they will not alter the character of its immediate agricultural surroundings and it will still be possible to appreciate the evidential value of the farmhouse and its original function, the contribution that the setting makes to the significance of the building will therefore be unaltered.
- 9.5.160 Visibility of the turbines in the wider setting of Gilfach-ganol farmhouse is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II Listed Building

- 9.5.161 The church is constructed of pick-dressed mountain stone and was built in 1895-8 by William Mcgaul (contractors) to designs by G. E. Halliday which were scaled back after the death of the patron Miss Olive Talbot in 1894. The three stage tower was not completed until 1958 and is faced with stone reclaimed from the Llynfi blast furnaces. In the gable is a statue of St Michael slaying the dragon, the interior is plain in a Decorated Gothic style but there are painted and stencilled walls to the sanctuary and an unusual immersion baptismal font beneath a plain tub font at the west end.
- 9.5.162 The building derives significance and its principal reason for designation as a Grade II listed building from its evidential value as a large and well preserved Gothic design by a well-known church architect and historical value as a memorial to Miss Olive Talbot, a generous benefactress to church-building. It also has communal value as a place of worship. It also has historical value for its indirect association with the Llynfi iron works due to the use of material from the furnaces in the construction of the tower.
- 9.5.163 The building is located in a small churchyard with no memorials, on the north side of Bryn-mawr Place, off Neath Road, parallel to and lying above Commercial Street. Despite its scale the building is only appreciated within its immediate setting within the town of Maesteg. This urban setting contributes to the communal value of the building as a place of worship as it allows an appreciation of the relationship between the church and the settlement it serves. The lack of memorials within the churchyard also contributes to the evidential value of the building as a late 19th century church – as it highlights the recent history of the building and its community and changes to burial practice at the time with these taking place in municipal cemeteries on the outskirts of the urban area. The church is appreciated only in close proximity within this urban setting and although there are glimpsed views out of Maesteg to the south-east from around the church these do not make a substantive contribution to its significance. No existing wind turbines are visible within this setting due to the built-up nature of the church's surroundings.
- 9.5.164 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV predicts visibility of the hubs of up to four turbines and the blades of another from the church, which would be located 2.71-4.48 km to the south-west of the church of the church and 2.33-3.11 km to the north-west of the church, however they will be obscured by the surrounding buildings. No turbines will be visible in the views south-east from the church. There will be no material change to the setting of this building as a result of the turbines in the wider area, it will continue to be experienced as a late 19th century church within an urban area and the contribution that the urban setting makes to its significance will be unaffected. Visibility of the turbines in the wider setting of Church of St Michael and All Angels is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Zoar Chapel (LB 18501), Grade II Listed Building

- 9.5.165 Zoar Chapel was built in 1911 as a Welsh Independent Chapel to the design of W Beddoe Rees of Cardiff, replacing a smaller earlier chapel. The contractor was Turner and Sons of Cardiff. It closed in 1978 and has now become a Chapel of Rest. Unlike most other Welsh non-conformist chapels which are constructed in Classical

styles with a high degree of symmetry this building has the appearance more of a church with its tall, off-centre tower with spire. It does however have the typical chapel arrangement of multiple doors to the façade. The building derives significance and its principal reason for designation as a Grade II LB from its evidential value as 'a very competent essay in Perpendicular Gothic by the eminent chapel architect, who worked elsewhere in his home town, at the same period, in a Beaux Arts style'²⁴, and particular for its interesting façade which also has aesthetic value. It also has communal value as a former place of worship and as a chapel of rest.

- 9.5.166 There is no burial ground associated with the chapel, reflecting its late date. It is experienced within an urban setting although there is woodland to the rear and views from the front of the chapel towards the higher ground beyond the town to the north-west. This urban setting and lack of cemetery contributes to the evidential value of the building as it provides physical evidence of the late date of construction of the chapel. The views of the surrounding landscape provide an aesthetically pleasing backdrop in which to appreciate the unusual architectural style of this chapel. The built-up nature of these surroundings means that no existing turbines are visible within the setting of the chapel.
- 9.5.167 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV indicates that the hubs of up to four turbines and the blades of an additional eight turbines will be visible from the chapel. The virtual model indicates that the turbines of which hubs would be visible would appear above the hills to the left of the chapel when looking at it from the immediate south-east on the junction of Zoar Place and Zoar Avenue, however the full height of the church tower is not shown in the virtual model. There will be some visual distraction due to the movement of the turbine blades however the chapel will still be the dominant feature in these views, and it will still be possible to appreciate the aesthetic, evidential and communal value of the building. There will be an impact of **Low Adverse** magnitude on this asset of **Medium Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Church of St David, and surrounding churchyard railed wall (LB 18502), Grade II Listed Building

- 9.5.168 The church was built by Egbert Moxham of Neath in 1852-1853 as a chapel of ease for Llangynwyd parish church, to provide more convenient orthodox Anglican service for the growing community of Maesteg. It is of local Pennant sandstone with a slate roof and is in Early English lancet style with a tall, buttressed bellcote to the western end. The building derives significance and its principal reason for listing at Grade II from its evidential value as a simply designed chapel and for its group value with other listed buildings in the centre of Maesteg which includes the Grade II listed cenotaph (LB 18497) to the immediate west of the church). The building also has communal value as a place of worship and focal point for religious life for some of the local community and for its links to Llangynwyd parish church as a chapel of ease.
- 9.5.169 The building is experienced within the urban centre of Maesteg, surrounded by commercial buildings and is only appreciated in close proximity. Its west front is partly obscured by trees which prevents a full appreciation of the building's evidential value although there is a visual connection with the listed war memorial / cenotaph which contributes to the evidential and communal value of both of these buildings. The lack of nearby residential properties and the modern commercial development to the north detracts from the communal value of the building as there is no longer any immediately obvious congregation. The location of the church on a junction next to a wide road provides a more open setting than would otherwise be expected in an urban area which combined with the local topography affords some views of the wider landscape around including views of the hills to the east and west from next to the church on Castle Street. These views however do not make a substantive contribution to the

significance of the building as an urban church. There are no existing turbines visible within the setting of the church due to the built-up surroundings.

- 9.5.170 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV indicates that the hubs of up to four turbines and the tips of a further seven turbines would be visible from the area around the church. The turbines would be located 2.26-3.11 km north-west of the church and 3.0-4.77 km south-west of the church. The virtual model indicates that the surrounding buildings would obscure the turbines in views from south-east of the church where it can be appreciated, but that two turbines (one of the northern group to the right and one of the southern group to the left) would be visible above the buildings on the hills beyond Maesteg in views from further back where the church first comes into view. The turbines will result in some visual distraction due to the movement of the blades which will slightly diminish the prominence of the church in these views but it will still be possible to appreciate the evidential and communal value of the church and its immediate urban setting will not be altered. There will be an impact of **Low Adverse** magnitude on this asset of **Medium Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Jerusalem Baptist Chapel in Bryn village (LB 22166), Grade II Listed Building

- 9.5.171 The chapel is in a simple Classical style built in 1858 with the current baptistry and pulpit added in the late 19th century and the front rendered in the early 20th century. The listed building description notes that the gallery has panelled fretwork to the front. Prior to the creation of the baptistry baptisms reportedly took place in the stream below Meadow Row to the south-east of the chapel. The building has been converted into a dwelling with planning permission²⁵ and LB consent granted in 2003²⁶. It is not known what internal alterations were made during the conversion as no plans are available on the NPTCC website. Unusually the chapel front is not the gable facing the street but instead faces south across the valley.
- 9.5.172 The building derives significance from its evidential value as a well-preserved mid-19th century chapel this evidential value and in particular the rare, panelled design of the gallery is also given as the main reason for its designation as a Grade II LB. It also has a degree of communal value as a former place of worship and focus of religious life for the non-conformist community of Bryn, although this has been diminished by its conversion to another use.
- 9.5.173 The building is located on the east side of the main housing estate in Bryn set back from the Cwmavon to Maesteg road (known as Neath Road). The former chapel is experienced only in close proximity on Neath Road and being set back behind a wall views of the chapel are limited even from Neath Road. Its village edge setting contributes to its evidential and communal value by allowing an appreciation of the relationship between the settlement and one of its religious focal points. The chapel faces south across the valley where the original baptismal location was and this contributes to its significance as it helps to explain the unusual layout of the chapel within its plot. There are no existing wind turbines visible within this setting. The northern group of turbines will be located 1.55-2.39 km north-east of the chapel and will be behind the viewer when looking at the chapel from the south-east on Neath Road where the architectural interest of the chapel's façade and its arrangement within the plot is best appreciated. The southern group of turbines will be located 1.85-3.70 km south of the chapel and all will be visible on the hills beyond Bryn village when looking in this direction from the chapel.
- 9.5.174 There will be no physical impact on the building and its evidential value will be unharmed. Although the turbines will introduce new features into the landscape around this chapel, they will have no impact on the historic or visual relationship between the former chapel and the village or the baptismal location and it will still be possible to appreciate the chapel's evidential and communal value. Visibility of the turbines in the wider setting of Jerusalem

²⁴ Cadw, (1997). *Full Report for Listed Buildings*. Available from - <http://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=en&id=18501> [Accessed 03/04/2023]

²⁵ Neath Port Talbot Council, (2003). Available from - <https://planningonline.npt.gov.uk/online-applications/applicationDetails.do?keyVal=ZZZYFOKZDR522&activeTab=summary> [Accessed 03/04/2023]

²⁶ Neath Port Talbot Council, (2003). Available from - <https://planningonline.npt.gov.uk/online-applications/applicationDetails.do?keyVal=ZZZYFOKZDR164&activeTab=summary> [Accessed 03/04/2023]

Baptist Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**

Church of St Mary (LB 22802), Grade II Listed Building

- 9.5.175 The church is of medieval origin, first mentioned in 1254, and shown in much later drawings with Tudor-style windows. It was rebuilt on the same site in 1858-9 by Prichard & Seddon. One of the medieval windows was reset into the north aisle, but the arrangement of tracery is not original. A 12th century piscina, thought to be from the site of a nearby chapel, was inserted into the chancel in 1927. The top stage of the tower was probably added or altered c1870, while the north aisle is an addition of 1898 by G E Halliday.
- 9.5.176 The building has evidential value and is listed at Grade II as an ambitious Gothic Revival church of the late Victorian period; the fine, prominent tower and varied window detail are of particular interest. It also has communal value as a place of worship.
- 9.5.177 The church is located south of the Aberavon shopping centre in a quadrangular churchyard encircled by the high level A48 to the north and west with car parks to the south and commercial buildings to the east. The immediate setting of the churchyard contributes to the evidential and communal value of the building by providing an appropriate context in which to experience the place of worship and to understand the connection with local people. The building is a prominent landmark in views from the south across the car parks at a distance of up to 140 m, from the west at the junction of Bailey Street and Castle Street at a distance of c.165 m, from the elevated A48 at distances of c.130 m to the north and is also a prominent feature in views from the south around the Church of St Joseph at a distance of c.150 m. In this latter view from the south the tower of the church is backdropped by hills, in all other views it is a skyline feature. This prominence of the building contributes to its significance as it adds to the evidential value of this as a 19th century church that replaced an earlier parish church.
- 9.5.178 The immediate setting of the churchyard contributes to the evidential and communal value of the church by providing an appropriate context in which to experience this place of worship and to understand its connection to local people. The medium range views in which the church is experienced also contribute to its evidential value as the tall tower can be appreciated in these views. The views from the south further contribute to the evidential value of the church as the established church (represented by St Mary's) and the Roman Catholic church (represented by St Joseph's) are in visual competition with one another reflecting the competition for congregations between the various denominations.
- 9.5.179 The operational Mynydd Brombil turbines are visible behind the church when viewing from the A48 flyover from northwest of the church but do not detract from the prominence of the church within this view. This view is also fleeting as there is limited scope to pause on the A48 flyover. The view of the church from ground level to the west of the A48 along Castle Street is partly obscured by the flyover and the buildings on Castle Street obscure the Mynydd Brombil turbines in this view. In closer proximity to the church below the flyer the church itself obscures Mynydd Brombil from view. No other wind farms included in the cumulative assessment are visible within the setting of the Church of St Mary. The Mynydd Brombil turbines do not dominate the view from northwest of the church and do not detract from the prominence of the church tower which contributes to its significance. The visual change within the setting of the listed building as a result of the Mynydd Brombil turbines does not affect the ability to appreciate the evidential, aesthetic and historic interest of the church. The turbines will be located 4.69-6.90 km east and 7.20-8.04 km north-east of the church. There will be no physical impact on the building and its evidential value will be unharmed. They will be behind or to the far right of the viewer when looking at the church from the south including from around St Joseph's church and will therefore not impact on the visual relationship between the two churches in these views. They are predicted to be visible beyond the church in views from the west including from the junction of Bailey Street and Castle Street and when approaching along Castle Street. However, they will be largely obscured by the houses along Castle Street until in close proximity to the church and the virtual model indicates that at this range they will appear lower in height than the tower, although they will cause some visual distraction due to the movement of the blades. This will result in a very slight loss of significance as the

prominence of the church will be slightly diminished in views from this direction, the prominence of the church in other views will be unaffected. This impact of **Low Adverse** magnitude to this asset of **Medium Importance** will result in an effect of **Minor Adverse Significance** and not significant.

Church of St Joseph (LB 22803), Grade II Listed Building

- 9.5.180 The church of St Joseph is a Roman Catholic church of 1930 built by F. R. Bates and Son in early Christian style and replacing an earlier church of 1862. It has evidential and historic value as an example of 20th century Catholic architecture and its connection with a named architect.
- 9.5.181 The church is located south of the Aberavon shopping centre, 120 m south of the parish church of St Mary (LB22802, discussed above). A narrow strip of churchyard to the west of the church is densely packed with tombs and there is a large graveyard to the north of the building which also contains a large number of memorials.
- 9.5.182 The immediate setting of the churchyard contributes to the evidential and communal value of the building by providing an appropriate context in which to experience the place of worship and to understand the connection with local people. The building is a prominent landmark in views from the east on the elevated A48 at distances of up to 300 m, from the south-east on the A4241 at distances of up to 300 m, and from the elevated A48 from the north around St Mary's church at a distance of c.120 m. The top of the tower is also visible above surrounding buildings in views from the west around the junctions off Bailey Street at a distance of c.160 m.
- 9.5.183 The immediate setting of the churchyard contributes to the communal value of the church as it represents a direct connection to the Catholic population of this area. The visual relationship between St Joseph's and St Mary's churches as noted above also contributes to the evidential and communal value of St Joseph's through the visual competition between these two churches. The prominence of the church tower also contributes to the significance of the building as the design reflects historic ecclesiastical architecture.
- 9.5.184 The Mynydd Brombil turbines are visible on the far hilltop in views from the church, but are behind the viewer when appreciating the evidential, historic, aesthetic and communal value of the church. The turbines are oblique to views of the church from the north and south in which it is appreciated and do not adversely affect its significance.
- 9.5.185 The turbines will be located 4.69-6.95 km east and 7.32-8.15 km north-east of the church. There will be no physical impact on the building and its evidential value will be unharmed. They will be behind or to the far left of the viewer when looking at the church from the north including from around St Mary's church and will be to the far right when approaching the church from the south where its relationship with St Mary's church can be appreciated. The turbines will therefore not impact on the visual relationship between the two churches. The turbines will be behind the viewer when appreciating the church from the east. They are predicted to be visible beyond the church in views from the west however the virtual model indicates that they will be obscured by buildings in these views. Visibility of the turbines in the wider setting of Church of St Joseph is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Jerusalem Chapel in Pontrhydyfen (LB 22889), Grade II Listed Building

- 9.5.186 This chapel was built in 1876 on the site of two earlier chapels of 1836 and 1845, it has been converted to residential use. It is a classical style chapel of rock faced sandstone with a slate roof.
- 9.5.187 The former chapel derives significance from its evidential value as an example of this type of chapel building and from a degree of communal value as a former place of worship and focus of religious life for its community. This communal value has been diminished slightly by its change of use. The chapel is located within a graveyard that extends east and north of the chapel to the north of Station Road in an elevated position above the village. This immediate setting contributes to the evidential and communal value of the chapel as it provides a link to the people who worshiped here.
- 9.5.188 Despite its elevated position above the village the chapel is only appreciated in close proximity as a result of the terracing of the steep topography to accommodate roads through the valley. The gable front is best appreciated

from the south-west immediately in front of the chapel on Station Road. The relationship between the chapel and the settlement (including other chapels) can be appreciated from north-west of the chapel from Station Road where there are oblique views of the chapel when looking over the settlement and the relationship with the graveyard can be appreciated from the south-east on Station Road. No existing turbines are visible within this setting.

- 9.5.189 There will be no physical impact on the building and its evidential value will be unharmed. The turbines will be located 3.64-6.39 km south-east of the chapel and will be behind the viewer when appreciating the evidential value of its façade. The ZTV predicts that the blades of one turbine will be visible beyond the settlement when looking towards the chapel from the south-west on Station Road but will not interrupt views of the settlement and will not affect how the relationship between the chapel and the settlement is understood. Visibility of the turbines in the wider setting of Jerusalem Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Penuel Chapel (LB 23020), Grade II Listed building

- 9.5.190 This classical chapel was built in 1856 with a façade added in 1908 it is of Gothic style with Art Nouveau glass to the entrance vestibule. It derives significance (and its main reason for listing) from its evidential value as an example of this type of building, in particular its fine façade and interior, the woodwork and Art Nouveau glass being of particular interest.
- 9.5.191 The building is located on the north side of Jersey Terrace in Cwmafan, and the evidential and aesthetic value of its façade is appreciated in close proximity on the road. The mass of the building and its position on the street frontage (with adjacent buildings on this side of Jersey Terrace set back from the pavement) makes it a prominent focal point when approaching from the south-west. This setting contributes to the evidential and communal value of the building as it allows an appreciation of it as a place of worship and as a focal point for religious life within this settlement. Due to the built-up nature of this setting no other wind turbines are visible.
- 9.5.192 The northern section of turbines will be located 4.77-5.73 km north-east of the chapel and the ZTV predicts that three turbines the blades of two turbines will be visible from the chapel. The southern section of turbines will be located 3.52-5.77 km south-east of the chapel but will be obscured by the buildings on the south side of Jersey Terrace.
- 9.5.193 There will be no physical impact on the building and its evidential value will be unharmed. The presence of turbines in the distance in views north-east along Jersey Terrace will not detract from the evidential and communal value of the chapel which will continue to dominate this immediate street scene. There will be no impact on the evidential value of the building's façade or interior which are the principal reasons for listing. Visibility of the turbines in the wider setting of Penuel Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Holy Cross Church (LB 23248), Grade II Listed Building

- 9.5.194 Holy Cross is a small cruciform church in Gothic style, built in 1827 as a chapel of ease by Edward Haycock and augmented in 1903 by G. E. Halliday. This later work included the insertion of an ornate rood screen. Inside the church is a board signed by William Bruce Knight (minister) and the church wardens recording that it was built with a grant from the Society for Promoting the Enlargement and Building of Churches and Chapels. It has a bellcote to the west end and is located in a large triangular graveyard bounded to the south by the M4 motorway. The church / chapel has evidential value inherent in its fabric and for the information it contains about the organisation of religious life in this area in the 19th century. It also has communal value as a place of worship and chapel of rest.
- 9.5.195 The building is experienced within its large graveyard and this immediate setting contributes to its significance as it provides an appropriate context in which to appreciate its evidential and communal value. It is also appreciated from the street along the north side of the graveyard at distances of up to 100 m where it is backdropped by hills to the east when approaching from the west and is on the skyline when approaching from the east. It is also visible from the M4 motorway to the south-west where it is nestled between hills with the settlements of Pen-y-Cae to the

north and west and Taibach to the east of the church. These views allow an appreciation of the church within its immediate setting of the graveyard and of its relationship with the settlements it serves and therefore contribute to the evidential and communal value of the building. Despite the church's comparatively small scale it dominates these local views due its massing and the open setting of the graveyard.

- 9.5.196 The northernmost of the Mynydd Brombil turbines is visible above the horizon in views of the church when approaching from the west and from immediately adjacent to the church. Movement of the turbine blades causes slight visual distraction in these views but the church is still the most prominent feature and there is a Negligible effect on its significance.
- 9.5.197 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV indicates that the hubs of up to four turbines and the blades of an additional two will be visible from the church. The existing Mynydd Brombil turbines are not visible in these views due to their smaller scale. In views of the church from the east the turbines will be behind the viewer and will not alter this element of the setting where the church is a skyline feature. In views from the south-west the turbines will be visible above the hills beyond and to the right of the church at a distance of 3.35-7.25 km. In views from the west the turbines will be visible above the hills to the left of the church. There will be some visual competition with the church due to the movement of the turbine blades in these views in addition to that caused by the Mynydd Brombil turbine but it will still be possible to appreciate the evidential and communal value of the church, it will remain the dominant feature of views across the graveyard from the north and east and the relationship between the church and the surrounding settlements will be unaltered. The visual competition is considered to result in a slight reduction in the significance of the building. This impact of **Low Adverse** magnitude to this asset of **Medium Importance** will be fully reversed on decommissioning and will result in an effect of **Minor Adverse Significance** and not significant.

Bethany chapel (LB 23252), Grade II Listed Building

- 9.5.198 This two storey chapel over a semi-basement school room was constructed in 1879 by David Jenkins (contractor) to designs by John Cound (architect), the foundation stone was laid by Sir H H Vivian. The chapel was built in fields to the east of Aberavon but is now surrounded by later development. The building derives significance (and its main reason for listing at Grade II) from its evidential value as a well preserved chapel of this period with an unusual arrangement of a basement school room. It also has communal value as a place of worship and of education.
- 9.5.199 The chapel has a prominent position in the centre of Port Talbot on the junction of Station Road and Forge Road and is appreciated in this localised setting with a terrace of Victorian properties (comprising shops on the ground floor) opposite it to the west and modern commercial buildings to the left (north) and right (south). There are glimpsed views of the hills beyond the town in views from the west of the chapel. This urban setting no longer reflects the original setting of the chapel but the Victorian properties to the west contribute to its communal value as this reflects the development of this area following the establishment of the chapel. The modern buildings to the north and south do not make a positive contribution to the significance of the chapel. The built-up surroundings mean that no existing turbines are visible within this setting.
- 9.5.200 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV indicates that up to two of the turbines are predicted to be visible from the area in front of the chapel although the virtual model indicates that they would be largely obscured by the adjacent buildings. At most there will be glimpsed views of turbines between the buildings. The chapel will continue to be appreciated within its urban setting, there will be no impact on the evidential and communal values of the building. Visibility of the turbines in the wider setting of Bethany Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II Listed Building

- 9.5.201 This chapel of 1864 is on the site of an earlier chapel built in 1769. It has a three bay classical front with tall round arched windows and a two storey school room to the rear. The building derives significance from its evidential value inherent in its fabric and the potential for below ground remains of the earlier chapel to survive beneath the existing building. It also has communal value as a place of worship.
- 9.5.202 The chapel has a small burial ground to the east and is experienced on a street north of the railway station and adjacent to the railway line within the centre of Neath. This urban setting contributes to the evidential and communal value of the building as a place of worship for the town of Neath. There are views of the hills to the west of Neath from around the chapel but these do not contribute to the evidential and historic value of the building as an urban church. The built-up surroundings mean that no existing turbines are visible within this setting.
- 9.5.203 There will be no physical impact on the building and its evidential value will be unharmed. Although the ZTV predicts visibility of the blades of one turbine, no hubs are predicted to be visible and at a range of over 6 km the turbines will be obscured by the built up area of Neath to the east and south-east of the chapel. There would be no material change to the setting of the listed building which will continue to be experienced within an urban setting. Visibility of the turbines in the wider setting of Soar Maes-yr-haf Congregational Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Tabernacle Chapel (LB 23019), Grade II Listed Building

- 9.5.204 This chapel was built in 1873 on the site of two earlier chapels of 1837 and 1854, it has a Classical style gable entry of Pennant sandstone with Bathstone dressings and a triangular pediment cut by a full height glorification arch. Internally there is a stained glass window depicting a dove between the vestibule and the chapel. The building derives significance and its principal reason for listing at Grade II from its evidential value as a particularly good example of this type of chapel and in particular its central glorification arch which also adds aesthetic value. It also has communal value as a place of worship. A vestry was added to the left of the building in 1931.
- 9.5.205 The building is located in a prominent position within the town of Cwmavon, It is a large building visible at distances of up to 150 m from the north-east and south-west when approaching along Heol-y-parc – although it is best appreciated in close proximity from the south-east on Tabernacle Terrace where its imposing façade faces south-east across the town but views in this direction are filtered by roadside trees. Views of the chapel from the immediate north on Heol-y-parc are of the rear of the building which is utilitarian in appearance and does not contribute to the aesthetic value of the building.
- 9.5.206 This setting on the hillside above the town contributes to the significance of the building as it emphasises the architectural interest of its façade which provides much of the building’s significance and allows an appreciation of the communal value of the chapel and its relationship with the settlement in the valley. No existing turbines are visible within this setting.
- 9.5.207 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV predicts visibility of the blade tips of up to 16 turbines (and hubs of up to 8) from the chapel. The turbines would be located 5.01-6.01 km east-north-east and 3.89-6.15 km south-east of the chapel. They would be behind the viewer when looking at the chapel from the south-east where its evidential value is appreciated and will therefore not interfere with how its evidential value is appreciated. The turbines will be to the far right of views of the chapel when approaching from the west and to the far left of the chapel when approaching from the east. They will appear on the distant horizon beyond the chapel in views from the north but these views do not contribute to the significance of the building. The virtual model indicates that they will be visible (but filtered by trees) in winter views from the south-east of the chapel when looking across the town and that in summer the vegetation will fully screen views of the turbines from the road outside the chapel front. It will still be possible to appreciate the relationship between the chapel and the settlement, the visual prominence of the chapel from the south-east will be unaffected and there

will be no harm to its significance as a result of visibility of turbines in the wider area. Visibility of the turbines in the wider setting of Tabernacle Chapel is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Capel Saron (LB 18496), Grade II Listed Building

- 9.5.208 This chapel was originally built in 1852 and remodelled in 1900, it was converted to a chapel of rest c.1991 but retains much of its interior. Unlike most of the chapels in the study area Capel Saron is rendered and painted. It derives significance and its principal reason for listing at Grade II for its evidential and aesthetic value as a good example of a provincial chapel and its interior details. It also has communal value as a former place of worship and now as a chapel of rest.
- 9.5.209 The building occupies an elevated position above the High Street at the north of Maesteg within an approximately triangular graveyard. This immediate setting of the graveyard contributes to the evidential and communal value of the building as a former chapel as it provides an appropriate context in which to appreciate the building’s former function and its association with local people through its former and current uses. The architectural interest and aesthetic value of the building is best appreciated from High Street to the east of the building where the Gothic façade can be seen and the building dominates the immediate street scene due to its elevated position. No existing turbines are visible within this setting.
- 9.5.210 There will be no physical impact on the building and its evidential value will be unharmed. The ZTV indicates that the hubs of up to four turbines and the blades of up to eight turbines will be visible from High Street when looking at the chapel. The northern turbines would be to the right of the chapel at distances of 1.50-2.34 km, the southern turbines would be to the left of the chapel at distances of 2.96-5.06 km. The virtual model indicates that they would be obscured by the surrounding buildings in views of the chapel from the east. The evidential and aesthetic value of the building will be unaffected by the presence of turbines in oblique views. There will therefore be no material change to the setting of the chapel as a result of the turbines in the wider area, the contribution that the setting makes to its significance will be unaltered. Visibility of the turbines in the wider setting of Capel Saron is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**.

Mitigation

- 9.5.211 Without mitigation the proposed development would result in construction phase impacts on 16 historic assets (all undesignated with the exception of the Mynydd Margam registered landscape and the WWII crash sites) and operational phase impacts on 5 designated historic assets.
- 9.5.212 The preferred mitigation option is always to avoid or reduce impacts through design, or through precautionary measures such as fencing off historic assets during construction works. Impacts which cannot be eliminated in these ways will lead to residual effects.
- 9.5.213 Adverse physical effects may be mitigated by an appropriate level of survey, excavation, recording, analysis and publication of the results, in accordance with a WSI. Archaeological investigation can have a beneficial effect of increasing knowledge and understanding of the asset, thereby enhancing its archaeological and historical interest and offsetting adverse effects but not reducing the significance of effect.
- 9.5.214 The only effective mitigation for operational phase effects resulting from change in the setting of historic assets is through design, either by removing turbines or by altering the layout. The design iterations have sought to minimise adverse effects as far as possible. No further mitigation measures are proposed.
- 9.5.215 Mitigation measures proposed for each of the assets that would be physically affected by the proposed development are detailed.

Heol y Moch (The Pigs Way) (GGAT01077.0w)

9.5.216 The access track in the east passes along part of Heol y Moch (The Pigs Way) (GGAT01077.0w) and upgrade to and widening of the track here could impact on remains associated with the ancient trackway. However, the degree of survival of this prehistoric and medieval trackway is unknown as the route is now covered by a modern road. Any potential impacts will be mitigated by archaeological monitoring and recording of groundworks to off-set any potential significant effects by improving archaeological knowledge, however this will not reduce any residual effects.

Post Medieval Trackway (07293w)

9.5.217 A later trackway (07293w) also runs along the existing road and over part of Heol y Moch. Upgrading or widening of the access track here could also impact on this asset, although the degree of survival of the original track is unknown. These groundworks will be mitigated by archaeological monitoring and recording of groundworks to off-set any significant effects by improving archaeological knowledge, however this will not reduce any residual effects.

Medieval Trackway (01078.0w)

9.5.218 A medieval trackway (01078.0w) which connected with the monastic grange of Penhydd is crossed by access tracks to Turbines 2 and 3. The degree of survival of the original track is unknown. These groundworks will be mitigated by archaeological monitoring and recording of groundworks to off-set any significant effects by improving archaeological knowledge, however this will not reduce any residual effects.

Area of Tip Scree (HA22)

9.5.219 A section of internal access track will pass through an area of tip scree (HA22) and the Penhydd Entrance compound will also be partially located on the tip scree, impacting just over 4% of the area. The adverse effects will be mitigated by archaeological monitoring and recording of groundworks to off-set any significant effects by improving archaeological knowledge, however this will not reduce any residual effects.

Area of Dry Stone Walling (05328w)

9.5.220 The access track in the south-west passes close to an extent section of dry stone walling (05328w). Fencing off of this asset will protect it from accidental damage.

Post Medieval House Platform (GGAT01993w)

9.5.221 Ground works to upgrade and widen the existing track nearby will occur close to the earthworks of a post medieval house platform (GGAT01993w). Fencing off of this asset will protect them from accidental damage.

Boundary Stones

9.5.222 A number of boundary stones along Heol y Moch (GGAT03911w, GGAT03912w and GGAT03915w) are located close to access tracks including the tracks around turbines 10 and 11. Mynydd Margam boundary stone (GGAT03886w) is close to access to Turbine 18. It is uncertain whether any of the boundary stones recorded in the wind farm boundary are extant. They are recorded from the historic Ordnance Survey (OS) maps mainly during the Forest Enterprise Welsh Heritage Assets Project and their condition is recorded as unknown, with the exception of the Garn Wern boundary stones are recorded as near destroyed. None were located during the site walkover and other field surveys have noted that they were not found but they were located in what is now areas of forestry and it is possible they could still be present within these. It is possible that the Garn Wern stones were similarly not located and assumed they were 'near destroyed' although no information is provided of how their condition was determined. A pre-commencement survey after felling is recommended to identify surviving stones and fencing off extant stones to avoid damage during the works and any adverse effects.

9.5.223 The following stones are in areas of felling: GGAT03886w, GGAT03912w, GGAT4002w, GGAT4003w, GGAT4004w GGAT4005w, GGAT4012w. Felling of trees could result in damage to these assets and a post-felling survey to locate and record these and temporarily remove any which could be directly impacted, in addition to a and safe system of work should avoid any adverse effects on these assets.

WW2 Plane Crash Sites

9.5.224 The remains of the plane crashes come under the Protection of Military Remains Act (1986) and if any remains are disturbed by the proposed development these will require handling according to the legislation. A programme of archaeological monitoring and investigation during construction to include metal detecting by an appropriately experienced archaeologist will ensure that any fragments of the crashes are identified, recorded and either returned to the family of the deceased pilot (in the case of any personal effects) or archived with the RAF Museum. This programme of archaeological investigation and recording will be agreed with GGAT, Cadw and the Ministry of Defence.

Decommissioning Impacts

9.5.225 Decommissioning of the proposed development will not involve any ground disturbance beyond the areas already impacted by construction and will return the setting of historic assets to their baseline condition (subject to any alterations caused by other developments which are outside the scope of this assessment) therefore such effects have been scoped out of the assessment.

9.6 RESIDUAL EFFECTS

Summary of Residual Effects

9.6.1 The residual effects are summarised in Table 9.6. Assets within the study area that are not included within Table 9.6 will experience no effects. The assessment has taken into consideration the micro-siting allowance of 50 m for infrastructure and the conclusions reflect this allowance.

Construction Phase

9.6.2 Direct adverse effects are predicted upon four undesignated assets as a result of the proposed development: Heol y Moch (The Pigs Way) trackway (GGAT01077), a section of post-medieval trackway (07293w), Penhydd medieval trackway (01078.0w) and an area of tip scree (HA22). These effects will be Minor Adverse for Heol y Moch and Negligible Adverse for the two trackways and tip scree. These effects are not significant.

9.6.3 A programme of archaeological monitoring and recording during construction will be carried out in accordance with a WSI which will be submitted to GGAT for approval. This will mitigate the impacts on these assets by enhancing our knowledge of them through recording. As preservation in situ of all historic assets is preferred to a written record, following application of the recommended mitigation measures, the assessed significance of effect will remain as Minor Adverse for Heol y Moch and Negligible Adverse for the two trackways and tip scree and not significant.

9.6.4 There will also be Very Slight impacts (in ASIDOHL terms) on the Mynydd Margam registered landscape as a result of the construction phase of the proposed development which are not considered to impact on the essential integrity and coherence of the landscape. The programme of archaeological monitoring and recording for the known historic assets detailed above will also mitigate the construction phase impacts of the wind farm on the registered landscape.

Operational Phase

9.6.5 Adverse effects are predicted upon 46 designated historic assets as a result of visual change within their setting which remains following the mitigation applied through design iterations as described in Chapter 4: Site Selection and Design Evolution. These effects are Minor Adverse (and not significant) for:

- Hen Eglwys SM;
- Mynydd y Castell SM;
- Margam Castle Grade I LB;
- Margam Park registered park and garden;
- Ergyd Isaf round barrows SM;
- Holy Cross Church Grade II LB;
- Church of St Mary Grade II LB;
- Church of St Cynwyd Grade II* LB;
- Y Bwlwarcau SM;
- Zoar Chapel Grade II LB;
- Church of St David Grade II LB; and
- Llangynwyd CA;

9.6.6 Effects are Negligible Adverse (and not significant) for:

- The other assets within Margam Park;
- Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape;
- Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), SM;
- Roman Camp (SM GM058), SM;
- Danish Camp (SM GM056), SM;
- Camp north of Tonmawr (SM GM057), SM;
- Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), SM;
- Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), SM;
- Maesteg Blast Furnaces (SM GM418, LB 18492), SM and Grade II LB) and Maesteg Sports Centre, The Cornstores (LB 11257), Grade II* LB;
- Port Talbot Memorial Park registered park and garden;
- Church of St James, Pyle with Kenfig (LB 11227), Grade I LB;
- Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* LB;
- Church of St David (LB 11246), Grade I LB;
- Church of St David, Bettws (LB 18626), Grade I LB;
- Bethania Capel y Bedyddwyr Neillduol (LB 18493), Grade II* LB;
- Llangynwyd Castle (SM GM085), SM;
- Llwydarth farmhouse (LB 11256), Grade II* LB;
- Chain Home Low Radar Station (SM GM488), SM;
- Bont Fawr Aqueduct / Viaduct (SM GM393, LB 23022), SM and Grade II* LB;
- Tythegston Court (LB 11216 and GM15), Grade II* listed building And Grade II Registered Park & Garden;

- Bryngarw Park (GM5), Grade II Registered Park & Garden;
- Pontrhydyfen Viaduct (LB 23024) Grade II LB;
- Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II LB;
- Gilfach-ganol farmhouse (LB 11375), Grade II LB;
- Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II LB;
- Church of St Joseph (LB 22803), Grade II LB;
- Jerusalem Chapel in Pontrhydyfen (LB 22889);
- Penuel Chapel (LB 23020), Grade II LB;
- Bethany chapel (LB 23252), Grade II LB;
- Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II L;
- Tabernacle Chapel (LB 23019), Grade II LB; and
- Capel Saron (LB 18496), Grade II LB.

9.6.7 The ASIDOHL Assessment has identified an impact of Moderate Significance (in ASIDOHL terms) on the Mynydd Margam registered landscape as a result of the visual changes to this landscape during the operational phase of the proposed development. This effect will be fully reversed on decommissioning and is not considered to materially alter the essential integrity and coherence of the historic landscape character areas. The ASIDOHL methodology stands alone and is not directly comparable with the EIA methodology.

Table 9.6: Summary table of residual effects

Asset	Effect	Mitigation	Significance of residual effect
Construction Phase			
Heol y Moch (The Pigs Way) (GGAT01077.0w)	Minor Adverse Significance through construction impacts	Archaeological monitoring and recording of groundworks	Minor Adverse Significance
Post Medieval Trackway (07293w)	Negligible Adverse Significance through construction impacts	Archaeological monitoring and recording of groundworks	Negligible Adverse Significance
Penhydd Medieval trackway (01078.0w)	Negligible Adverse Significance through construction impacts	Archaeological monitoring and recording of groundworks	Negligible Adverse Significance
Tip scree (HA22)	Negligible Adverse Significance through construction impacts	Archaeological monitoring and recording of groundworks	Negligible Adverse Significance
Mynydd Margam Registered Landscape	Adverse effects through direct physical and indirect physical impacts	Archaeological monitoring and recording of groundworks that impact on known historic assets as detailed above	ASIDOHL found Very Slight impacts
Operational Phase			
Hen Eglwys Scheduled Monument and Grade I LB	Minor Adverse significance through change in setting	Embedded in design	Minor Adverse significance
Mynydd y Castell SM	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Margam Castle Grade I LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Margam Park Grade I Registered Park and Garden	Adverse effects through indirect visual impacts	Embedded in design	Minor Adverse Significance
Mynydd Margam Registered Landscape	Moderate Adverse Significance through operational and change in landscape character	Embedded in design	ASIDOHL found impacts of Moderate Significance
Other assets within Margam Park	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), SMs	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Roman Camp (SM GM058), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance

Asset	Effect	Mitigation	Significance of residual effect
Danish Camp (SM GM056), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Camp north of Tonmawr (SM GM057), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Y Bwlwarcau SM	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Ergyd Isaf Round Barrows SM	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), SMs	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Maesteg Blast Furnaces (SM GM418, LB 18492), SM and Grade II LB) and Maesteg Sports Centre, The Cornstores (LB 11257), Grade II* LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St James, Pyle with Kenfig (LB 11227), Grade I LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St David (LB 11246), Grade I LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St David, Bettws (LB 18626), Grade I LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Bethania Capel y Bedyddwyr Neillduol (LB 18493), Grade II* LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Llangynwyd Castle (SM GM085), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance

Asset	Effect	Mitigation	Significance of residual effect
Llwydarth farmhouse (LB 11256), Grade II* LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Chain Home Low Radar Station (SM GM488), SM	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Bont Fawr Aqueduct / Viaduct (SM GM393, LB 23022), SM and Grade II* LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Llangynwyd CA	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Church of St Cynwyd Grade II* LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Tytheaston Court (LB 11216 and GM15), Grade II* listed building And Grade II Registered Park & Garden	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Bryngarw Park (GM5), Grade II Registered Park & Garden	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Port Talbot: Talbot Memorial Park (GM45), Grade II Registered Park & Garden	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Ponrhydyfen Viaduct (LB 23024) Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Gilfach-ganol farmhouse (LB 11375), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Zoar Chapel Grade II LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance

Asset	Effect	Mitigation	Significance of residual effect
Church of St David Grade II LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Jerusalem Baptist Chapel in Bryn village (LB 22166), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Church of St Mary (LB 22802), Grade II LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Church of St Joseph (LB 22803), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Jerusalem Chapel in Ponrhydyfen (LB 22889),	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Penuel Chapel (LB 23020), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Holy Cross Church (LB 23248), Grade II LB	Minor Adverse Significance through change in setting	Embedded in design	Minor Adverse Significance
Bethany chapel (LB 23252), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Tabernacle Chapel (LB 23019), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance
Capel Saron (LB 18496), Grade II LB	Negligible Adverse Significance through change in setting	Embedded in design	Negligible Adverse Significance

Benefits of the Proposed Development

9.6.8 No specific measures of benefit to historic assets have been identified, however the applicant is proposing to agree a Heritage Appreciation Plan with statutory consultees prior to start of construction, looking to provide new and enhanced local heritage information and access.

9.7 CUMULATIVE EFFECTS

9.7.1 As agreed in the scoping report (Appendix 3, paragraphs 14.3.21-23) the following criteria define which wind farms have the potential for cumulative effects on historic assets and which have been excluded from assessment:

- Turbines below 20 m in height be excluded from the assessment of cumulative effects;
- Single turbines between 20 m and 50 m in height within 5 km of Y Bryn Wind Farm is included;
- Single turbines over 50 m in height and all wind farms within 20 km be considered for cumulative effects; and

- Wind farms or single turbines beyond 20 km be excluded.

9.7.2 The following wind farms within 20 km radius have been identified (see Figure 8.6 in Volume 2 of the ES) and using the above criteria have been assessed for potential cumulative effects on historic assets. Other wind farms within 45 km identified in Figure 8.8 between 20 km and 45 km of Y Bryn site boundary are excluded from the assessment of cumulative effects on historic assets. These are the operational Wentloog Environmental Centre, Pen Bryn Oer, Cefn Forest Farm, Oakdale Business Park, Pen-y-fan (Ind. Est) and Perthigwynion Farm turbines.

Operational Wind Farms

- Taff Ely;
- Maesgwyn;
- Maesgwyn (extension);
- Maerdy;
- Ferndale;
- Mynydd Bwllfa;
- Mynydd Brombil;
- Pant y Wal;
- Pant y Wal Extension;
- Llynfi Afan Renewable Energy Park;
- Pen Y Cymoedd;
- Ffynnon Oer;
- Newton Down;
- Fforch Nest 1 and 2;
- Mynydd Portref;
- Mynydd Portref Extension;
- Mynydd Y Gwrhyd (resubmission);
- Mynydd Y Gwair (resubmission);
- West of Rhiwfelin Fach Farm;
- Parc Stormy Down;
- Haregrove Farm;
- Ford Motor Company;
- Land South of Gelli Las Farm;
- Bwllfa Farm;
- Swansea Bay Wastewater Works;
- Queens Docks (later);
- Queens Dock (earlier);
- Mynachdy Farm 2;
- Mynachdy Farm 1;
- Mynydd y Bettws;
- Newlands Windfarm; and
- Hill house wind farm.

Consented Wind Farms

- Maesgwyn (extension) – in construction;
- Foel Trawsant;
- Melin Court;
- Pant y Wal Extension (Phase 2) ;
- Upper Ogmore;
- Nant-y-Gwyddon Landfill Site;
- Llwyncelyn (Llanwonno);
- Taff Ely (repowering);
- Graig Fatha;
- Rhiwfelin;
- Abergorki; and
- Land at Kenfig Industrial Estate, Margam.

Submitted Wind Farms

- Llwyncelyn (Resubmission); and
- Foel Trawsant S73 application.

Potential Wind Farms

9.7.3 At the time of submission pre-submission notifications have been received for the following schemes within 20 km of the proposed development:

- Mynydd y Glyn (19.5km to the east);
- Fforch Dwm (4.1km to the north);
- Mynydd y Gaer (12.2km to the east); and
- Hirfynydd Renewable Energy Park (12km to the north).

Construction Phase Cumulative Effects

9.7.4 Cumulative construction phase effects are typically scoped out as these typically only affect historic assets within the site and other developments do not impact on the same historic assets. The exceptions in this case are the area of tip scree (HA22) at the entrance to the northern section which could be subject to cumulative effects from the construction of the access road for Foel Trawsant Wind Farm and the Mynydd Margam Registered Landscape which has already been physically impacted by the Mynydd Brombil turbines and will experience physical impacts as a result of the proposed development. Potential cumulative effects on these two assets are therefore assessed.

Scenario 1: Impact of proposed development with baseline including the operational and consented wind farms

9.7.5 Assessment Scenario 1 considers the impact of the proposed development alone if it was added to the current baseline which includes the operational Mynydd Brombil turbines and a future baseline that includes the consented Foel Trawsant turbines (should the consent be implemented). These are the only wind farms that have potential to result in construction phase impacts to historic assets that will experience construction phase impacts as a result of the proposed development.

9.7.6 The area of tip scree (HA22) is predicted to experience effects of negligible significance as a result of the construction of Y Bryn wind farm. It is not impacted by the Mynydd Brombil turbines. HA22 was not recognised as

a historic asset in the assessment of Foel Trawsnant Wind Farm²⁷. It will however be physically impacted by the construction track for the proposed development, for the purposes of this assessment this is considered to result in a **Low Adverse** impact on this asset of **Negligible Importance** resulting in an effect of **Negligible Significance**. The addition of the impacts from Y Bryn Wind Farm (also **Low Adverse**) is considered to result in a combined impact of at most **Moderate Adverse** magnitude on this asset of **Negligible Importance** resulting in a cumulative effect of **Negligible Significance**, and not significant.

9.7.7 The Mynydd Brombil turbines have resulted in direct physical effects of very slight magnitude on the Mynydd Brombil and Ergyd Isaf HLCA of the Mynydd Margam Registered Landscape. The ASIDOHL assessment for the Mynydd Brombil scheme²⁸ concluded that the overall effects (direct physical, indirect physical and visual (setting) effects on the registered landscape were slight.

9.7.8 The Foel Trawsnant turbines lie outside the registered landscape of Mynydd Margam and the ASIDOHL assessment²⁹ concluded that there would be no direct or indirect physical impacts.

9.7.9 The addition of the proposed development into the registered landscape would result in further direct physical effects that the ASIDOHL assessment (Appendix 9.2) finds to be very slight to HLCA003, HLCA004, and HLCA005 and moderate to HLCA010. Only one HLCA (Mynydd Brombil and Ergyd Isaf (HLCA004)) would experience direct and indirect physical impacts as a result of both the Mynydd Brombil scheme and the proposed wind farm. The addition of the proposed development would result in additional construction phase impacts of very slight magnitude (using the terminology in the ASIDOHL assessment) to this HLCA. The small scale of the development footprints in comparison with the size of the HLCA means that the cumulative effect would still be very slight based on the scoring used in the ASIDOHL assessment.

9.7.10 The cumulative construction phase effects are not considered to be significant.

Scenario 2: Impact of proposed development with baseline including the operational, consented and submitted wind farms

9.7.11 Assessment Scenario 2 considers the impact of the proposed development alone if it was added to the potential future baseline, which could include the operational Mynydd Brombil and the revised layout of the Foel Trawsnant turbines (should the application to increase rotor diameters and vary the layout be consented and implemented). No other submitted windfarms are predicted to result in construction phase impacts to historic assets that will experience construction phase impacts as a result of the proposed development.

9.7.12 The revised layout for Foel Trawsnant Wind Farm to increase rotor diameters and reduce the number of turbines does not result in any change to the proposed access and therefore will result in no changes to the assessment of cumulative effects compared to Scenario 1.

9.7.13 The cumulative effects are not considered to be significant.

Operational Phase Cumulative Effects

9.7.14 In the context of the operational phase of onshore wind farm development, the potential for cumulative effects on the significance of historic assets arises when two or more schemes are present (or in the case of consented schemes and current applications will be present) in the setting of a historic asset. This potential for cumulative effects is only relevant to the current assessment when a historic asset is predicted to experience adverse impacts from the proposed development in isolation.

9.7.15 The following historic assets have been identified as experiencing adverse effects as a result of the proposed wind farm and therefore have potential for cumulative effects as a result of other operational or consented wind farms or other wind farm applications:

- Hen Eglwys;
- Mynydd y Castell Camp hillfort;
- Margam Castle;
- Margam Park Registered Park and Garden;
- Mynydd Margam Registered Landscape;
- Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape;
- Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), SMs;
- Y Bwlwarcu hill fort (SM GM059), SM;
- Roman Camp (SM GM058), SM;
- Danish Camp (SM GM056), SM;
- Camp north of Tonmawr (SM GM057), SM;
- Ergyd Isaf Round Barrows (SM GM160), SM;
- Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), SMs;
- Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), SM;
- Maesteg Blast Furnaces (SM GM418, LB 18492), SM and Grade II LB) and Maesteg Sports Centre, The Cornstores (LB 11257), Grade II* LB;
- Church of St James, Pyle with Kenfig (LB 11227), Grade I LB;
- Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* LB;
- Church of St David (LB 11246), Grade I LB;
- Church of St David, Bettws (LB 18626), Grade I LB;
- Bethania Chapel y Bedyddwyr Neillduol (LB 18493), Grade II* LB;
- Llangynwyd Castle (SM GM085), SM;
- Llwydarth farmhouse (LB 11256), Grade II* LB;
- Chain Home Low Radar Station (SM GM488), SM;
- Bont Fawr Aqueduct / Viaduct (SM GM393, LB 22890 and 23022), SM and Grade II* LB;
- Llangynwyd CA;
- Church of St Cynwyd (LB 11243), Grade II* LB;
- Tythegston Court (LB 11216 and GM15), Grade II* LB And Grade II Registered Park & Garden;
- Bryngarw Park (GM5), Grade II Registered Park & Garden;
- Port Talbot: Talbot Memorial Park (GM45), Grade II Registered Park & Garden;
- Ponrhydyfen Viaduct (LB 23024) Grade II LB;
- Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II LB;

²⁷ Wood Environment and Infrastructure Solutions UK Ltd 2018 Foel Trawsnant Amended Scheme Environmental Statement Chapter 8.

²⁸ Pegasus / Cotswold Archaeology 2012 Mynydd Brombil Wind Farm: Environmental Statement Appendix 8.3 ASIDOHL2 ASSESSMENT (MYNYDD MARGAM).

²⁹ Wood Environment & Infrastructure Solutions UK Ltd 2014 Foel Trawsnant Wind Farm: Environmental Statement Appendix 8A Assessment of the Significance of Impacts of Development on Historic Landscape (ASIDOHL).

- Gilfach-ganol farmhouse (LB 11375), Grade II LB;
- Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II LB;
- Zoar Chapel (LB 18501), Grade II LB;
- Church of St David, and surrounding churchyard railed wall (LB 18502), Grade II LB;
- Jerusalem Baptist Chapel in Bryn village (LB 22166), Grade II LB;
- Church of St Mary (LB 22802), Grade II LB;
- Church of St Joseph (LB 22803), Grade II LB;
- Jerusalem Chapel in Pontrhydyfen (LB 22889), Grade II LB;
- Penuel Chapel (LB 23020), Grade II LB;
- Holy Cross Church (LB 23248), Grade II LB;
- Bethany chapel (LB 23252), Grade II LB;
- Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II LB;
- Tabernacle Chapel (LB 23019), Grade II LB; and
- Capel Saron (LB 18496), Grade II LB.

9.7.16 For each of the assessment scenarios set out in Section 9.3 each of these assets is considered in turn.

Scenario 1: Impact of proposed development with baseline including the operational and consented wind farms

9.7.17 Assessment Scenario 1 considers the impact of the proposed development alone if it was added to the current baseline which includes the operational Taff Ely, Maesgwyn, Maesgwyn (extension), Maerdy, Ferndale, Mynydd Bwllfa, Mynydd Brombil, Pant y Wal, Pant y Wal Extension, Llynfi Afan Renewable Energy Park, Pen Y Cymoedd, Ffynnon Oer, Newton Down, Fforch Nest 1 and 2, Mynydd Portref, Mynydd Portref Extension, Mynydd Y Gwrhyd (resubmission), Wentloog Environmental Centre, Mynydd Y Gwair (resubmission), Pen Bryn Oer, West of Rhiwfelin Fach Farm, Parc Stormy Down, Haregrove Farm, Ford Motor Company, Land South of Gelli Las Farm, Bwllfa Farm, Swansea Bay Wastewater Works, Queens Docks (later), Queens Dock (earlier), Mynachdy Farm 2, Mynachdy Farm 1, Mynydd y Bettws, Cefn Forest Farm, Oakdale Business Park, Pen-y-fan (Ind. Est), Newlands Windfarm, Hill house wind farm, and Perthigwynion Farm turbines and a future baseline which includes the consented Maesgwyn (extension), Foel Trawsnant,, Melin Court, Pant y Wal Extension (Phase 2), Llwyncelyn (Llanwonno), Taff Ely (repowering), Graig Fatha, Abergorki and Land at Kenfig Industrial Estate turbines (should the consents for these be implemented).

Hen Eglwys Scheduled Monument and Grade I Listed Building

9.7.18 No existing wind farms are visible in the important views of Hen Eglwys from the southwest that contribute to its significance because topography screens views of the Mynydd Brombil turbines which are 2.0 km- 2.7 km north-northwest of the church and all other operational wind farms are more distant and also screened by topography and/or behind the viewer in this view. The consented Foel Trawsnant turbines if built would be 8.1 km northeast of the church but are not predicted to be visible from this key view.

9.7.19 The Newlands wind farm is 2.9 km to the south-southeast of the church and the Parc Stormy Down and Newton Down turbines are between 7.5 km and 8.7 km from the church in the same direction, the consented turbine at Kenfig Industrial Estate, if constructed, will be 3.1 km to the south of the church, but these views would be filtered by the surrounding trees on the slopes below the church and visibility of turbines at this range does not adversely affect the way that the relationship between Hen Eglwys and the ruins of the Cistercian abbey is appreciated. No impacts to this monument were predicted as a result of the consented Foel Trawsnant turbines. Visibility of these

turbines is likely to be obscured by topography. None of the other operational or consented wind farms within 20 km of Y Bryn site boundary affect the significance of this asset.

9.7.20 The addition of the proposed turbines into this baseline will introduce new structures into views of the monument from the southwest and will widen the field of view in which turbines are visible from the church ruins altering the appearance of its surroundings but not adversely affecting the ability to appreciate its evidential, historic and communal values resulting in a **Low Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant..

Mynydd y Castell Scheduled Monument

9.7.21 No operational turbines are visible in views of the hillfort from the south within the park which contribute to its significance and no consented turbines will be visible in this view either. The Mynydd Brombil turbines are visible to the far right of the hillfort in views from the east, but this visibility of turbines within the setting of the monument does not impact on how its evidential value as a prehistoric hillfort is appreciated, the distinctive form of the summit is not obscured and the topographic position of the hillfort as a strategic location is not altered or diminished. The operational Mynydd Brombil turbines are visible 2.1 km to 2.8 km to the northwest from the monument itself and the Newlands windfarm is 2.7 km to the south with the Parc Stormy Down and Newton Down turbines 7.6 km to 8.6 km in the same direction and the Haregrove Farm turbine is 8.1 km to the south-southeast. None of these adversely affect the ability to appreciate its evidential value as a hillfort.

9.7.22 The consented turbine at Kenfig Industrial Estate, if constructed, will be 3.1 km to the south-south west. The consented Foel Trawsnant turbines if constructed may be visible 7.8 km to 8.6 km northeast of the hillfort but no impacts to this monument were predicted and at this range there will be no impact on the evidential value of the monument as a result of any of the operational or consented schemes.

9.7.23 The addition of the proposed scheme into this baseline will bring turbines to within 2.4 km of the monument and will increase the horizontal field of view in which turbines are visible to the northeast of the monument in comparison to the consented Foel Trawsnant turbines. The Foel Trawsnant turbines will then appear behind the proposed turbines. The proposed turbines will not impact on the ability to appreciate the topographic setting and strategic importance of Mynydd y Castell and its significance as a prehistoric hillfort will be unharmed. The cumulative effect is considered to result in a **Low Adverse** impact on the significance of this asset of **High Importance**, resulting in an effect of **Minor Adverse Significance** and not significant.

Margam Castle Grade I Listed Building

9.7.24 The Newlands, Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are also predicted to be visible from the southwest entrance to the park when looking southeast and the Mynydd Brombil turbines when looking northwest but these views are partially filtered by vegetation (Figure 8.67). The castle is oblique to these views and the turbines do not impact on the evidential, aesthetic, historic or communal value of the castle which is appreciated when looking northeast to the castle from this location.

9.7.25 Similarly, the operational Hargreave Farm turbine and the operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are predicted to be visible from the area south of Margam Castle when looking east, the Newlands turbine is predicted to be visible from here when looking south, and the Queens Docks turbines and the Swansea Bay WWTW turbine are predicted to be visible from this part of the park when looking west however these views are partially filtered by mature vegetation within the park (Figure 8.61b). These turbines would all be behind the viewer when looking towards the castle from this location where the aesthetic and evidential value of the castle is best appreciated. No consented schemes will be visible from the areas where the castle is appreciated. The Foel Trawsnant turbines are not predicted to be visible from these areas and the consented turbine at Kenfig Industrial Estate would be behind the viewer when appreciating the castle.

9.7.26 The addition of the proposed turbines would result in some visual distraction to the castle tower in views from the access in the southwest of the park when looking northeast towards the castle and will introduce turbines to the

far right of the castle when viewing from the south. As no other turbines impact on the significance of the castle the cumulative effect is the same as that for the proposed development in isolation – a **Low Adverse** impact on this asset of **High Importance**, resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

Margam Park Grade I Registered Park and Garden

- 9.7.27 The operational Hargreave Farm turbine and the operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are predicted to be visible from the area south of Margam Castle when looking east and the Newlands turbine is predicted to be visible from here when looking south, however these views are partially filtered by mature vegetation within the park (Figure 8.61b). Similarly the Queens Docks turbines and the Swansea Bay WWTW turbine are predicted to be visible from this part of the park when looking west but these views are also screened by vegetation.
- 9.7.28 The Newlands, Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are also predicted to be visible from the southwest entrance to the park when looking southeast and the Mynydd Brombil turbines when looking northwest but these views are also partially filtered by vegetation (Figure 8.67).
- 9.7.29 The operational Hill House, Ford Motor Company and Haregrove Farm turbines are visible from the area of deer park in the east of the registered park when looking east (as illustrated in Figure 8.52), however due to the scale of the turbines, the topography and the distances from the park they are not readily discernible and do not impact on the significance of the park. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are visible from the deer park when looking south where they appear towards the distant horizon, the operational Newlands turbine is also visible from here and is clearly visible in the middle distance on the lower ground outside the park as illustrated in Figure 8.52. A wireline shows that the operational Queens Docks turbines are just visible above the horizon from the deer park when looking west although this view is dominated by the Port Talbot steelworks and Figure 8.52 shows that the Queens Dock turbines are obscured by forestry on the hills between the deer park and the turbines.
- 9.7.30 In the same view the Mynydd Brombil turbines are visible above the horizon to the northwest from the deer park area along with an electricity pylon. Visibility of the Mynydd Brombil turbines results in an extension of the horizontal and vertical field of view in which modern industrial structures dominate in the views from the deer park, however they have a negligible impact on the ability to appreciate the evidential, historic, aesthetic or communal values of the park. None of the other operational turbines adversely affect the evidential, historic, aesthetic or communal values of the park. The consented turbine at Kenfig Industrial Estate is the only consented scheme which will be visible from the park including from the elevated areas of the former deer park in the north east of the registered area (**Figure 8.52**), it is also predicted to be visible from the areas south of Margam Castle, but it is likely to be filtered by vegetation in these views (Figure 8.61 and Figure 8.67). as noted above the distance to the turbine and its location on lower ground means that it will not impact on the ability to appreciate the evidential, historic, aesthetic or communal values of the park.
- 9.7.31 The addition of the proposed turbines into this baseline will result in turbines being visible in all directions from the deer park, further changing the character of the landscape around the park. The cumulative effect is considered to result in an impact of **Low Adverse** magnitude on this **High Importance** park as a whole, resulting in an effect judged to be of **Minor Adverse Significance** and not significant

Mynydd Margam Registered Landscape

- 9.7.32 The existing Mynydd Brombil turbines have already impacted on Mynydd Margam registered landscape, specifically HLCA001 Margam Abbey and Castle (slight), HLCA002 Cefn Crugwylt and Cwm Maelwg (slight), HLCA003 Cwm Brombil and Graig Fawr (moderate), HLCA004 Mynydd Brombil and Ergyd Isaf (considerable),

HLCA006 Eglwys Nunydd and Cwrt-y-defaig (slight), HLCA007 Graig Goch and Heol (slight), HLCA008 Margam Village (slight), HLCA009 Cwm Dyffryn and Cwm Farteg Railway Corridor (moderate), HLCA0010 Margam Forest (slight), HLCA013 Upper Cwm Kenfig (slight), HLCA0014 Moel Ton Mawr (slight), HLCA015 Upper Park and Ton-ygrugos (slight), HLCA016 Ton Mawr (slight) and HLCA017 Cwm Dyffryn: Southern Valley Sides (slight)³⁰. The consented Foel Trawsant Wind Farm will also impact on the Mynydd Margam registered landscape. The ASIDOHL assessment for the Foel Trawsant scheme concluded that there would be very slight or moderate impacts to seven historic landscape character areas as a result of the turbines, with the greatest impacts on HLCA 005 Llangynwyd (moderate, HLCA 013 Upper Cwm Kenfig, HLCA 014 Moel Ton Mawr and HLCA 017 Cwm Dyffryn: Southern Valley Sides³¹. The consented Foel Trawsant turbines will increase the horizontal field of view in which turbines are visible from the HLCAs within the registered landscape compared to Mynydd Brombil and will also introduce turbines into the setting of HLCA005 which does not have visibility of the Mynydd Brombil turbines. The consented turbine at Kenfig Industrial Estate will increase visibility of turbines from parts of the registered landscape, however the (non-ASIDHOHL) assessment for this scheme found at most a minor adverse impact on the historic assets assessed. All other operational and consented schemes are sufficiently removed from the registered landscape that they will not result in adverse impacts.

- 9.7.33 The addition of the proposed turbines will result in increased visibility of turbines from all of these HLCAs, widening the horizontal field of view in which turbines are visible and resulting in increased indirect visual impacts. The cumulative impact of the proposed wind farm operating in combination with the Mynydd Brombil and Foel Trawsant wind farms and other operational and consented wind farms / wind turbines is considered to increase the impact compared to the proposed wind farm operating in isolation, but cumulative effects would remain Moderate Significance (in ASIDOHL terms).

Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape

- 9.7.34 The operational Mynydd y Gwair turbines are visible 25 km to the north-northwest, the Mynydd y Bettws turbines c.28 km to the north-northwest, the Mynydd Brombil turbines 4.7 km to the north, the Newlands turbine 1.1 km to the north-northeast, the Llynfi Afan turbines 12 km to the north-northeast and the Pant y Wal and Pant y Wal Extension turbines 15 km to the northeast, although only the Mynydd Brombil and Newlands turbines are readily visible in these views (Figure 8.68a). The Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are predicted to be visible from the registered landscape in views to the east at a range of 4 km from the southern edge of the landscape but are obscured by vegetation in the representative view (Figure 8.68b). The Queens Docks and Swansea Bay WWTW turbines are predicted to be visible in views to the northwest (Figure 8.68d) at a range of c.12 km but are not readily discernible at this range due to being backdropped by the urban area of Swansea. None of these existing turbines adversely affect the significance of the Merthyr Mawr, Kenfig and Margam Burrows registered landscape. No consented schemes are predicted to be visible from the registered landscape.
- 9.7.35 The tips of blades of the consented Upper Ogmere wind farm will be visible from the registered landscape. However at a range of over 14 km from the edge of the landscape they will not be readily discernible and will have no impact on the significance of the registered landscape. The consented turbine at Kenfig Industrial Estate will be visible from the registered landscape and at its closest point will be c.500 m from the registered area. From key viewpoints in the centre of the registered area (illustrated in Figure 8.68) the turbine will appear in the middle distance (2.3 km) to the north and will be mainly backdropped by the rising ground with the existing Mynydd Brombil turbines to the west.
- 9.7.36 The effect of the addition of the proposed turbines into this baseline is therefore the same as the proposed development operating with all operational schemes which is considered to result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

³⁰ Pegasus / Cotswold Archaeology 2012 Mynydd Brombil Wind Farm Environmental Statement Appendix 8.3: ASIDOHL2 Assessment (Mynydd Margam).

³¹ Wood Environment and Infrastructure Solutions UK Ltd 2018 Foel Trawsant Amended Scheme Environmental Statement Appendix 8A.

Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), Scheduled Monuments

- 9.7.37 As noted above forestry screens views out from these monuments and no existing turbines are therefore visible within their current setting. After felling there would be a period when there would be increased visibility of the surrounding landscape from these monuments. This may result in visibility of the Pen y Cymoedd, Llynfi Afan, and Ffynnon Oer turbines to the north-northeast and east from the felling date of 2037-41 from the felling date of 2042. This felling will also result in visibility of the consented Melin Court, and Upper Ogmored turbines which will appear as extensions to the operational windfarms within these views. This felling will also result in visibility of the consented Foel Trawsnant turbines (if the consent is implemented) between 300 m to the north and 900 m to the southeast of Cefn yr Argoed and between 900 m and 2.1 km to the east of Nant Herbert Camp. Visibility of operational and consented turbines within the setting of these monuments for a short period of time (until the replacement trees grow to sufficient height to provide screening again) will result in a Negligible Adverse impact on these two assets of High Importance resulting in an effect of Negligible Significance.
- 9.7.38 The addition of the proposed turbines into this baseline will extend the horizontal field of view in which turbines would be visible following felling leading to turbines being visible at close range to both the north and south of Cefn yr Argoed and at medium range to the northeast and close range to the south of Nant Herbert for a short period of time. The addition of the proposed turbines is considered to result in **Low Adverse** impacts and the cumulative effect is considered to result in a **Minor Adverse** impact on these two assets of **High Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Y Bwlwarcrau Scheduled Monument

- 9.7.39 The operational Ffynnon Oer and Pen y Cymoedd turbines are visible in views looking towards Y Bwlwarcrau from the south (Figure 8.70) but are partly screened by forestry from the monument itself. The consented Foel Trawsnant and Melin Court turbines will also be visible in this view where they will form a cluster to the northeast of the monument at a distance of 4.7 km to the nearest turbine partly obscured by forestry within the site. The operational Llynfi Afan, Pant y Wal, Pant y Wal Extension, Fforch Nest 1 and 2, and Taff Ely windfarms are also visible from the monument and the consented Pant y Wal Extension Phase 2, Taff Ely Repowering, Graig Fatha and Upper Ogmored turbines will also be visible. These turbines form three distinct groups when viewed from Y Bwlwarcrau looking north, northwest and west, the largest being the group to the north/northwest (Foel Trawsnant, Melin Court, Ffynnon Oer, Pen y Cymoedd and Upper Ogmored). These are all sufficiently removed from the monument that they do not impact on how it is appreciated and do not adversely affect the contribution that its setting makes to its significance. The Hill House, Ford Motor Company, and Hargrove Farm turbines and the Newton Down, Parc Stormy Down and Stormy Down Aerodrome turbines are all on the lower ground sufficiently removed to the south of the monument that they do not affect the contribution that setting makes to its significance. The Mynydd Brombil turbines are obscured by forestry in views west of Y Bwlwarcrau and do not affect the setting of the monument.
- 9.7.40 The addition of the proposed turbines into this baseline will increase the horizontal field of view in which turbines are visible from the monument and will bring turbines to within 325 m of the monument, the closest operational or consented scheme currently being the Foel Trawsnant turbines 4.7 km to the north.
- 9.7.41 The addition of the proposed turbines is considered to result in **Low Adverse** impacts to this asset of **High Importance** as a result of this visual competition and the cumulative effects would be **Minor Adverse Significance** and not significant.

Roman Camp, Scheduled Monument

- 9.7.42 The operational Pen y Cymoedd and Ffynnon Oer windfarms are predicted to be visible to the northeast of the monument as are the consented Upper Ogmored turbines, and Pant y Wal and Pant y Wal Extension as well as Fforch Nest 1 and 2 to the east, Taff Ely, Mynydd Portref and Mynydd Portref Extension to the southeast, Hill

House, Ford Motor Company, Haregrove Farm, Newton Down, Parc Stormy Down and Stormy Down Aerodrome to the south and Mynydd Brombil to the west. For most of these only blade tips would be visible at a range of over 4.3 km and they are not discernible, the exception is the Mynydd Brombil turbines which are visible at a range of c.4 km to the west above the forestry. The consented Foel Trawsnant, Melin Court and Upper Ogmored turbines are predicted to be visible from Y Bwlwarcrau where they will overlap with the Ffynnon Oer and Pen y Cymoedd turbines, being closer the proposed turbines will also be more visible than these turbines in the view north from Y Bwlwarcrau. The consented Pant y Wal Extension 2 turbines will form part of the cluster with the Pant y Wal, Pant y Wal Extension and Fforch Nest 1 and 2 turbines to the west and the consented Taff Ely Repowering and Graig Fatha turbines will form part of the cluster with the existing Taff Ely, Mynydd Portref and Mynydd Portref Extension to the southwest – the repowering of Taff Ely will slightly narrow the horizontal spread of this cluster of turbines. These windfarms are sufficiently removed from the monument that they do not affect the significance of Roman Camp.

- 9.7.43 The addition of the proposed turbines into this baseline will result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Danish Camp, Scheduled Monument

- 9.7.44 As noted, the forestry around Danish Camp is planned for felling after 2042, therefore there will be a period of time following construction of the wind farm when there will be increased visibility from this monument. During the period between felling and re-establishment of the forestry the Mynydd Brombil turbines will be visible northwest of the monument at a range of 3.5 km. The operational Hill House, Ford Motor Company and Haregrove Farm will also become visible to the east. However due to the scale of the turbines, the topography and the distances they will not be readily discernible. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines may also become visible when looking south where they would appear towards the distant horizon. The Newlands turbine will also become visible for this period at a range of 3.2 km to the south-southwest.
- 9.7.45 The consented Kenfig Industrial Estate turbine may also become visible during this period at a range of 4.2 km to the south west although this is at lower elevation and at this range will not affect the contribution that setting makes to the significance of the monument, the cumulative effects of adding the proposed turbines are the same as the assessment of the turbines and existing baseline detailed: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Camp N of Tonmawr, Scheduled Monument

- 9.7.46 The operational Hill House, Ford Motor Company and Haregrove Farm turbines are visible to the east. however due to the scale of the turbines, the topography and the distances they are not readily discernible. The operational Newtown Down, Parc Stormy Down and Stormy Down Aerodrome turbines are visible when looking south where they appear towards the distant horizon. The Newlands turbine is also visible at a range of 3.2 km to the south-southwest. The Mynydd Brombil turbines are visible above the forestry to the northwest of the monument at a range of 3.5 km.
- 9.7.47 The Kenfig Industrial Estate turbine will be visible at a range of 4.2 km to the southwest of the monument but at this range will not impact its significance. No other consented schemes are predicted to be visible from this monument and the cumulative effects of adding the proposed turbines are the same as the assessment of the turbines and existing baseline detailed: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Ergyd Isaf Round Barrows Scheduled Monument

- 9.7.48 The existing Mynydd Brombil turbines have already impacted on the Ergyd Isaf round barrows SM. No other operational or consented wind farms within 20 km of Y Bryn site boundary impact on the significance of Ergyd Isaf SM due to the distances from the monument (the next closest after the Mynydd Brombil turbines are Newlands Wind Farm c.5 km to the south-east and not visible from the barrows and Kenfig Industrial Estate turbine c.5.1 km

to the south which at this range will not impact the significance of the barrows). Future felling will briefly increase the visibility from the monument but will not result in additional schemes becoming visible.

- 9.7.49 The addition of the proposed turbines into this baseline will widen the horizontal field of view in which turbines are visible from the barrows and will result in a cumulative **Low Adverse** impact to this asset of **High Importance** resulting in a cumulative effect of **Minor Adverse Significance** and not significant.

Ergyd Uchaf prehistoric Round Barrow, Twmpath Diwlith barrow, and the site of the Bodvoc Stone, Scheduled Monuments

- 9.7.50 As already noted, although currently obscured by forestry the Mynydd Brombil turbines are 1.5 km west of Ergyd Uchaf and will be visible following felling of the forestry west of this monument until the replacement trees grow to sufficient height to provide screening again. Likewise they will be visible at a greater distance (c. 4 km) west of Twmpath Diwlith and the site of the Bodvoc Stone for the same period, although the increased distance means that there is more likely to be overlap with the felling dates and therefore a shorter period of visibility is predicted. There may also be periods of time when the consented Foel Trawsnant turbines are visible from these monuments with the consented Upper Ogmored turbines beyond them resulting in a Negligible Adverse impact.
- 9.7.51 The addition of the proposed turbines into this baseline will bring turbines closer to these assets and during the period when there is visibility from these monuments this will result in an effect of Negligible significance. The cumulative effect is considered to be **Negligible Adverse Significance** and not significant.

Cae'r Mynydd Ventilation Furnace and Mine, Scheduled Monument

- 9.7.52 The monument is surrounded by forestry but following felling the Mynydd Brombil turbines may become visible for a period of time c. 5.2 km to the southwest of the monument. The turbines will not adversely affect the significance of the monument at this range. The Foel Trawsnant turbines (if constructed) may also become visible at a range of 1.5 km to the northeast, the consented Upper Ogmored turbines would be further to the northeast and unlikely to be visible. No other operational or consented turbines are predicted to be visible from this asset. These will not adversely affect the contribution that setting makes to the significance of the monument and the effects are considered to be of Negligible Significance. The addition of the proposed turbines into this baseline will bring turbines closer to the monument (between 380 m and 1.2 km to the north and between 1.8 km and 4.1 km to the south of the furnace). The cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Maesteg Blast Furnaces, Scheduled Monument and Grade II Listed Building and Maesteg Sports Centre, The Cornstores, Grade II* Listed Building

- 9.7.53 No existing wind turbines are visible within the setting of this asset due to the built-up nature of its surroundings. The consented Foel Trawsnant and Upper Ogmored turbines will be visible (if constructed) on the hills to the west which would result in a **Negligible Adverse** impact on these two assets of **High Importance** resulting in an effect of **Negligible Significance**. No other consented schemes are predicted to be visible from this asset. The addition of the proposed turbines into this baseline will extend the horizontal field of view in which turbines are visible on the hills to the west of the blast furnaces resulting in a cumulative **Negligible Adverse** impact on these two assets of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Church of St James, Pyle with Kenfig, Grade I Listed Building

- 9.7.54 No existing wind turbines are visible within the setting of this asset due to the built-up nature of its surroundings. No consented schemes are predicted to be visible, and the cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Church of St Mary Magdalene, Pyle with Kenfig, Grade I Listed Building

- 9.7.55 The operational Mynydd Brombil turbines are visible from the road north of the church when looking north, and the Port Talbot Steelworks are visible beyond the church from the road adjacent to the churchyard. These structures alter the character of the wider surroundings of the church but do not compete with its prominence and the effect on its significance is neutral. The consented Kenfig Industrial Estate turbine may be visible when looking north-northwest at a range of 1.8 km, the heritage impact assessment for this scheme concluded there would be a minor to moderate adverse impact on the church due to it interrupting views between the church and the castle and deserted medieval town of Kenfig, bringing the industrial character of the steelworks closer to the church and competing for prominence with the church tower.
- 9.7.56 No other consented schemes are predicted to be visible. The proposed development will result in additional turbines being visible from the church, but at greater distances than the operational and consented schemes and will not impact on the prominence of the church nor its relationship with the castle and deserted town of Kenfig. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Church of St David Grade I Listed Building

- 9.7.57 No operational turbines are visible within the setting of Church of St David and no consented turbines will be visible due to the built up nature of its surroundings. The cumulative effects of adding the proposed turbines to this baseline are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Church of St David, Bettws, Grade I Listed Building

- 9.7.58 No existing wind turbines are visible within this setting due to the largely built-up nature of the church's surroundings. The consented Foel Trawsnant and Upper Ogmored turbines (if constructed) are predicted to be visible from Bettws but will be obscured by the adjacent buildings in views of the church where it is appreciated. No other consented turbines are predicted to be visible. The cumulative effects of adding the proposed turbines to this baseline are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Bethania Chapel y Bedyddwyr Neillduol, Grade II* Listed Building

- 9.7.59 No existing wind turbines are visible within this setting due to the built-up nature of the church's surroundings. Similarly, no consented schemes are predicted to be visible within the setting of the church. The cumulative effects of adding the proposed turbines to this baseline are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Llangynwyd Castle, Scheduled Monument

- 9.7.60 Some of the existing Pen y Cymoedd turbines are visible as two groups approximately 4.7 km north-northeast of the monument and detract slightly from the rural nature of the surroundings of the castle but do not adversely affect the ability to appreciate its significance or its relationship with its surroundings. The consented Foel Trawsnant turbines will be visible at a range of 4.8 km to the north-northwest of the monument, extending the horizontal field of view in which turbines are visible from the monument and further detracting from the rural nature of the monuments surroundings but not adversely affecting the ability to appreciate its significance. The consented Upper Ogmored turbines may be visible from this monument and would further extend the horizontal field of view in which turbines are visible by continuing to the right of the existing Pen y Cymoedd turbines which are visible to

the northeast. This will result in some additional visual change to the wider rural surroundings of the monument, but it will still be possible to appreciate the contribution that setting makes to its significance.

- 9.7.61 The addition of the proposed turbines into this baseline will further extend the horizontal field of view in which turbines are visible from the monument as they will be located to the west and northwest of the monument. They will also result in turbines being in closer proximity to the monument (2 km to the nearest turbine). The cumulative effect of the three schemes in combination is considered to increase the effect of the proposed scheme in combination with the operational turbines as turbines will occupy most of the western to northern arc of view from the castle. This is considered to increase the effect of the proposed wind farm in combination with the operational wind farms from a Negligible Adverse to a **Minor Adverse** impact on this asset of **High importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Llwydarth Farmhouse

- 9.7.62 No existing wind turbines are visible within the setting of this asset and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Chain Home Low Radar Station, Scheduled Monument

- 9.7.63 The Mynydd Brombil turbines are visible above the horizon at a distance of c.1.5 km north of the monument but do not detract from the significance of these remains. The Port Talbot steelworks dominates views west from the monument, although there have been some alterations to the steelworks since WWII, they were present at the time that the radar station was constructed and were part of the reason for requiring early warning of enemy aircraft, these structures therefore make a neutral to positive contribution to the significance of the monument. No consented schemes are predicted to be visible from this monument and the cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **High Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Bont Fawr Aqueduct / Viaduct, Scheduled Monument and Grade II* Listed Building

- 9.7.64 No existing turbines are visible within the setting of the monument. The consented Foel Trawsnant turbines (if constructed) are predicted to be visible at a range of 3.5 km to the east of the aqueduct. They will result in a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Significance**. The consented Upper Ogmores turbines would be at a greater distance and not visible.
- 9.7.65 The addition of the proposed turbines to this baseline will increase the horizontal field of view in which turbines are visible from the aqueduct and will bring turbines to within 2.8 km of the aqueduct. The cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **High Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Llangynwyd Conservation Area

- 9.7.66 The operational Llynfi Afan turbines are screened from the main area of the CA by the churchyard wall and do not affect the character and appearance of the CA. The operational Mynydd Portref, Mynydd Portref Extension and Taff Ely turbines are visible to southwest of CA from the edges of the designated area but are screened by buildings and vegetation from the centre of the village (Figure 8.72). As noted, these turbines do not result in any harm to the significance of the church which is the most prominent building within the conservation area. The operational Hill House and Gelli Las Farm turbines are also visible in the distance to the south-southwest when viewing from the edge of the designated area or from the churchyard extension but from the centre of the village they are obscured by houses, they are sufficiently removed that they do not result in any material change to the setting of the CA.

- 9.7.67 The consented Foel Trawsnant turbines will be visible to the far right of the church when viewing from the eastern cemetery extension but are not predicted to be visible from the main part of the CA. As noted, the horizontal separation between the church and the Foel Trawsnant turbines will not result in any harm to its significance. The consented Taff Ely repowering would slightly narrow the horizontal spread of the group of turbines east of the conservation area. The blade of one of the consented Upper Ogmores turbines is predicted to be visible to the north of the CA but at such a small scale that it would not affect the character and appearance of the CA.

- 9.7.68 The addition of the proposed turbines to this baseline will result in a slight reduction in the contribution that the rural surroundings make to the character and appearance of the village and therefore a slight reduction in its heritage significance. The proposed turbines will increase the horizontal field of view in which turbines are visible from the CA, but as the operational and consented schemes are sufficiently removed so as to not affect the character and appearance of the CA the cumulative effects will be **Low Adverse** magnitude on this asset of **Medium Importance** resulting in an effect of **Minor Adverse** significance and not significant.

Church of St Cynwyd Grade II* Listed Building

- 9.7.69 The operational Llynfi Afan turbines are just visible over the hill to the north of the church and are sufficiently removed not to result in change to its setting. The operational Mynydd Portref, Mynydd Portref Extension and Taff Ely turbines are visible to southwest of the church from the churchyard extension. They are behind the viewer when appreciating the evidential, aesthetic and historic values of the church and do not result in any harm to its significance. The operational Hill House and Gelli Las Farm turbines are also visible in the distance to the south-southwest of the church, they are sufficiently removed that they do not result in any material change to the setting of the church.

- 9.7.70 The consented Taff Ely repowering would slightly narrow the horizontal spread of the group of turbines to the east of the church but would not alter the effect of this group on the significance of the church which is already negligible. The consented Foel Trawsnant turbines will be visible to the far right of the church when viewing from the eastern cemetery extension. The horizontal separation between the church and the turbines in this view means that they will not detract from the prominence of the church tower in this view and will not result in any harm to its significance. The blade of one of the consented Upper Ogmores turbines is predicted to be visible to the north of the CA but at such a small scale that it would not impact on the church. Visibility of the existing and consented turbines within the setting of the Church of St Cynwyd is considered to be a **Low Adverse** impact on this asset of **High Importance** resulting an effect of **Minor Significance** and not significant.

- 9.7.71 The addition of the proposed turbines to this baseline will increase the horizontal field of view in which turbines are visible from the churchyard. They will cause some visual distraction to the prominence of the church in views from the east within the churchyard extension but no other key views of the church will be affected. The cumulative effect is considered to be an impact of **Low Adverse** magnitude on this asset of **High Importance** which will result in an effect judged to be of **Minor Adverse Significance** and not significant.

Tytheaston Court, Grade II Registered Park and Garden and Grade II* Listed Building

- 9.7.72 The operational Newton Down and Parc Stormy Down and Stormy Down Aerodrome turbines are visible from the western edge of the park looking away from the designed landscape and have a negligible impact on the significance of the registered park, there are no existing turbines visible from the LB. No consented turbines are predicted to be visible from this asset.
- 9.7.73 The addition of the proposed turbines to this baseline, over 10 km north of Tytheaston Court LB will result in a cumulative impact of **Negligible Adverse** magnitude on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Bryngarw Park, Grade II Registered Park and Garden

- 9.7.74 No existing turbines are visible from the park due to the dense planting, as this vegetation gives the park a large part of its significance it can be expected that it will be maintained for posterity so far as possible. The consented Foel Trawsnant turbines are predicted to be visible from the park but as with the existing turbines the vegetation screening is likely to obscure them from view. The consented Taff Ely repowering would narrow the field of view occupied by the cluster of turbines to the east if this were visible from the park.
- 9.7.75 The presence of turbines in the wider surroundings of the park is considered to result in a Negligible Adverse impact on this asset of Medium Importance resulting in an effect of Negligible significance. The addition of the proposed turbines will increase the theoretic field of view in which turbines would be visible from the park but will again be obscured by the vegetation within the park. The cumulative effect is considered to result in a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Port Talbot Memorial Park, Grade II Registered Park and Garden

- 9.7.76 No operational turbines are visible within the setting of the park and no consented turbines will be visible. The cumulative effect of adding the proposed turbines is therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Pontrhydyfen Viaduct, Grade II Listed Building

- 9.7.77 No existing turbines are visible within the setting of the viaduct. The consented Foel Trawsnant turbines (if constructed) are predicted to be visible at a range of 3.6 km to the east of the viaduct, the consented Upper Ogmores turbines would be further beyond the Foel Trawsnant turbines and unlikely to be visible. They will result in a **Negligible Adverse** impact on this asset of High Importance resulting in an effect of **Negligible Significance**.
- 9.7.78 The addition of the proposed turbines to this baseline will increase the horizontal field of view in which turbines are visible from the viaduct and will bring turbines to within 2.9 km of it. The cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Pentre Farmhouse, Grade II Listed Building

- 9.7.79 Although the operational Pen y Cymoedd and Ffynnon Oer turbines are predicted to be visible from this asset at a range of 5 km to the north/northeast they are not readily discernible and do not adversely affect the setting of Pentre Farmhouse. Overhead powerlines supported on pylons cross to the immediate west of the farmhouse resulting in a negligible reduction in the contribution that the rural agricultural surroundings make to the significance of this asset.
- 9.7.80 The consented Foel Trawsnant turbines are predicted to be visible at a range of 4 km to the north-northwest of the farmhouse and the consented Upper Ogmores turbines would be over 7.5 km to the northeast but at this range these consented schemes would not result in a material change to the way that the rural agricultural surroundings contribute to the significance of this asset.
- 9.7.81 The addition of the proposed turbines into this baseline would bring turbines closer to the asset (2 km to the nearest turbine) and the cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant

Gilfach-ganol Farmhouse, Grade II Listed Building

- 9.7.82 The operational Pant y Wal and Pant y Wal Extension turbines are visible from the road west of the farmhouse at a range of 10 km to the northeast, the Llynfi Afan turbines at a range of 9.5 km, and the Pen y Cymoedd and Ffynnon Oer turbines are visible at a range of c..9.5 km to the north.
- 9.7.83 The consented Foel Trawsnant turbines will be visible at a range of 6 km to the north of the farmhouse and the consented Upper Ogmores turbines would be over 9 km to the northeast, extending the horizontal field of view in which turbines are visible, but at this range they will not result in any adverse impact on how the setting of the farmhouse contributes to its significance.
- 9.7.84 The addition of the proposed turbines into the wider setting of Gilfach-ganol farmhouse will further extend the horizontal field of view in which turbines will be visible from the farmhouse and will bring turbines to within 2.3 km of the LB. The cumulative effect of this visual change in the wider surroundings of the farmhouse is considered to result in a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Church of St Michael and All Angels, Grade II Listed Building

- 9.7.85 No existing wind turbines are visible within the setting of the church due to the built-up nature of its surroundings. Similarly, no consented schemes are predicted to be visible for the same reason. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Zoar Chapel Grade II Listed Building

- 9.7.86 No operational turbines are visible within the setting of Zoar Chapel and no consented turbines will be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Minor Adverse** impact on this asset of **Medium Importance** resulting an effect of **Minor Adverse Significance** and not significant.

Church of St David, and surrounding churchyard railed wall

- 9.7.87 No operational turbines are visible within the setting of this church and no consented turbines will be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Jerusalem Baptist Chapel, Bryn, Grade II Listed Building

- 9.7.88 No operational turbines are visible within the setting of this chapel. The consented Foel Trawsnant turbines will be over 2.7 km to the northeast of the chapel and are not predicted to be visible due to the distance, topography and forestry screening.
- 9.7.89 The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Church of St Mary Grade II Listed Building

- 9.7.90 The operational Mynydd Brombil turbines are visible behind the church when viewing from the A48 flyover from northwest of the church but do not detract from the prominence of the church within this view. This view is also fleeting as there is limited scope to pause on the A48 flyover. The view of the church from ground level to the west of the A48 along Castle Street is partly obscured by the flyover and the buildings on Castle Street obscure the

Mynydd Brombil turbines in this view. In closer proximity to the church below the flyer the church itself obscures Mynydd Brombil from view. No other wind farms included in the cumulative assessment are visible within the setting of the Church of St Mary. The Mynydd Brombil turbines do not dominate the view from northwest of the church and do not detract from the prominence of the church tower which contributes to its significance. The visual change within the setting of the LB as a result of the Mynydd Brombil turbines does not affect the ability to appreciate the evidential, aesthetic and historic interest of the church. No other operational or consented turbines are or will be visible within the setting of this church.

- 9.7.91 The addition of the proposed turbines will increase visibility of turbines behind the church in views from the A48, as the proposed turbines will extend the horizontal field of view in which turbines are visible by approximately 90 degrees to the left of the church in this view. This will lead to further visual distraction from the prominence of the church within this view. The proposed turbines will also cause some visual distraction from the prominence of the church in views from Castle Street but the Mynydd Brombil turbines are not visible from here and the effects are solely as a result of the proposed turbines. Visibility of the turbines in other views will be sufficiently removed from the church in terms of horizontal separation that they will not detract from the evidential value of the church. The addition of the proposed turbines is considered to result in Low Adverse impacts to this asset as a result of this visual competition and the cumulative effects would be **Minor Adverse** impacts to this asset of **Medium Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Church of St Joseph, Grade II Listed Building

- 9.7.92 No existing turbines are visible within the setting of this church and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Jerusalem Chapel, Pontrhydyfen, Grade II Listed Building

- 9.7.93 No existing turbines are visible within the setting of the chapel, the consented Foel Trawsnant turbines are predicted to be visible at a range of 3.6 km to the east of the chapel. They will result in a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect of **Negligible Significance**. The addition of the proposed turbines into this baseline will extend the horizontal field of view in which turbines are visible on the far horizon from this chapel. No other consented schemes are predicted to be visible. The cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Penuel Chapel, Grade II Listed Building

- 9.7.94 Due to the built-up nature of the chapel's setting no operational wind turbines are visible and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Holy Cross Church Grade II Listed Building

- 9.7.95 No operational wind farms are visible within the setting of Holy Cross Church and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Bethany Chapel, Grade II Listed Building

- 9.7.96 Due to the built-up nature of the chapel's setting no operational wind turbines are visible and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the

proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Soar Maes-yr-haf Congregational Chapel and forecourt railings, Grade II listed building

- 9.7.97 Due to the built-up nature of the chapel's setting no operational wind turbines are visible and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Tabernacle Chapel, Grade II Listed Building

- 9.7.98 No existing turbines are visible within the setting of the chapel, the consented Foel Trawsnant turbines are predicted to be visible at a range of 5.5 km to the northeast of the chapel. They will result in a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect of **Negligible Significance**. The addition of the proposed turbines into this baseline will extend the horizontal field of view in which turbines are visible on the far horizon from this chapel. The cumulative effect is considered to be a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Adverse Significance** and not significant.

Capel Saron, Grade II Listed Building

- 9.7.99 Due to the built-up nature of the chapel's setting no operational wind turbines are visible and no consented schemes are predicted to be visible. The cumulative effects are therefore the same as the assessment of the proposed development in isolation: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting an effect of **Negligible Significance** and not significant.

Scenario 2: Impact of proposed development with baseline including the operational, consented and submitted wind farms

- 9.7.100 Assessment Scenario 2 considers the impact of the proposed development alone if it was added a baseline that includes all of the operational and consented schemes as addressed in Scenario 1 plus the submitted Llwyncelyn (Resubmission) turbines but with the submitted variation to the consented Foel Trawsnant wind farm in place of the consented layout.

Hen Eglwys Scheduled Monument and Grade I Listed Building

- 9.7.101 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of Hen Eglwys. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but the ES submitted for the Foel Trawsnant wind farm does not identify any harm to Hen Eglwys. No other submitted schemes are predicted to impact on this asset due to the greater distances.
- 9.7.102 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Low Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant, , therefore no cumulative effects are predicted.

Mynydd y Castell Scheduled Monument

- 9.7.103 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of Mynydd y Castell. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines.
- 9.7.104 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Low Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

9.7.105

Margam Castle Grade I Listed Building

9.7.106 No submitted schemes are predicted to be visible from areas in which Margam Castle is appreciated. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Low Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

Margam Park Grade I Registered Park and Garden

9.7.107 No submitted schemes are predicted to be visible from the park.

9.7.108 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Low Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

Mynydd Margam Registered Landscape

9.7.109 The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines. No other submitted schemes will cause indirect visual impacts to the registered landscape.

9.7.110 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1 which are the same as the impact of the proposed wind farm operating in isolation – that is adverse impacts of Moderate Significance (in ASIDOHL terms).

Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape

9.7.111 No submitted schemes are predicted to be visible from the registered landscape.

9.7.112 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), Scheduled Monuments

9.7.113 No submitted schemes are predicted to be visible from these monuments and the addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1 – that is a **Low Adverse** impact and the cumulative effect is considered to result in a **Minor Adverse** impact on these two assets of High Importance resulting in an effect of **Minor Significance** and not significant.

Y Bwlwarcu Scheduled Monument

9.7.114 The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will otherwise not alter the impacts on Y Bwlwarcu compared to Scenario 1. The submitted Llanwonno Resubmission is predicted to be visible from the monument, beyond the Pant y Wal turbines, but lies outside the extent of this cumulative assessment. No other submitted schemes are predicted to be visible within the setting of Y Bwlwarcu and the addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1 which are the same as the impact of the proposed wind farm operating in isolation - a **Minor Adverse** impact on this asset of **High Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Roman Camp, Scheduled Monument

9.7.115 The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will otherwise not alter the impacts on Roman Camp compared to Scenario 1. The submitted Llanwonno Resubmission is predicted to be visible from the monument, beyond the Pant y Wal turbines, but lies outside the extent of this cumulative assessment. No other submitted schemes are predicted to be visible within the setting of Roman Camp and the addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1 which are the same as the impact of the proposed wind farm operating in isolation - a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect of **Negligible Adverse Significance** and not significant.

Danish Camp, Scheduled Monument

9.7.116 No submitted schemes are predicted to be visible from Danish Camp. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Camp N of Tonmawr, Scheduled Monument

9.7.117 No submitted schemes are predicted to be visible from this monument. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Ergyd Isaf Round Barrows Scheduled Monument

9.7.118 No submitted wind farms will be visible from the setting of Ergyd Isaf and the cumulative effect of adding the proposed turbines to this baseline is the same as for Scenario 1 - a **Low Adverse** impact to this asset of **High Importance** resulting in a cumulative effect of **Minor Adverse Significance** and not significant.

Ergyd Uchaf prehistoric Round Barrow, Twmpath Diwlith barrow, and the site of the Bodvoc Stone, Scheduled Monuments

9.7.119 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of Ergyd Uchaf;. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not alter the impact on these monuments compared to Scenario 1.

9.7.120 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Cae'r Mynydd Ventilation Furnace and Mine, Scheduled Monument

9.7.121 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of Cae'r Mynydd. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines.

9.7.122 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Maesteg Blast Furnaces, Scheduled Monument and Grade II Listed Building and Maesteg Sports Centre, The Cornstores, Grade II* Listed Building

- 9.7.123 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of these listed buildings. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of these listed buildings compared to Scenario 1.
- 9.7.124 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Church of St James, Pyle with Kenfig

- 9.7.125 No submitted schemes are predicted to be visible from the setting of this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Church of St Mary Magdalene, Pyle with Kenfig

- 9.7.126 No submitted schemes are predicted to be visible from the setting of this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Church of St David Grade II Listed Building

- 9.7.127 No submitted schemes are predicted to be visible from the setting of this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Church of St David, Bettws

- 9.7.128 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of this church, as noted above these turbines would be obscured by buildings adjacent to the church. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but would not otherwise alter the impacts on this asset compared to Scenario 1.
- 9.7.129 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Bethania Capel y Bedyddwyr Neillduol, Grade II* Listed Building

- 9.7.130 No submitted schemes are predicted to be visible from the setting of this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Llangynwyd Castle, Scheduled Monument

- 9.7.131 The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not alter the impact on these monuments compared to Scenario 1, the altered spread of turbines will still extend the

horizontal field of view in which turbines are visible from the monument and further detracting from the rural nature of the monuments surroundings but not adversely affecting the ability to appreciate its significance..

- 9.7.132 The addition of the proposed turbines into this baseline will further extend the horizontal field of view in which turbines are visible from the monument as they will be located to the west and northwest of the monument. They will also result in turbines being in closer proximity to the monument (2 km to the nearest turbine). The cumulative effect is considered to be a **Minor Adverse** impact on this asset of **High importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Llwydarth Farmhouse

- 9.7.133 No submitted schemes are predicted to be visible from this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Chain Home Low Radar Station, Scheduled Monument

- 9.7.134 No submitted schemes are predicted to be visible from this listed building. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse** Significance and not significant.

Bont Fawr Aqueduct / Viaduct, Scheduled Monument and Grade II* Listed Building

- 9.7.135 With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of these listed buildings. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the aqueduct compared to Scenario 1.
- 9.7.136 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Llangynwyd Conservation Area

- 9.7.137 The submitted variation to the consented Foel Trawsnant turbines to increase rotor diameters and delete three turbines may result increased visibility of the turbines in views from the centre of the CA however Figure 8.72 suggests that the buildings of the CA could screen the Foel Trawsnant turbines from views within the CA.
- 9.7.138 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects With the exception of Foel Trawsnant no submitted schemes are predicted to be visible within the setting of these listed buildings. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the conservation area compared to Scenario 1.
- 9.7.139 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: a **Low Adverse** magnitude on this asset of **Medium Importance** resulting in an effect of **Minor Adverse** significance and not significant.

Church of St Cynwyd Grade II* Listed Building

- 9.7.140 The submitted variation to the consented Foel Trawsnant turbines to increase rotor diameters and delete three turbines will result in increased visibility of the turbines in views from the churchyard extension in which the church is prominent, this could result in additional visual competition compared to Scenario 1, but the horizontal separation will not be reduced, limiting the effect of this.

- 9.7.141 The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: – an impact of **Low Adverse** magnitude on this asset of **High Importance** which will result in an effect judged to be of **Minor Adverse Significance** and not significant.

Tytheaston Court, Grade II Registered Park and Garden and Grade II* Listed Building

- 9.7.142 No submitted schemes are predicted to be visible from Tytheaston Court. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **High Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Bryngarw Park, Grade II Registered Park and Garden

- 9.7.143 No submitted schemes are predicted to be visible from Bryngarw. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant

Port Talbot: Talbot Memorial Park, Grade II Registered Park and Garden

- 9.7.144 No submitted schemes are predicted to be visible from the Memorial Park. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Ponrhydyfen Viaduct, Grade II Listed Building

- 9.7.145 With the exception of Foel Trawsant no submitted schemes are predicted to be visible within the setting of the viaduct. The variation to the consented Foel Trawsant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the aqueduct compared to Scenario 1.

- 9.7.146 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Pentre Farmhouse, Grade II Listed Building

- 9.7.147 The variation to the consented Foel Trawsant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the farmhouse compared to Scenario 1.

- 9.7.148 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Gilfach-ganol Farmhouse, Grade II Listed Building

- 9.7.149 The variation to the consented Foel Trawsant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the farmhouse compared to Scenario 1. The submitted Upper Ogmored turbines would extend the horizontal spread of turbines south from the operational Pen y Cymoedd wind farm but at this range would not adversely affect the contribution that the setting makes to the significance of this asset.

- 9.7.150 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Church of St Michael and All Angels, Grade II Listed Building

- 9.7.151 No submitted schemes are predicted to be visible within the setting of Church of St Michael and All Angels due to the built-up nature of the surroundings. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant

Zoar Chapel Grade II Listed Building

- 9.7.152 No submitted schemes are predicted to be visible within the setting of Zoar Chapel. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Minor Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant

Church of St David, and surrounding churchyard railed wall, Grade II Listed Building

- 9.7.153 No submitted schemes are predicted to be visible within the setting of Church of St David. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Minor Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Minor Adverse Significance** and not significant.

Jerusalem Baptist Chapel, Bryn, Grade II Listed Building

- 9.7.154 No submitted schemes are predicted to be visible within the setting of this chapel. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Church of St Mary Grade II Listed Building

- 9.7.155 No submitted schemes are predicted to be visible within the setting of Church of St Mary. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: **Minor Adverse** impacts to this asset of **Medium Importance** resulting in an effect of **Minor Adverse Significance** and not significant.

Church of St Joseph, Grade II Listed Building

- 9.7.156 No submitted schemes are predicted to be visible within the setting of Church of St Joseph. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Jerusalem Chapel, Ponrhydyfen, Grade II Listed Building

- 9.7.157 The variation to the consented Foel Trawsant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of Jerusalem Chapel compared to Scenario 1. No other submitted schemes will be visible from this asset.

- 9.7.158 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Penuel Chapel, Grade II Listed Building

- 9.7.159 No submitted schemes are predicted to be visible within the setting of Penuel Chapel due to the built-up nature of the surroundings. The addition of the proposed turbines into this baseline therefore result in the same cumulative

effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Holy Cross Church Grade II Listed Building

9.7.160 No submitted schemes are predicted to be visible within the setting of Holy Cross Church. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Bethany Chapel, Grade II Listed Building

9.7.161 No submitted schemes are predicted to be visible within the setting of Bethany Chapel due to the built-up nature of the surroundings. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Soar Maes-yr-haf Congregational Chapel and forecourt railings, Grade II listed building

9.7.162 No submitted schemes are predicted to be visible within the setting of Soar Maes-yr-haf chapel due to the built-up nature of the surroundings. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Tabernacle Chapel, Grade II Listed Building.

9.7.163 With the exception of Foel Trawsnant, no submitted schemes are predicted to be visible within the setting of the viaduct. The variation to the consented Foel Trawsnant wind farm to increase rotor diameters and delete three turbines may be expected to reduce the extent of the hub-height zone of theoretic visibility of these turbines but will not otherwise alter the effect on the setting of the chapel compared to Scenario 1.

9.7.164 The addition of the proposed turbines into this baseline therefore results in the same cumulative effects as Scenario 1: **Negligible Adverse Significance** and not significant.

Capel Saron

9.7.165 No submitted schemes are predicted to be visible within the setting of Capel Saron due to the built-up nature of the surroundings. The addition of the proposed turbines into this baseline therefore result in the same cumulative effects as Scenario 1: a **Negligible Adverse** impact on this asset of **Medium Importance** resulting in an effect judged to be of **Negligible Adverse Significance** and not significant.

Non-wind cumulative effects

9.7.166 An EIA screening request has been submitted for the proposed Eirlys solar farm which is located within 1 km of the southeastern edge of the Y Bryn site boundary. This may result in impacts on the SMs southeast of the Y Bryn site boundary – Y Bwlwarcaw, Roman Camp, Danish Camp and Camp N of Tonmawr if the layout extends to within the setting of these monuments and is likely to result in impacts to the Mynydd Margam Registered Landscape as it lies within HLCA015. It is assumed that efforts will be made to minimize the impacts on these assets and that the effect will be at most Minor Significance and not significant. The cumulative effect of the turbines operating at the same time as the solar farm is therefore considered to be no more than Minor Significance.

9.7.167 All other non-wind sites in the long list for cumulative effects are sufficiently far removed from the assets affected by the proposed turbines that cumulative effects are not predicted.

Summary of cumulative effects

9.7.168 The assessment has found that the proposed development operating at the same time as other consented schemes (under Scenario 1) or would result in no cumulative effects to the majority of assets. There would be an increase in the levels of visual effect on the Mynydd Margam Registered Landscape as a result of Y Bryn, Mynydd Brombil and Foel Trawsnant operating at the same time and there would be an increase in the significance of effect on Llangynwyd Castle through Bryn, Foel Trawsnant and Pen y Cymoedd turbines operating in combination.

9.7.169 The assessment has found that the cumulative effects of all operational, consented and submitted schemes operating in combination with the proposed turbines under Scenario 2 would result in the same effects as Scenario 1.

Table 9.6: Summary table of cumulative effects

Asset	Significance of residual effect	Cumulative Scenario 1	Cumulative Scenario 2
Construction Phase			
Heol y Moch (The Pigs Way) (GGAT01077.0w)	Minor Adverse Significance	No cumulative effects	No cumulative effects
Post Medieval Trackway (07293w)	Negligible Adverse Significance	No cumulative effects	No cumulative effects
Penhydd Medieval trackway (01078.0w)	Negligible Adverse Significance	No cumulative effects	No cumulative effects
Tip scree (HA22)	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Mynydd Margam Registered Landscape	ASIDOHL found Very Slight impacts	Very Slight impacts in ASIDOHL terms	Same as Scenario 1
Operational Phase			
Hen Eglwys SM and Grade I LB	Minor Adverse significance	Minor Adverse Significance	Same as Scenario 1
Mynydd y Castell SM	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Margam Castle Grade I LB	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Margam Park Grade I Registered Park and Garden	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Mynydd Margam Registered Landscape	ASIDOHL found impacts of Moderate Significance	Moderate Significance in ASIDOHL terms	Same as Scenario 1
Other assets within Margam Park	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1

Asset	Significance of residual effect	Cumulative Scenario 1	Cumulative Scenario 2
Merthyr Mawr, Kenfig and Margam Burrows Registered Landscape	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Cefn yr Argoed Camp (SM GM245) and Nant Herbert Camp (SM GM244), SM	Negligible Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Roman Camp (SM GM058), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Danish Camp (SM GM056), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Camp north of Tonmawr (SM GM057), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Y Bwlwarcaw SM	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Ergyd Isaf Round Barrows SM	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Ergyd Uchaf prehistoric Round Barrow (SM GM159), Twmpath Diwlith barrow (SM GM557); and the site of the Bodvoc Stone (SM GM443), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Cae'r Mynydd Ventilation Furnace and Mine (SM GM547), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Maesteg Blast Furnaces (SM GM418, LB 18492), SM and Grade II LB) and Maesteg Sports Centre, The Cornstores (LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1

Asset	Significance of residual effect	Cumulative Scenario 1	Cumulative Scenario 2
11257), Grade II* LB			
Church of St James, Pyle with Kenfig (LB 11227), Grade I LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Church of St Mary Magdalene, Pyle with Kenfig (LB11248), Grade II* LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Church of St David (LB 11246), Grade I LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Church of St David, Bettws (LB 18626), Grade I LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Bethania Capel y Bedyddwyr Neillduol (LB 18493), Grade II* LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Llangynwyd Castle (SM GM085), SM	Negligible Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Llwydarth farmhouse (LB 11256), Grade II* LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Chain Home Low Radar Station (SM GM488), SM	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Bont Fawr Aqueduct / Viaduct (SM GM393, LB 23022), SM and Grade II* LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Llangynwyd CA	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1

Asset	Significance of residual effect	Cumulative Scenario 1	Cumulative Scenario 2
Church of St Cynwyd Grade II* LB	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Tythegston Court (LB 11216 and GM15), Grade II* LB And Grade II Registered Park & Garden	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Bryngarw Park (GM5), Grade II Registered Park & Garden	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Port Talbot: Talbot Memorial Park (GM45), Grade II Registered Park & Garden	Negligible Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Pontrhydyfen Viaduct (LB 23024) Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Pentre Farmhouse With Attached Farm Range (LB 11373), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Gilfach-ganol farmhouse (LB 11375), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Church of St Michael and All Angels, Llangynwyd with Maesteg, including enclosing graveyard wall (LB 18500), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Zoar Chapel Grade II LB	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1

Asset	Significance of residual effect	Cumulative Scenario 1	Cumulative Scenario 2
Church of St David Grade II LB	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Jerusalem Baptist Chapel in Bryn village (LB 22166), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Church of St Mary (LB 22802), Grade II LB	Minor Adverse Significance	Minor Adverse Significance	Same as Scenario 1
Church of St Joseph (LB 22803), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Jerusalem Chapel in Pontrhydyfen (LB 22889),	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Penuel Chapel (LB 23020), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Holy Cross Church (LB 23248), Grade II LB	Minor Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Bethany chapel (LB 23252), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Soar Maes-yr-haf Congregational Chapel and forecourt railings (LB 11801), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Tabernacle Chapel (LB 23019), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1
Capel Saron (LB 18496), Grade II LB	Negligible Adverse Significance	Negligible Adverse Significance	Same as Scenario 1

9.8 CONCLUSIONS

9.8.1 The assessment has found that there would be adverse effects to four non-designated assets and one designated historic asset as a result of the construction of the proposed wind farm. For the Mynydd Margam Registered

Landscape these construction phase effects would be Very Slight (in ASIDOHL terms). For the non-designated assets the construction phase effects would be Minor Adverse and not significant for Heol y Moch and Negligible Adverse and not significant for the two trackways and tip scree. A programme of archaeological monitoring and recording during construction will mitigate the impacts on these assets by enhancing our knowledge of them through recording.

- 9.8.2 The assessment has found that there would also be adverse effects to 46 designated historic assets as a result of the operation of the proposed wind farm. Minor Adverse (and not significant) for: Hen Eglwys scheduled monument, Mynydd y Castell scheduled monument, Margam Castle Grade I LB, Margam Park registered park and garden, Ergyd Isaf round barrows scheduled monument, Holy Cross Church Grade II LB, Church of St Mary Grade II LB, and Church of St Cynwyd Grade II* LB, Y Bwlwarcaw SM, Zoar Chapel Grade II LB, Church of St David Grade II LB, and Llangynwyd CA and Negligible Adverse and not significant for the remaining 34 assets.
- 9.8.3 The only significant effect identified is on Mynydd Margam registered landscape which the ASIODHL assessment found would experience adverse impacts of Moderate Significance (in ASIDOHL terms).
- 9.8.4 The cumulative assessment has found that the addition of the proposed turbines into a baseline of all operational and consented schemes would result in no increase in the significance of effect compared to the impact of the proposed turbines alone for the majority of assets. The exception is Llangynwyd Castle where the effect of the proposed scheme in combination with the consented Foel Traswnant Scheme and operational Pen y Cymoedd wind farm will increase from Negligible Adverse to Minor Adverse but will still not be significant. It has also found that the addition of the proposed turbines into a baseline of all operational, consented and submitted schemes would result in no increase in the significance of effect compared to the operational and consented schemes.