

5 LANDSCAPE AND VISUAL

Purpose and Scope

- 5.1 The purpose of this chapter is to identify and assess the landscape and visual effects which would result from the Proposed Development.
- 5.2 As stated previously, the site lies within the administrative boundary of RCTCBC (the LPA) and is located 13 km north-west of Cardiff city centre.
- 5.3 The site itself is located on land between Church Village and Treforest Industrial Estate, to the east is the main railway line linking Cardiff with Pontypridd and other parts of The Valleys. To the west lies the A473. For a more detailed location please see **Figure 5.1: Site Location and Field Identification** and **Figure 5.2: Landscape Planning Designations**.
- 5.4 The site extends to approximately 40 hectares (98.8 acres) (including the cable route) and consists of several parcels of land. The parcels are irregular in shape and comprise a series of agricultural fields of varying sizes. They are currently primarily used for pasture grazing and are bound by a mixture of mature woodland, trees and hedgerows.
- 5.5 This chapter provides an assessment of the effects of the Proposed Development on the existing landscape resources and receptors, as well as an assessment of the effects on visual receptors in the surrounding landscape. Where appropriate, measures are proposed to prevent, reduce or offset any adverse effects.
- 5.6 The assessment considers the effects on landscape and visual environment during the first winter following completion of the development (Year 1) after the landscape measures have been implemented, as a worst case. Thereafter, any adverse effects will lessen, as the proposed planting matures.
- 5.7 This chapter also considers the Glint and Glare Assessment completed for this application (**Appendix 5.1**).

Study Area

- 5.8 The study area extends to 5km from the outer edges of the site, in all directions, and has been adopted due to the relative scale (land take) of the Proposed Development. It is anticipated that any potential significant effects would be within this radius. The location of the site and relevant landscape planning designations within the study area are shown on **Figure 5.2**.
- 5.9 To determine the potential intervisibility of the Proposed Development with the surrounding landscape, a computer-generated Zone of Theoretical Visibility (ZTV) has been mapped. The ZTV is defined as the theoretical area from which parts of the Proposed Development would be potentially visible and broadly defines the extent of potential visibility within 5km for both the landscape character and visual assessment. The ZTV is shown on **Figure 5.4**.

Assessment Methodology

Baseline Methodology

Assessment Criteria and Assignment of Significance

- 5.10 As a matter of best practice, this assessment has been undertaken based on the relevant guidance on landscape and visual impact assessment (LVIA) described in the following documents:
- *Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3)* (Landscape Institute and Institute of Environmental Management & Assessment, 2013);

- *Landscape Character Assessment Guidance for England and Scotland* (The Countryside Agency and Scottish Natural Heritage, 2002);
- *An Approach to Landscape Character Assessment* (Natural England, 2014);
- *Technical Guidance Note 06/19, Visual Representation of Development Proposals* (Landscape Institute, September 2019): and
- *Technical Guidance Note 02/21: Assessing landscape value outside national designations* (Landscape Institute, May 2021).

Distinction between Landscape and Visual Effects

- 5.11 As set out in the GLVIA3 landscape and visual effects are assessed separately, although the procedure for assessing each is closely linked. A clear distinction has been drawn between landscape and visual effects as described below:
- Landscape effects relate to the effects of the proposed development on the physical and other characteristics of the landscape and its resulting character and quality.
 - Visual effects relate to the effects on views experienced by visual receptors (e.g. residents, footpath users, tourists etc) and on the visual amenity experienced by those people.
- 5.12 A combination of desk-based research and fieldwork was undertaken to establish the landscape and visual context of the site. This included:
- a desk-based review of legislative and planning context relevant to the site and landscape and visual issues associated with the Proposed Development;
 - a combination of desk-based study and fieldwork has been used to determine both the landscape and the visual baseline;
 - a ZTV has been generated (based on the maximum height of the solar panels at 3.2m above existing ground level (EGL), to show the extent of theoretical visibility of the Proposed Development and the landscape areas that might be indirectly affected;
 - fieldwork was undertaken on the site in March 2022. The representative viewpoint photography was taken during the course of this site visit;
 - the visual context of the Proposed Development was established, including the extent of views from public footpaths, residential properties, commercial properties, recreational areas/open space, roads and other receptors; and
 - the representative viewpoints were identified using the ZTV. They were confirmed or adjusted through fieldwork, with additional viewpoints being added where it was thought it would aid the better understanding of the baseline visual resources and therefore, the assessment of the effects upon visual receptors.

Consultation

- 5.13 Table 5.1 sets out the consultation undertaken as part of the EIA process, relevant to the LVIA.

Table 5.1: Consultation Responses Relevant to this Chapter

Consultee and Issues Raised	How/ Where Addressed
Pre-Application Advice (Ref: GD/21/5130/41) received from Rhondda Cynon Taf County Borough Council (RCTBC) <i>"Impact on character and appearance of the area.</i>	Scoping Report submitted (March 2022) Potential views from residential receptor have been considered (see paragraph 6.2.43). However, it should

Consultee and Issues Raised	How/ Where Addressed
<p><i>Any future planning application should positively demonstrate that the impact of the proposed development on the character and appearance of the site and wider area are acceptable. In particular proposals need to have full regard to the landscape character and visual amenity of the site and wider area. Given the Special Landscape Area designation particular care needs to be taken in addressing this issue. To that end it is expected that proposals should demonstrate the overall farming character of the area can be retained and this will also involve the retention and strengthening of existing field pattern boundaries and hedgerows small woods and the overall field pattern.</i></p> <p><i>Developments of this kind can if poorly designed erode the green gap between the industrial estate and the residential areas to the west and the design of the proposed development should respect the character of the area and its LANDMAP designation. Your applicant should give early consideration to the possible need for a Section 106 agreement to address this issue. Similarly, proximity of the solar arrays to the field boundaries also requires careful consideration. Generally, consideration needs to be given to this issue through the construction, operational and decommissioning phases.</i></p> <p><i>Impact on residential amenity and privacy.</i></p> <p><i>Given the location of the proposed development its impact on residential amenity and privacy is unlikely to be severe. However, views from and into the site need to be given careful consideration and be properly evaluated particularly in relation to the few properties that are closest to the site. The Landscape & Visual Impact Assessment will need to have due regard to the visual effect of the proposed development on residential property. Generally, consideration needs to be given to this issue through the construction, operational and decommissioning phases.”</i></p>	<p>be noted that in the planning system no individual has the right to a view. The Landscape Institute has provided guidance on assessing private views in Technical Guidance Note 2/19: Residential Visual Amenity Assessment (LI TGN 2/19).</p> <p>As such, no residential properties have the potential to experience a degree of harm over and above substantial to make considering private views a public interest matter. Consequently, private views are not considered further in this LVIA.</p>
<p>Specific feedback from the LPA (RCTCBC) regarding the Candidate Viewpoint selections was received, which is as follows:</p> <p><i>Additional viewpoint location requested to the south of viewpoint 13, located within the residential area; and,</i></p> <p><i>Viewpoints 3 and 5 were considered to be too close to the proposed development and other viewpoints. An alternative location for these was suggested to the west within other areas covered by the ZTV.</i></p>	<p>To address this, one additional viewpoint location and two alternative viewpoint locations have been selected, Candidate Representative Viewpoints 11, 12 and 13 respectively (ref. Figure 2).</p> <p>During the course of field surveys in March 2022, it was ascertained that potential intervisibility from Candidate Representative Viewpoint 1 was limited. While Representative Viewpoint 1 was retained, an additional Representative Viewpoint (Representative Viewpoint 4) has been included and assessed as part of the LVIA.</p>
<p>DNS: EIA Scoping Direction (3282038: Maes Mawr Solar Farm, Planning and Environmental Decisions Wales, 6th May 2022)</p> <p><i>ID 19 Cumulative Effects - It is welcomed that the LVIA chapter will include an assessment of the cumulative effects within the study area. The applicant is advised to ensure that any study also includes the impacts, if any, generated from DNS/3272053 Tywn Hywel Wind Farm, DNS/3280378 Mynydd y Glyn wind farm and DNS/3266623 Cwm Ifor Solar as well as any</i></p>	<p>Cumulative effects are detailed in the cumulative effects section of this chapter.</p> <p>Application ref 14/1014 refers to Maes Bach Solar Farm which is the neighbouring solar farm and has been constructed. This scheme therefore forms part of the baseline landscape for the Proposed Development and is not included as a cumulative scheme.</p>

Consultee and Issues Raised	How/ Where Addressed
<p><i>other large-scale developments that may come forward whilst compiling the LVIA.</i></p> <p><i>Furthermore, RCTCBC note that a smaller solar farm (app ref 14/1014) was approved adjacent to this site in December 2014.</i></p>	
<p>DNS: EIA Scoping Direction (3282038: Maes Mawr Solar Farm, Planning and Environmental Decisions Wales, 6th May 2022)</p> <p><i>The LVIA should address the impacts of the proposal on this designation. Additional information is provided by RCTCBC at Appendix 1.</i></p>	<p>The Proposed Development falls within the Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA).</p> <p>Information on the SLAs is provided in the baseline section of this chapter and the effects of the Proposed Development on them are set out in the assessment of effects section.</p>

Planning Policy Context

- 5.14 As part of establishing the existing baseline environment, this assessment has reviewed and considered relevant planning policies within the currently adopted Local Development Plan for the RCTCBC area which is the Rhondda Cynon Taf Local Development Plan up to 2021 (adopted March 2011).

Local Development Plan

Rhondda Cynon Taf Local Development Plan up to 2021 (adopted March 2011)

- 5.15 The Rhondda Cynon Taf Local Development Plan (RCTLDP) was adopted in March 2011. The RCTLDP provides “*the development strategy and spatial policy framework for the LDP area over a fifteen-year period to 2021*”.
- 5.16 The RCTLDP Policies Map¹ indicates that the site does not fall within any statutory landscape designations, e.g. Areas of Outstanding Natural Beauty (AONB), but falls entirely within a Special Landscape Area (SLA). The site is not covered by any site-specific policies or allocations.
- 5.17 Policies with potential to be of relevance to the impacts of the Proposed Development on landscape character and visual receptors are set out below.

Area Wide Planning Policies

Policy AW12: Renewable and Non-Renewable Energy

- 5.18 In relation to renewable and non-renewable energy development Policy AW12 states:
- “Development proposals which promote the provision of renewable and non-renewable energy such as schemes for energy from biomass, hydro-electricity, anaerobic digestion, on-shore oil and gas and small / medium sized wind turbines, will be permitted where it can be demonstrated that there*

¹ Rhondda Cynon Taf Local Development Plan Policies Map, <http://www.cartogold.co.uk/rhondda/Rhondda.htm> (Accessed 7th March 2022).

is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage, landscape importance, public health and residential amenity.

Development proposals should be designed to minimise resource use during construction, operation and maintenance.”

5.19 The planning balance of these considerations is addressed in the Planning Statement submitted with the application.

5.20 The Proposed Development is temporary and reversible, but long-term in nature with a proposed operational period of at least 40 years. It is expected that the restoration of the site would be subject to a planning condition to be agreed with RCTCBC and/or PEDW. Nevertheless, the Applicant envisages that at the end of the operational life of the solar farm, buildings, surface equipment, cabling to plough depth, and any areas of hardstanding would be removed. It is proposed that trees, hedgerows and other planting established in association with the Proposed Development would remain in-situ, except where it restricts the ability to farm, thus forming a permanent enhancement and improvement to the quantum and quality of existing tree cover and hedgerow green infrastructure network in the County Borough.

Southern Strategy Area Policies

Policy SSA22: Green Wedges

“Green Wedges have been identified in order to prevent coalescence between and within settlements at the following locations:

6. Land between Beddau / Tyn-y-Nant and Llantwit Fardre (Crown Hill) / Church Village;

7. Land between Efail Isaf and Llantwit Fardre...

...Within these areas development that would prejudice the open nature of the land, will not be permitted”.

5.21 The site is outwith those areas which are locally designated as Green Wedge, as listed above. As such, the Proposed Development would have no direct effects upon them.

Policy SSA23: Special Landscape Areas

“Special Landscape Areas are identified at the following locations:

1. Llanharry Surrounds;

2. Talygarn Surrounds;

3. Ely Valley at Miskin;

4. Coed-yr-Hendy and Mwyndy;

5. Llantrisant Surrounds;

8. Efail Isaf, Garth and Nantgarw Western Slopes;

9. Craig yr Allt;

Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.”

Other Material Considerations

National Planning Policy

Planning Policy Wales (Edition 11, 2021)

- 5.22 Edition 11 of Planning Policy Wales (PPW) was published in February 2021.
- 5.23 PPW sets out the land use planning policies of WG. The conservation and improvement of the natural heritage of Wales is one of its objectives noting the following (paragraphs 6.02 and 6.03):

“The special and unique characteristics and intrinsic qualities of the natural and built environment must be protected in their own right, for historic, scenic, aesthetic and nature conservation reasons. These features give places their unique identity and distinctiveness and provide for cultural experiences and healthy lifestyles.

As well as those characteristics regarded as special or unique there are other, environmental qualities of places which are ubiquitous. Environmental components of places, such as clean air, access to open spaces and water quality, are linked to the quality of the built and natural environment. The environmental components of places influence and shape health and wellbeing as well as playing a role in sustaining and creating places which are adaptable and resilient to change. Distinctive and Natural places must maintain or incorporate green infrastructure, recognising the wide-ranging role it can play, as key components of their natural and built fabric. Doing so will maximise health and well-being of communities and the environment.”

- 5.24 PPW also attaches considerable importance to the benefits of good design stating (paragraph 3.10) that:

“In areas recognised for their particular landscape, townscape, cultural or historic character and value it can be appropriate to seek to promote or reinforce local distinctiveness. In those areas, the impact of development on the existing character, the scale and siting of new development, and the use of appropriate building materials (including where possible sustainably produced materials from local sources), will be particularly important.”

- 5.25 In addition, PPW attaches considerable importance to the benefits of renewable energy stating (at paragraphs 5.77 and 5.91) that:

“...benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance... ...The planning system should:

...optimise energy storage... and ...maximise renewable and low carbon energy generation...”

“Local authorities should facilitate all forms of renewable and low carbon energy development...”

Landscape and Visual Baseline

Landscape Character Baseline

Published Landscape Character Assessments

- 5.26 Landscape character can be defined at a variety of scales and a substantial amount of existing published information is available at national and county/regional levels (refer to **Figures 5.24 to 5.30**).

National Landscape Character Areas (NLCA)

- 5.27 National Landscape Character Areas (NLCAs) are countrywide and form the broad scale landscape character assessment of Wales. The site and majority of the 5km study area falls within NLCA 37: Dyffrynnoedd y De (South Wales Valleys).
- 5.28 The key characteristics² of this NLCA are as follows:
- “...Numerous steep-sided valleys - typically aligned in parallel, flowing in southerly directions, shaped by southward flowing glaciers, leaving behind distinctive corrie ('cwm') and crag features. Major rivers include the Tawe, Taff and Rhymney.*
- Ribbon urban and industrial areas in valleys – in places extending up valley sides and to valley heads. The area is sometimes regarded as being part of a ‘city region’. Middle and eastern valleys tend to be the most heavily and continuously developed, e.g Rhondda Valley. The uplands by comparison have little or no settlement...*
- ...Contrast of urban valley activity next to quiet uplands – e.g. busy roads, new developments, traffic noise, night lighting, verses the adjacent wilder, remoter, quieter uplands...*
- ...blocks of coniferous plantation and deciduous woodland fringes – covering many steep hillsides and hilltops, most notably in the middle to western portion of the area, providing a softer contemporary landscape where there was once industry...*
- ...Improved pastures on some lower valley sides - grazed by sheep and some dairy cattle.*
- Field boundaries - dry stone walls mark the boundary of common land while fields on lower slopes are bounded by dense hawthorn hedges, interspersed with swathes of broadleaved woodland.*
- Transport routes restricted to valleys – the intervening topography makes valley to valley travel difficult, except at heads and bottoms of valleys. Occasionally there are roads that climb steeply over passes with dramatic views and ‘hair pin’ bends...”*
- 5.29 The southernmost parts of the 5km study area fall within NLCA 36: Bro Morgannwg (Vale of Glamorgan) and NLCA 36: Casnewydd, Caerdydd ar Barri (Newport, Cardiff and Barry). These NLCAs fall outwith the site boundary. There would be no direct landscape effects upon their key characteristics as a result of the Proposed Development.

LANDMAP – the Welsh Landscape Baseline

- 5.30 LANDMAP is an “all-Wales Geographical Information System (GIS) based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent dataset” (CCW (now NRW), 2011). It is administered by Natural Resources Wales (NRW) and comprises five spatially related datasets or aspect layers as follows:
- Geological Landscape: “Considers the physical, primarily geological, influences that have shaped the contemporary landscape and identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology”;
 - Landscape Habitats: “Focuses on recording habitat features, characteristics and their spatial relationships within the context of the wider landscape”;
 - Visual and Sensory: “Maps landscape characteristics and qualities as perceived through our senses, primarily visually. The physical attributes of landform and land cover, their visible patterns and their interrelationship”;

² <https://naturalresources.wales/evidence-and-data/maps/nlca/?lang=en> (accessed March 2022)

- Historic Landscape: “Landscape characteristics that depend on key historic land uses, patterns and features. Identifies only those classes of historic land uses, patterns and features that are prominent and contribute to the overall historic character of the present landscape.”; and
- Cultural Landscape: “Describes the links between landscape and people, from the way in which cultural, or human activity shapes the landscape, to the way in which culture shapes the way we respond to landscape. Focus is on mapping the landscape where it has been, or is being, shaped by a particular cultural activity or process, or where it has been directly represented, depicted or described in art, literature or folklore”.

5.31 For each dataset the landscape is divided into discrete geographical units referred to as aspect areas. Each is given a unique identification code and is accompanied by a dataset which includes both a description and evaluation of quality and value.

5.32 Whilst all LANDMAP Aspect Areas have been considered, for the purposes of this assessment the main focus will be on those Aspect Areas which would be directly affected by the Proposed Development, i.e. those within which the site itself is located.

Visual and Sensory Landscape Aspect Area

5.33 The parts of the site, which would contain solar panels, are entirely located within ‘Hendre’ (CYNONVS572) Visual and Sensory Aspect Area (**Figure 5.39**). With the cable route partly located within ‘Mynydd y Glyn’ (CYNONVS142) and ‘Pontypridd’ (CYNONVS709). The overall evaluation for ‘Hendre’ (CYNONVS572), which would experience a long-term change, is Moderate (**Figure 5.40**). ‘Hendre’ aspect area is described as “A rolling rural landscape with small/medium sized fields, predominantly grazing, defined by hedgerows with scattered blocks of broadleaf and mixed woodland, some with a slight parkland /estate feel... landform lies between approximately 40m and 100mAOD... scattered villages and farmsteads sit within this attractive rural landscape, slightly spoilt by the presence of intrusive/visually detractive elements eg M4, pylons, sharply defined urban edges. Boundary changes in all three areas at change detection, due to recent developments, on edge of Bridgend, at Llanilid/Bryncae, and at Church Village. Recent Church Village bypass through eastern polygon has altered views and perception of area, and reduced tranquility [sic].”

Landscape Habitat Aspect Area

5.34 The site is predominantly within the large unnamed landscape habitat aspect area CYNONLH101, with a very small portion of the north easternmost part of the site (including the southern section of the cable route) located within the similarly unnamed landscape habitat aspect area CYNONLH096. The northernmost section of the cable route is located within the large, although fragmented, unnamed landscape habitat aspect area CYNONLH090 (**Figure 5.41**). The overall evaluation of these aspect areas is Moderate, High and Low respectively. With CYNONLH101, within which the majority of the site is located, being Moderate. Justification for the overall evaluation of this aspect area is given as “Much of area is improved grassland which is low value but there are valuable (including Priority) habitats scattered throughout and a number of areas worthy of SINC designation which raise the value of the area...”.

Cultural Landscape Aspect Area

5.35 The site is located predominantly within the ‘Designated Landscape Areas’ (CYNONCL056) Cultural Landscape Aspect Area. With a small part of the cable route located within ‘Treforest Industrial Estate’ (CYNONCL035) (**Figure 5.42**). The ‘Designated Landscape Areas’ aspect area, which would see the most change, is described as “Large expanses of (mostly) upland and moorland landscape that are present throughout the Study Area. They have been variously designated statutorily as Sites of Special Scientific Interest by the Countryside Council for Wales, or by Unitary Authorities as Special Landscape Areas, Sites of Interest for Nature Conservation or as part of the Coalfield

Plateaux. Such designations are a reflection of 20th/21st century perceptions of the value of protecting both natural habitats and of rural areas of lesser importance though possessing much aesthetic and sensory value. They contain variously historic and contemporary evidence of human occupation and exploitation in the form of prehistoric monuments, redundant industrial workings and transport systems, and of forestry. As such they are a commodity for leisure enjoyment as well as providing very extensive "green lungs" to supplement those identified in urban landscapes that they surround". The overall evaluation for this Aspect Area is High.

Geological Landscape Aspect Area

- 5.36 With regard to the Geological Landscape aspect area, the site is predominantly located within 'Taff Valley' (CYNONGL015) (**Figure 5.43**). Described as being "*Part of extensive, dissected Pennant sandstone plateau of lower Taff valley - working quarry unassessed but may be of at least regional geological significance...*". The overall evaluation of the aspect area is High.

Historic Landscape Aspect Area

- 5.37 The site is located predominantly within the small Historic Landscape aspect area 'Garth-fawr' (CYNONHL994) (**Figure 5.44**). The overall evaluation of this aspect area is Moderate with "*A reasonably intact post-medieval irregular fieldscape with considerable evidence of 19th century industrial extractive activity*".

Overview of the Study Area and Site

Site and Local Surrounds

- 5.38 The study area is located in the south of Wales, to the northwest of the capital Cardiff, near the village of Tonteg / Church Village and the towns of Pontypridd and Caerphilly. The villages of Tonteg and Church Village, to the northwest of the site, are separated from the Treforest Industrial Estate and other areas of urban expansion to the southeast of Pontypridd following the A470, by linear woodland blocks, agricultural fields and smaller roads. There is a contiguous ribbon of urban development which generally follows the main transport routes (such as the A470), interspersed by woodland blocks, agricultural fields and other open areas. Beyond the urban sprawl are large areas of open countryside consisting of linear woodland blocks, well defined field boundary hedgerows and small to medium sized agricultural fields. Much of the open countryside beyond the urban areas is designated as a Special Landscape Area (SLA), including the site itself, with much of the areas of woodland being Ancient and Semi Natural Woodland.
- 5.39 The main areas of the site proposed to contain solar panels, are located approximately 200m to the southeast of the village of Tonteg and 300m to the southwest of the Treforest Industrial Estate, at its nearest point. It comprises two areas, separated by Maesmawr Road, which passes generally north to south separating the easternmost parts of the site from the remainder and forming the easternmost boundary to the southern parts of the site. The A473 forms a small part of the northernmost boundary, although development would be separated by roadside vegetation. The remainder of the site is bound by well-maintained field boundary hedgerows, including along Maesmawr Road, and linear woodland blocks to the easternmost boundary, much of which is Ancient and Semi Natural Woodland, beyond which lies the mainline railway and the Treforest Industrial Estate.
- 5.40 Both areas of the site consist of several agricultural fields primarily used for intensive pasture grazing. The agricultural fields are segregated by a mixture of post and wire fencing, hedgerows and tracks. There are a number of Public Rights of Way (PRoWs), including DRE/47/2, DRE/50b/1 and DRE/51/2, which run through or in close proximity to the site. Excepting PRoW routes, there is no public access to the site.

Vegetation

- 5.41 Within the wider 5km study area, outside the developed areas, farmland largely consists of small to medium sized agricultural fields, defined by hedgerows and a number of scattered woodlands. The course of the River Taf is largely wooded, and a belt of woodland runs around the southern peripheries of the towns of Pontypridd and villages of Tonteg and Church Village.
- 5.42 The northeast and northwest of the site are partly bounded by tree belts that run adjacent to the A473 and mainline railway, much of which is Ancient Woodland (see **Figure 5.1**). The remaining boundaries, although more open, are largely enclosed by mature field boundary hedgerows, smaller linear woodland blocks and individual trees.
- 5.43 The fields within the site comprise of improved grassland, rye-grass managed for silage production, and improved grassland fields which are heavily grazed by cattle and sheep.
- 5.44 Woodland adjacent to mainline railway and A473 provides visual separation of the site from much of the surrounding urban areas to the north.

Topography and Drainage

- 5.45 Topographical variation and drainage within the 5km radius study area and wider landscape are shown in **Figure 5.3**.
- 5.46 The topography of the study area is varied, consisting of relatively flat ground within much of the urban areas of the southern edges of Pontypridd and other urban areas near the main transport network and within the bottom of the River Taf valley. It lies at elevations of approximately 6 to 26m Above Ordnance Datum (AOD). Land rises steeply in all directions from this, including within some of the urban areas, with a series of hills and ridges, particularly to the north of the study area, rising to a maximum height of 386m AOD.
- 5.47 The topography of the site is similarly varied. With some flatter areas to the northwest of the site at approximately 95m AOD. The land gently rises in all directions towards Maesmawr Road and south. To the west of Maesmawr Road the landform rises more steeply to a high point of 134m AOD before falling again to the western edge of the site and the River Taf beyond.
- 5.48 There are numerous small waterbodies, tributaries and rivers throughout the study area and in the site itself, these include the River Taf and Rhymney River. The River Taf is the most prominent, running generally north to south through the study area, along which development has formed. The River Taf is the closest to the site.
- 5.49 Within the centre of the site, there are areas of natural and man-made, standing water as well as field drains.

Communications

- 5.50 The A470 forms a major transportation corridor north-south through the middle of the study area connecting the various urban areas throughout. The mainline railway line runs between Cardiff and Pontypridd, before heading further north within the central part of the study area, following a similar route to the A470 along the River Taf valley. A number of other major roads branch off the A470, servicing the other urban areas within the local area, including Tonteg, Church Village and Caerphilly. A series of local lanes run through-out the wider agricultural landscape.
- 5.51 Public access is provided within the study area via numerous PRoWs that include promoted footpaths such as the Taff Ely Ridgeway Walk and Taff Trail.
- 5.52 The site lies generally to the south of the A470 and A473 and is accessed from Maesmawr Road which effectively splits the site into east and west parcels.

5.53 Public access is available through the western parts of the site, with PRoW DRE/47/2, running generally north to south within this part of the site, and DRE/50b/1 running east to west. There is no public access within the parts of the site to the east of Maesmawr Road.

Landscape Value

Designated Landscapes

5.54 The site is outwith any AONB or National Park (NP) designations of national importance (refer to **Figure 5.2**). As such, there would be no direct physical impacts upon nationally designated landscapes resulting from the Proposed Development.

5.55 A landscape designation, of local importance, which falls wholly within the site, is the Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA), as set out in the RCTLDP.

5.56 Located on the southern edge of Rhondda Cynon Taf District, the Efail Isaf, Garth and Nantgarw Western Slopes SLA is “...adjacent to Garth Hill, from the edge of Treforest Industrial Estate in the east to Efail Isaf in west. Line of proposed Church Village bypass defines the north east edge. Comprising two distinct parts – larger western part is rolling plateau, eastern part is Taff Vale sides and floor”.

5.57 The primary landscape qualities and features have been identified as follows:

- *Attractive farmland on rolling plateau, with irregular fields mainly of improved grassland, large hedges, scattered farms and winding lanes*
- *This farmland forms the foreground in views from popular Garth Hill to the south*
- *Wooded slopes to Taff Vale are important part of views from A470 and Treforest Industrial Estate.*
- *These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales.*
- *Mix of broadleaf and coniferous woodlands*

5.58 The overall evaluation of the SLA is Moderate.

5.59 Within the wider 5km study area, there are a number of other landscape related planning designations that would be indirectly impacted by the Proposed Development. These include:

- Registered Common Land; the nearest being Tir Mynediad, approximately 1.5km to the south at its nearest point; and,
- Historic Parks and Gardens; the nearest being Pontypridd: Ynysangharad Park, approximately 4.3km to the northwest at its nearest point.

5.60 There are a substantial number of individual trees, hedgerows and blocks of woodland across the site, or immediately adjacent to it. A number of the woodland blocks to the immediate west of the site are noted as Ancient Woodland.

Application Site Value

5.61 The range of factors taken into consideration when determining the overall value of the local landscape are set out below.

5.62 GLVIA defines value as “*the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons... A review of existing landscape designations is usually the starting point to understanding landscape value, but the value attached to undesignated landscapes also needs to be carefully considered and individual elements of the landscape – such as trees, buildings or hedgerows may also have value.*”

GLVIA Box 5.1, identifies a range of factors to consider when establishing value. These are also useful in identifying the particular qualities present within the site.

- 5.63 An evaluation of the value attached to undesignated landscapes has been considered and reference has been made to the Landscape Institute's *Technical Guidance note 02/21: Assessing landscape value outside national designations* (see **Appendix 5.2** for details of the value of the site, as a non-designated landscape).
- 5.64 The overall land use of the site is agricultural with its landscape character having been influenced by its current agricultural land uses.
- 5.65 Urban development has had some limited influence on the character of the site as it encroaches south from the A470 and Pontypridd, separated from the site by the A473 and mainline railway, as well as extensive woodland blocks, much of which is Ancient Woodland. A minor road (Maesmawr Road) runs north south and splits the site east and west. Also, in close proximity to the east and southeast of the site is the existing Maes Bach Farm Solar Park. This modern infrastructure development has an influence on the site and immediate landscape, along with overhead powerlines which are also a feature of this landscape.
- 5.66 Immediately to the northeast of the site are areas of Ancient Woodland that are of landscape value. The River Taff, located outwith of the site, beyond the railway, contains areas of tranquillity, even when passing through urban areas, and provides recreational opportunities, with numerous PRoWs along or close to it, including some that continue to and through the site. PRoWs DRE/47/2 and DRE/50b/1 run through the majority of the site, linking areas between Church Village, Maesmawr Road, the Treforest Industrial Estate and providing access and recreational opportunities and links within the site and wider landscape.
- 5.67 The proximity of the A473, the railway and the Maes Bach Farm Solar Park have influenced the area's character and resulted in a small part of the site, nearest the Maes Bach Farm Solar Park, possessing slightly fewer traditionally rural qualities or areas of tranquillity. However, the majority of the site, although influenced to some extent by urban development and other infrastructure, has a scenic quality, which although managed, is well contained by woodland and field boundary hedgerows and trees, contributing to the rural setting/buffer of these urban areas to the north of the A473 and railway.
- 5.68 In summary, taking into account the evaluation above that has been informed by the landscape value table within **Appendix 5.2**, the site and immediate local landscape is not considered to be rare. There are no known conservation, biodiversity or historic associations attributed to the site. Although it is noted that there are parts of the site which have been identified as being of higher biodiversity interest, which are to be retained and managed. The Proposed Development would have a relatively low overall footprint with the intrinsic field pattern of the site retained and enhanced. It is judged therefore that the overall susceptibility of the site to the Proposed Development would be Low to Medium.
- 5.69 The overall sensitivity of the site to the Proposed Development is considered to be Medium.

Visual Baseline

Zone of Theoretical Visibility (ZTV)

- 5.70 The ZTV generated to inform this assessment shows the area from which a part of the Proposed Development would be theoretically visible (**Figure 5.4**) as discussed in paragraph 5.71 of this chapter. It was prepared using a view height of 1.6m and 19 origin points to represent the full parameters of the Proposed Development at a maximum height of 3.2m above existing ground levels (EGL). It does not take into account proposed mitigation and does not indicate how much of a photovoltaic panel can be seen, simply that it is visible.

- 5.71 The ZTV has been developed based on visual barriers for significant blocks of woodland and settlement. As the ZTV does not account for garden vegetation, hedgerows or individual trees, the potential intervisibility with the Proposed Development would, in reality, be less in places. This has been assessed through fieldwork.
- 5.72 The colour scale on the ZTV indicates how many origin points would theoretically be discernible. As such, the higher the number of origin points visible, the more orange/red the colour shown on the ZTV, with lower visibility shown as blue. Given the size of the site, this allows judgements to be made regarding the extent of the Proposed Development that would potentially be discernible and has informed the selection of representative viewpoints for the assessment, with a greater propensity to select publicly accessible representative viewpoints within areas of potentially higher (red) visibility.
- 5.73 Overall, the ZTV indicates that views of parts of the Proposed Development would be possible to some extent across much of the study area, with areas of potentially higher inter-visibility on higher ground to the immediate south and to the north of the site. The local topography of the landscape limits views from the far north and south. With urban areas further limiting potential intervisibility.

Visual Receptor Groups

Views from Residential Properties

- 5.74 The ZTV (**Figure 5.4**) indicates that there are several residential properties, within the 5km study area, that have potential visibility of the Proposed Development. However, the number within 1km are limited.
- 5.75 The nature of the Proposed Development (a maximum of 3.2m high) along with the mature layered vegetation and topographical variation, are such that the extent of potential intervisibility from residential properties is limited.
- 5.76 Residential properties, within 1.5km of the site, are detailed below:
- Maesbach (approximately 200m to the southwest, at its nearest point);
 - Ty Newydd Farm House (655m to the south);
 - Drysgoed Farm (605m to the south);
 - Residential properties at the northern edge of Parc Nant Celyn (674m to the southwest);
 - Residential properties within Church Village/Upper Church Village and Tonteg (varies, between approximately 175m up to 1.5km to the west).
- 5.77 There are a number of residential properties beyond 1.5km within the wider study area which fall within the ZTV. For example. Properties located to the northwest of Upper Church Village (Representative Viewpoint 12), along Penycoedcae Road (Representative Viewpoint 13) and at the northern edges of Rhydyfelin (Representative Viewpoints 14, 15 and 16). Due to distance as well as the low nature of the Proposed Development these properties will not experience significant visual effects.

Private Views

- 5.78 In the planning system no individual has the right to a view. The Landscape Institute has provided guidance on assessing private views in *Technical Guidance Note 2/19: Residential Visual Amenity Assessment* (LI TGN 2/19).
- 5.79 Views of the Proposed Development would neither overwhelm existing properties within the study area, nor render these properties so “*unattractive a place to live that planning permission should be refused*” (Inspector Kingaby, Burnthouse Farm Wind Farm, APP/D0515/A/10/2123739, Inspector’s Report, paragraph 119) (also at paragraph A1.6 of LI TGN 2/19). Inspector Kingaby noted that

“There needs to be a degree of harm over and above identified substantial effect to take a case into the category of refusal in the public interest. Changing the outlook from a property is not sufficient” (Inspector’s Report, paragraph 120) (also at paragraph A1.7, LI TGN 2/19). The Inspector, in the Langham Wind Farm decision, noted that *“The planning system controls development in the public interest, and not in the private interest. The preservation of open views is a private interest”* (Langham Wind Farm Appeal Decision APP/D2510/A/10/2130539) (also at LI TGN 2/19, paragraph A1.11).

5.80 Due to the nature and location of the Proposed Development, no residential properties have the potential to experience a degree of harm over and above substantial to make considering private views a public interest matter. Consequently, private views are not considered further in this LVIA.

Public Rights of Way (PRoWs) and Access Land

5.81 The ZTV (**Figure 5.4**) has indicated potential intervisibility to the Proposed Development from a number of PRoWs, visual receptors of high sensitivity. Representative Viewpoints (**Figure 5.5 to 5.37**) have, where possible, been located and taken from PRoWs identified which fall within the ZTV envelope. The Representative Viewpoints are therefore an assessment of views from the PRoW network. It is noted however, that the potential views of and appreciation of the Proposed Development, from parts of a PRoW would alter as they traverse the landscape. Where this is likely, PRoWs have been walked where possible but professional judgement, regarding the level of potential intervisibility, have in part been necessarily made.

5.82 Of those PRoWs which fall within the ZTV, there are a number that are located within close proximity to, or passing through, the site and therefore have the potential to be most affected by the Proposed Development:

- DRE/47/2 (Representative Viewpoint 2);
- DRE/50b/1 (Representative Viewpoint 3 and 4);
- DRE/51/2;
- DRE/53/2; and,
- DRE/47/3.

5.83 There are several areas of Access Land which fall within the 5km study area. To the south of the Application Site is Garth Hill. A number of PRoW traverse this area of Access Land, including the Taff Ely Ridgeway Walk, which joins PRoW DRE/77/1. Representative Viewpoint 9 has been located and taken from Garth Hill along the PRoW network. To the west is Craig yr Allt Access Land, over which a part of the Taff Ely Ridgeway Walk and other PRoWs also pass. Representative Viewpoint 17 has been located and taken from Craig yr Allt along the PRoW network.

People involved in Recreational Activities

5.84 Other than the PRoWs and areas of Access Land identified above, other areas where people are engaged in recreational activities, which fall within the ZTV, are limited. There is an area of public open space to the north of Parc Nant Celyn (Representative Viewpoint 6). This area is surrounded by mature trees and woodland and so views to the site as a whole are not available, with only the higher parts of it visible. Church Village Central Park (Representative Viewpoint 11) is similarly surrounded by mature trees and also the existing developed areas of Church Village. Although the upper parts would be potentially visible, effects resulting from the Proposed Development would be limited and not significant.

5.85 There are no other formal areas of recreation, that fall within the ZTV, located within the 5km study area.

People at Work

- 5.86 Various farms/agri-businesses are located in the vicinity of the site, these include the following:
 - Maes Bach Farm;
 - Maesmawr Farm;
 - Drysgoed Farm; and,
 - Other farming businesses to the south.
- 5.87 People at their places of work are considered to have a Low sensitivity to the Proposed Development because the focus of attention is on their work not on the surroundings.
- 5.88 People involved in agriculture working at the businesses listed above are likely to experience views of the Proposed Development to varying degrees, albeit that layered vegetation and topographical variation would likely curtail views. However, given their Low sensitivity and in some cases their involvement and/or familiarity with the Proposed Development, they are not likely to experience a visual change which would be considered significant. This receptor group is therefore not considered further within this LVIA.

Dynamic Receptors

- 5.89 The ZTV (**Figure 5.4**) has indicated that there would be potential fleeting visibility of the Proposed Development for people travelling on the mainline railway which passes generally north to south through the centre of the study area. Although the railway passes close by the site, less than 250m to the east in places, due to intervening vegetation and topographical variation potential intervisibility is limited to a very small section of the railway at a distance of approximately 2.9 to 3.8km to the northwest of the site. Due to the direction of travel, relative to the site, and the limited window of visibility identified within the ZTV, there is no potential for significant visual effects to arise. Therefore, people travelling by rail are assessed no further in this LVIA.
- 5.90 There are a number of local roads and lanes in the vicinity of the site, the closest being Maesmawr Road which pass through and divides it, passing at a distance of less than 10m from the Proposed Development in places (at its closest point) (**Figures 5.5, 5.8 and 5.9**; Representative Viewpoints 1, 4 and 5). People travelling in motor vehicles through this landscape are considered to have a Low sensitivity to development proposals, with cyclists travelling through the landscape a Medium sensitivity.

View Ranges

- 5.91 For the purposes of this assessment, views have been classified according to three distance ‘ranges’ as set out in **Table 5.2**.

Table 5.2: View Ranges

Range	Distance Threshold	Reasoning Description
Short	Less than 1km	At close range the project could appear as a ‘prominent’ feature and visual receptors could experience high to medium/low magnitude of change when compared to existing views.
Medium	Between 1km and 5km	In medium range views the project could appear as ‘present’ features and visual receptors could experience medium/low to negligible magnitude of change compared to the existing situation.
Long	More than 5km	In long range views the project would read as part of the landscape and visual receptors would tend to experience a low to negligible or lower magnitude of change compared to the existing situation. Due to the low nature of the Proposed Development, at 3.2m, a study area of 5 km from the outer edges of the site has been used for the LVIA. It is anticipated that any significant visual

Range	Distance Threshold	Reasoning Description
		effects because of the Proposed Development would occur well within this. As such, no long-range views, beyond 5km, have been considered as part of this assessment.

Representative Viewpoints

- 5.92 A number of viewpoints were selected to represent the receptors within the study area, from which to assess the change in views that would result from the project. All viewpoints are situated in publicly accessible locations within the extent of the ZTV, with a range of distances and orientation to the project. The locations of the representative viewpoints are shown on **Figure 5.4** and the existing panoramas on **Figures 5.5 to 5.37** (including winter Year 1 photomontages).
- 5.93 Winter photographs were taken in March 2022. Overall visibility was good. No summer photographs have been taken and as such any assessment on summer visibility has been made using professional judgement. **Table 5.3** below describes the location of the representative viewpoints for this assessment.

Table 5.3: Representative Viewpoints

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 1: Maesmawr Road Low	310135, 186166	<10m (Short)	View from Maesmawr Road to the immediate north of the site, within the part of the site which would make up the southernmost part of the cable route. Short range view, channelled and generally enclosed by intervening vegetation, including tall roadside hedgerow, looking south. Due to intervening vegetation and landform, there is no discernible view to the site from this location. With glimpsed views to trees, on embankment, which occupy the northern field boundary of the field to the immediate north of the access track to Maes Bach Farm, outwith the site boundary. Longer distance views, channelled by existing vegetation along Maesmawr Road, are available to higher ground, Garth Hill, to the south of the site in the distance.
Viewpoint 2: Public Right of Way (DRE/47/2) on the northern site boundary High	309881, 186059	<10m (Short)	View from the northern edge of the site as PRoW DRE/47/2 enters the site. Open view across tussocky wet grassland, including areas of purple moor grass, to the north-western parts of the site. Existing field boundary trees and hedgerows to the western boundary of the site and within in it, create a strong visual barrier to the wider landscape, with some glimpsed views to higher ground to the southwest. Existing field boundaries, grown out hedgerows on embankments throughout the site which are gappy in places, allow glimpsed views to parts of the site further to the south. Although topographical variation is such that a large part of the site is not discernible from this location. Short range view from within the north-western part of the site, and of the northern extents of Field A (ref. Figure 5.1). Open grassland of Field A is viewed in the foreground with glimpsed views to Field G located through field boundary vegetation at the southern edges of Field A. The hedgerow located along the western boundary of Field A, along with the layered hedgerows beyond and topographical variation screens views of much of the site to the south.

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 3: Public Right of Way (DRE/50b/1) High	309719, 185795	<10m (Short)	Similar to Viewpoint 2. View from the westernmost edge of the site in close proximity to PRow DRE/50b/1. Looking east across the grassland habitat within Field A. This short-range view is open within the foreground of Field A with field boundary hedgerow and trees to the eastern edge of Field A which allows glimpsed views to parts of fields B, F, G with Field E and a small part of Field J seen on rising ground beyond Maesmawr Road. Layered vegetation to the southwest, including at the edge of Field A/G, along with topographical variation, screen much of the southernmost parts of the site from view.
Viewpoint 4: Public Right of Way (DRE/50b/2) at junction with Maesmawr Road High	310250, 185701	<10m (Short)	Elevated short-range view from PRow DRE/50b/2 located to the southwestern corner of the site, as the PRow joins Maesmawr Road. View clearly demonstrates the contrast with the habitat within the site to the east and west of Maesmawr Road. To the east, on rising ground, the landscape is more open with drier acidic grassland and more open field boundaries including patchy hedgerows, scattered trees and post and wire fencing. By contrast, the western parts of the site are more enclosed with extensive field boundary hedgerow and trees and only glimpsed views to the wetter and more tussocky grass fields. A post and wire fence at the southern boundary of Field J, to the left of the view, along with rising ground allows open views to this part of the site with a patchy field boundary hedgerow beyond and with the land continuing to rise allowing open views to much of Field E. Maesmawr Road and mature roadside hedgerows creates a distinct visual separation from the west of the site. Within the foreground of the left of the view, land falls away sharply to the southern edge of Field I. A gap in the hedgerows adjacent to Maesmawr Road allows more or less open views to a small part of Field I and F with only glimpsed views to the remaining fields within this part of the site. Built form within the view is generally limited to overhead powerlines which traverse the site, with the developments of Church Village/Tonteg glimpsed on rising ground in the background.
Viewpoint 5: Maesmawr Road Low	310467, 185193	240m (Short)	Elevated short-range view from Maesmawr Road to the southwest of the site looking north. Extensive roadside vegetation and topographical variation screen possible views to much of the site from this location. To the right of the view, Maes Bach Solar Farm is a noticeable feature within the landscape, although the extent of this is similarly curtailed by intervening topography. As Maesmawr Road winds through the centre of the view, adjacent to the site and the Maes Bach Solar Farm, there are glimpsed views to a very small part of Fields K and N to the west of the road. Rising ground to the north of Maes Bach Solar Farm along with intervening vegetation and topography through the local area, prevents discernible views to the remaining parts of the site from this location.

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 6: POS area to north of Parc Nant Celyn (including PRow users) High	309095, 185169	880m (Short)	Slightly elevated view from public open space area to the north of Nant Celyn, which includes ProWs DRE/48b/3 and a small part of DRE/51/4, looking northeast towards the site. Views to the site are restricted by layered tree vegetation and the topographical variation of the local area, with no discernible views to the majority of the site, particularly to the west of Maesmawr Road. Land rises steeply to the east of Maesmawr Road, Fields E and J. A small portion of this part of the site can be glimpsed above the tree line within the centre of the view, partly screened by individual birch and hazel tree planting within the POS in the foreground. The large overhead powerlines which traverse much of the site can be seen above the tree line with the land rising again to the north beyond the River Taff.
Viewpoint 7: Unnamed Road between Efail Isaf and Garth Isaf Farm Low	309445, 184636	990m (Short)	View to the southwest of the site, looking northeast from unnamed road between Efail Isaf and Garth Leaf Farm. Clipped roadside hedgerow along much of the length of the road prevents a clear view to the wider landscape, including towards the site. Overhead pylons are seen above hedgerow with higher ground to the north of the river Taff seen above the hedge line.
Viewpoint 8: Public Right of Way (DRE/64/1) High	310326, 184584	835m (Short)	Open elevated view from footpath to the south of the site, near Garth Fawr Farm, looking across sloping grassland and agricultural fields across River Taff valley to rising ground to the north. Extensive views from this elevated location are obtained across fields in the foreground to higher ground in the north. Within the middle ground of the view there are clear views to much of the site, to the east and west of Maesmawr Road. Much of the existing Maes Bach Solar Farm is a noticeable feature within the view, partially broken up by layered vegetation. Topographical variation to the north of this obstructs views to much of the eastern parts of the site seen through gaps in tree planting. The most visible parts of the site are those fields to the south of it, adjacent to Maesmawr Road and the existing Maes Bach Solar Farm. These include the majority of fields K and N, with much of Fields L and M to the south west. Beyond this, the remaining fields within the western parts of the site are glimpsed through extensive layered vegetation which divide the fields. This extensive view comprises both rural and urban elements, with urban development within Church Village, Tonteg, other residential areas and the Treforest Industrial Estate to the north of the site in the distance and the rural foreground and background comprising scattered properties, such as Maesbach Farm, and pylons which traverse parts of the site including Fields A, B, G and H. Long distance views are of areas of higher ground further to the north.

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 9: Taff Ely Ridgeway Walk (Garth Hill) High	310545, 183717	1.6km (Medium)	Similar view to Viewpoint 8, although at a higher elevation further to the south along the PRoW network. View north from the Taff Ely Ridgeway Walk looking north across the valley. The view is of pastoral fields and woodland belts located to the south of Church Village/Tonteg and transport corridors of the A473 and mainline railway to the south of the Treforest Industrial Estate. Higher ground, including hills at the sides of the River Taff valley and further to the north of Pontypridd are visible on the horizon. The mid and foreground of the view is generally rural, with limited built features in it. The most noticeable built feature is the existing Maes Bach Solar Farm partially filtered and broken up by field boundaries. To the north and west of this, within the centre of the view, the site is discernible although much of it is broken up by intervening vegetation and, in particular to the north of Maes Bach Solar Farm, topographical variation. Within the centre of the view, the most noticeable parts of the site which are visible from this elevated position include Fields K, L, M and N at the southern end of the site. To the north of this, there are glimpsed views of the remaining parts of the site seen through and above the layered vegetation.
Viewpoint 10: Taff Ely Ridgeway Walk High	306693, 183217	4km (Medium)	Medium distance view to the southwest of the site, looking northeast. Elevated view from part of the Taff Ely Ridgeway Walk, consisting of a combination of urban residential and commercial development and open grassland, interspersed by woodland blocks and linear tree belts/hedgerows. This elevated view has extensive views northeast demonstrating the undulating nature of the landscape with higher ground in all directions seen above the urban areas. Glimpsed views of the main road (A473) as it travels north can be seen which gives visual cues in order to locate the site, including distinctive foot bridges which cross the road in several places. The site itself is not readily discernible in this medium distance view, with only a small portion of the western parts nearest the A473 visible within the view. The remainder of the site is not discernible due to intervening topography and layered vegetation.
Viewpoint 11: Church Village (Central Park / PRoW DRE/38/3) High	308818, 186326	1km (Medium)	View from footpath within Church Village Central Park on PRoW DRE/38/3. Generally open foreground with views across southern playing field looking southeast towards the site, with land falling away beyond playing field. Extensive layered tree vegetation to the southern boundary of the park screen views to the wider countryside with only higher ground to the south and east seen above the tree line. In winter, when the view was taken, the intervening tree vegetation allows glimpsed heavily filtered views to the highest parts of the site, Fields D, E and J. Although glimpsed through the intervening vegetation, views are not obvious and may not be immediately apparent to the general public. There are no discernible views to any other part of the site from this location due to intervening built form, vegetation and topography.

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 12: Unnamed Road / PRoW DRE/14/1 High	307985, 186787	1.9km (Medium)	Medium distance view from elevated roadside to the north-western outskirts of Upper Church Village. Looking southwest across the River Taff valley towards the site. Much of the site can be seen on rising ground within the background of the view. The existing Maes Bach Solar Farm is a visible built feature within the view, along with the line of Maesmawr Road and the adjacent hedge lines. Albeit that at a distance of some 1.9km, they are not obvious features within the view. Closer within the view and across much of the midground is the residential area of Church Village/Tonteg, spreading across much of the view interspersed by extensive tree cover. Beyond the built areas, land rises steeply to higher ground in the southwest at the base of which is the site. The agricultural land is divided by field hedgerows, hedgerow trees and small areas of woodland. Overhead cables and pylons form vertical elements within the view, including along the roadside in the foreground.
Viewpoint 13: Penycoedcae Road / PRoW ANT/195/1 High	305972, 187158	4km (Medium)	Medium distance view from local road to the northwest of the site, looking generally southeast. Views to the southeast are generally open from this elevated position, seen above the low clipped roadside hedgerow. View is not extensively developed, with only the residential property (Dan-Y-Twyn, off Black Road) and the commercial/residential development at Llantwit Chase. Extensive vegetative cover and topographical variation prevents discernible views to build form within much of the local landscape, with land rising sharply to the southeast of Church Village/Tonteg. Much of the site, particularly parts of the highest areas (Fields D, E and J), and some lower lying parts adjacent to Maesmawr Road (Field C, F and I) are partially visible above the tree line within the midground, at the base of the rising ground. Overhead cables and pylons form vertical elements within the agricultural land, although not immediately noticeable, along with glimpsed distant views to a small part of the existing Maes Bach Solar Farm.
Viewpoint 14: Public Right of Way (PON/111/3) High	309438, 188204	2km (Medium)	View from the footpath, within residential area of Rhydyfelin off Sycamore Street/Laburnum Terrace (including a small part of Laburnum Court). The ZTV (Figure 5.3) suggest a very small area of potential intervisibility to the site. However, extensive vegetation to the edges of the PRoW prevents any clear view to the wider landscape from this location. With only a glimpsed channelled view to higher ground to the southeast. No views of the fields within the site or elements within the site are obtained beyond the vegetation located along the PRoWs edge.

Representative Viewpoints No. / Name / Sensitivity	OS Grid Reference	Approximate Distance to Application Site (at nearest point)	View Location Description
Viewpoint 15: Public Right of Way (PON/11/1) High	309587, 189431	3.4km (Medium)	Expansive open panoramic view from the PRoW to the north of the site, looking south. At a distance of some 3.4km, those small parts of the site which are visible, including the higher parts of Fields D, E, I, J, K and N are barely discernible. Existing development, including the Treforest Industrial Estate, stretches across much of the view along the valley bottom. With steep valley sides covered by woodland and agricultural fields in all directions overlooking the developed valley bottom, the parts of the site which are visible, along with a small part of Maesmawr Road and the existing Maes Bach Solar Farm are located at the foot of Garth Hill.
Viewpoint 16: Public Right of Way (Eglwysilian Road / Rhymney Valley Ridgeway Walk) High	311021, 188352	2.2km (Medium)	Similarly, to Representative Viewpoint 15, expansive open panoramic view across the River Taff valley. Medium distance view to the north of the esite, looking south. The eye is drawn above the developed valley floor in the mid ground, including a number of large-scale buildings within the Treforest Industrial Estate, to higher ground beyond with Garth Hill a prominent feature in the background. Due to the intervening vegetation and topographical variation, even from this elevated position, only a very small part of the site is discernible within the view, being the higher parts of Fields D, E and J. Away from which the land falls towards Maesmawr Road.
Viewpoint 17: Public Right of Way (T E R Trail within open access land) High	313162, 185028	2.8km (Medium)	Medium distant view to the west of the site, looking east. The Treforest Industrial Estate is an obvious built feature within the valley bottom, with ribbon development following the river valley to the north. The wooded valley sides to the west reveal medium distant views to the existing Maes Bach Solar Farm, seen perpendicular to the view. The layered vegetation and, in particular, topographical variation are such that much of the site is not discernible from this elevated position. Only a very small part of the highest points within the site (Fields D, E and J) are visible. The remainder of the site, beyond the Maes Bach Solar Farm and sloping ground to the west cannot be viewed.

Photomontages

5.94 To illustrate the proposed development, the 17 chosen Representative Viewpoint locations have been prepared as rendered photomontages. These photomontages illustrate the Proposed Development at winter Year 1, the worst-case scenario. **Figures 5.5 to 5.37** illustrate all the rendered photomontage views selected to inform this assessment.

Future Baseline Conditions

5.95 Having established the existing baseline character of the area, it should be noted that landscapes are dynamic and are subject to change.

Climate Change

5.96 The Met Office UK Carbon Projections ('UKCP09') dataset provides probabilistic projections of change in climatic parameters over time for 25km grid squares across the UK. Projected changes during low, medium and high future global greenhouse gas emissions scenarios have been reviewed

for the period from 2020 up to 2069, encompassing the potential construction and operational periods of the Proposed Development.

- 5.97 The likely ranges of change in climatic parameters including precipitation, temperature, wind speed, humidity and frequency of extreme weather may affect the native flora. However, while this would not increase the sensitivity of receptors, it may affect the magnitude of impact, e.g. the Proposed Development may be more visible to people who only have semi-screened views at present, or it may increase the number of receptors, where loss of trees could enable views not currently possible. As this aspect of the effects of climate change is uncertain, it is difficult to predict the significance of effect.

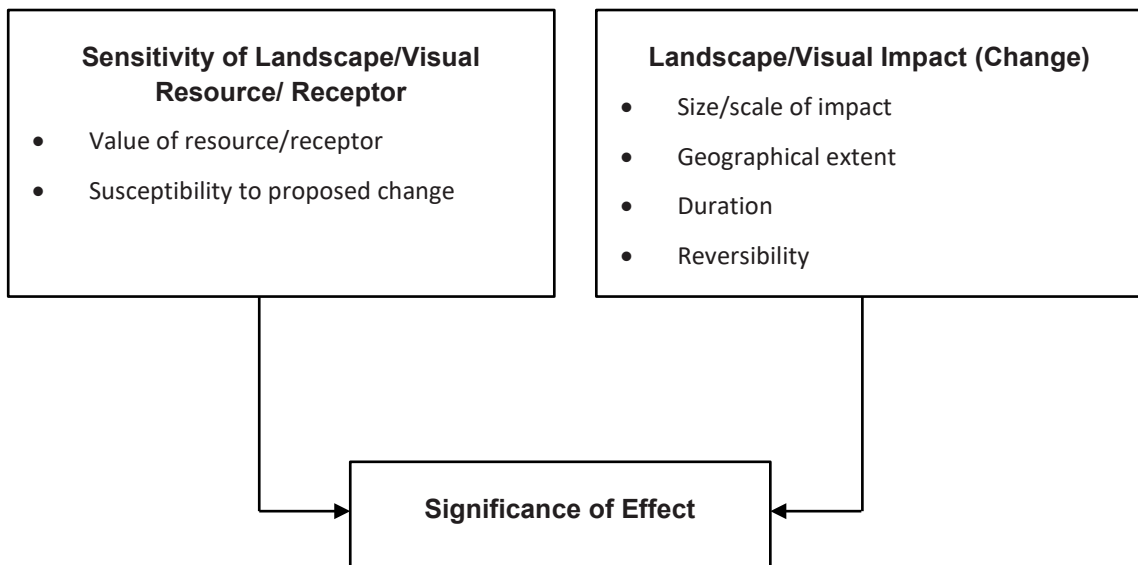
Land-use Change

- 5.98 The landscape is always changing to accommodate new development or removal of old. There is a need to accommodate change while maintaining and enhancing the quality of the landscape where possible. New development should respect the environment and its location by way of scale, design and landscape treatment.
- 5.99 The future baseline for the study area includes the potential change as a result of the development of allocated sites within the LDP. There are no allocations in the vicinity of the site in the extant LDP and the Revised LDP is in the early stages of preparation. There is currently no published information available as to the extent of Candidate Sites that might be included within the Revised LDP, although the call for sites has now closed. It is therefore not possible to include details of future land use change at the time of writing this chapter.

Assessment Criteria and Assignment of Significance

- 5.100 The *Guidelines for Landscape and Visual Impact Assessment: Third Edition* (GLVIA) sets out broad guidelines rather than detailed prescriptive methodologies. The methodologies tailored for this assessment are based on GLVIA3 guidance, which recommends that an LVIA “concentrates on principles and process” and “does not provide a detailed or formulaic recipe” to assess effects, it being the “responsibility of the professional to ensure that the approach and methodology are appropriate to the task in hand” (preface to GLVIA). The effects on the landscape resources or visual receptors (people) are assessed by considering the proposed change in the baseline conditions (the impact of the proposal) against the type of landscape resource or visual receptor (including the importance and sensitivity of that resource or receptor). The methodology is set out in detail below and summarised in Diagram 5.1. These factors are determined through a combination of quantitative (objective) and qualitative (subjective) assessment using professional judgement.

Diagram 5.1: Assessment Methodology Summary



Resource/Receptor Sensitivity

Sensitivity of Landscape Resource/Receptors

5.101 The sensitivity of a landscape receptor is a combination of “judgements of their susceptibility to the type of change or development proposed and the value attached to the landscape” (GLVIA, para 5.39). For the purpose of this assessment, susceptibility and value of landscape receptors are defined as follows:

- Landscape susceptibility: “the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed change without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies” (GLVIA, para 5.40).
- Value of the landscape receptor: “The value of the Landscape Character Types or Areas that may be affected, based on review of designations at both national and local levels, and, where there are no designations, judgements based on criteria that can be used to establish landscape value; and, the value of individual contributors to landscape character, especially the key characteristics, which may include individual elements of the landscape, particularly landscape features, notable aesthetic, perceptual or experiential qualities, and combinations of these contributors” (GLVIA, para 5.44).

5.102 Sensitivity is not readily graded into bands. However, descriptions of landscape susceptibility and value are set out in **Table 5.4** below.

Table 5.4: Definitions of Sensitivity

Sensitivity	Typical Descriptors Landscape Resource/Receptor Susceptibility	Landscape Resource/Receptor Value
Very High	Exceptional landscape quality, no or limited potential for substitution. Key elements / features well known to the wider public.	Nationally/internationally designated/valued landscape, or key elements or features of nationally/internationally designated landscapes.

Sensitivity	Typical Descriptors Landscape Resource/Receptor Susceptibility	Landscape Resource/Receptor Value
High	Strong/distinctive landscape character; absence of landscape detractors.	Regionally/nationally designated/valued countryside and landscape features.
Medium	Some distinctive landscape characteristics; few landscape detractors.	Locally/regionally designated/valued countryside and landscape features.
Low	Absence of distinctive landscape characteristics; presence of landscape detractors.	Undesignated countryside and landscape features.
Negligible	Absence of positive landscape characteristics. Significant presence of landscape detractors.	Undesignated countryside and landscape features.

Sensitivity of Visual Receptors

5.103 Visual receptors are always people. The sensitivity of each visual receptor (the particular person or group of people likely to be affected at a specific viewpoint) *“should be assessed in terms of both their susceptibility to change and in views and visual amenity and also the value attached to particular views”* (GLVIA, para 6.31). For the purpose of this assessment, susceptibility and value of visual receptors are defined as follows:

- Visual susceptibility: *“The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of: The occupation or activity of people experiencing views at the particular locations; and, the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations”* (GLVIA, para 6.32).
- Value of views: Judgements made about the value of views should take account of: *“recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations; and, indicators of value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment (such as parking places, sign boards or interpretive material) and references to them in literature or art...”* (GLVIA, para 6.37).

5.104 Sensitivity is not readily graded in bands and GLVIA notes, with regards to visual sensitivity, that the division of who may or may not be sensitive to a particular change *“is not black and white and in reality, there will be a gradation in susceptibility to change”* (GLVIA, para 6.35). In order to provide both consistency and transparency to the assessment process, however, **Table 5.5**, below defines the criteria which have guided the judgement as to the intrinsic susceptibility and value of the resource/receptor and subsequent sensitivity to the Proposed Development.

Table 5.5: Definitions of Visual Sensitivity

Sensitivity	Typical Descriptors	Visual Resource/Receptor Susceptibility	Visual Resource/Receptor Value
Very High	Observers, drawn to a particular view, including those who have travelled from around Britain and overseas to experience the views.		See paragraph 5.100 and 5.101, above
High	Observers on the public rights of way network in the countryside are more sensitive to visual change.		See paragraph 5.100 and 5.101, above
Medium	Observers enjoying the countryside from vehicles on quiet/promoted routes or pedestrians on less scenic/urban rights of way are moderately sensitive to visual change.		See paragraph 5.100 and 5.101, above
Low	Observers in vehicles or people involved in outdoor activities where attention is not focused on landscape are less sensitive to visual change.		See paragraph 5.100 and 5.101, above
Negligible	Observers in vehicles or people involved in frequent or frequently repeated activities are less sensitive to visual change.		See paragraph 5.100 and 5.101, above

Magnitude of Impact

Magnitude of Impact on Landscape Resources and Receptors

- 5.105 The magnitude of impact or change affecting landscape receptors depends on the size or scale, geographical extent of the area influenced and its duration and reversibility. These factors are described below:
- Size or scale: *“The extent of the existing landscape elements that will be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape...; the degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or by addition of new ones...”* and, *“whether the effect [impact] changes the key characteristics of the landscape, which are critical to its distinctive character”* (GLVIA, para 5.49).
 - Geographical extent: Distinct from scale or size, this factor considers the geographical area over which the landscape impacts will be felt, it might, for example, be a moderate loss of landscape receptors or character over a large area, or a large loss of receptors or character over a very localised area. At para 5.50 GLVIA3 notes that *“in general effects [impacts] may have an influence at the following scales, although this will vary according to the nature of the project and not all may be relevant on every occasion: at the site level within the development site itself; at the level of the immediate setting of the site; at the scale of the landscape type or character area within which the proposal lies; and, on a larger scale, influencing several landscape types or character areas.”* For the purposes of this LVIA, the assessment considers the impact of the proposed development on the published landscape character areas, both at and national level, i.e. the third and fourth landscape scales.
- 5.106 Duration and reversibility: Duration is categorised as short, medium or long-term. GLVIA explains that as there are no standard lengths of time within these categories, the appraisal must state what these are and why these have been chosen (GLVIA, para 5.51). Reversibility is described as *“a judgement about the prospects and practicality of the particular effect being reversed in, for example, a generation”* (GLVIA, para 5.52). Projects can be considered to be permanent (irreversible), partially reversible or fully reversible. For the purposes of this assessment the Proposed Development is considered to be temporary and fully reversible.

Magnitude of Impact on Visual Receptors

- 5.107 As with the magnitude of landscape impacts, the magnitude of impact or change affecting visual receptors depends on the size or scale, geographical extent of the area influenced and its duration and reversibility. These factors are described below:
- Size or scale: Judgements need to take account of: *“the scale of the change [impact] in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed development; the degree of contrast or integration of any new features or changes in the landscape with existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and, the nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses”* (GLVIA, para 6.39).
 - Geographical extent: This will vary from viewpoint to viewpoint and will reflect: *“the angle [orientation] of view in relation to the main activity of the receptor; the distance of the viewpoint from the proposed development; and, the extent of the area over which the changes [impacts] would be visible”* (GLVIA, para 6.40).
- 5.108 Duration and reversibility of visual effects: As with landscape impacts, duration should be categorised as short, medium or long-term and projects considered to be permanent (irreversible), partially reversible or fully reversible (GLVIA, para 6.41). For the purposes of this appraisal the impacts on views of the Proposed Development are considered to be temporary and fully reversible.
- 5.109 The magnitude of the predicted impact has been described using criteria outlined above and **Diagram 5.1** and the detailed in methodology below. Magnitude of impact has been classified on a four-point scale (Large, Medium, Small and Negligible,). The definitions of terms relating to the magnitude of impact are set out in **Table 5.6** below.

Table 5.6: Example Definitions of Magnitude

Magnitude of Impact	Typical Descriptions	
	Landscape Resource	Visual Resource
Large	Total loss or addition or/very substantial loss or addition of key elements/features/patterns of the baseline i.e., pre-development landscape and/or introduction of dominant, uncharacteristic elements with the attributes of the receiving landscape.	Complete or very substantial change in view, dominant involving complete or very substantial obstruction of existing view or complete change in character and composition of baseline, e.g., through removal of key elements.
Medium	Partial loss or addition of or moderate alteration to one or more key elements/features/patterns of the baseline i.e., pre-development landscape and/or introduction of elements that may be prominent but may not necessarily be substantially uncharacteristic with the attributes of the receiving landscape.	Moderate change in view: which may involve partial obstruction of existing view or partial change in character and composition of baseline, i.e. pre-development view, through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter scale and character of the surroundings and the wider setting. Composition of the views would alter. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.

Magnitude of Impact	Typical Descriptions	
	Landscape Resource	Visual Resource
Small	Minor loss or addition of or alteration to one or more key elements/features/patterns of the baseline i.e., pre-development landscape and/or introduction of elements that may not be uncharacteristic with the surrounding landscape.	Minor change in baseline, i.e. pre-development view, – change would be distinguishable from the surroundings whilst composition and character would be similar to the pre-change circumstances.
Negligible	Very minor loss or addition of or alteration to one or more key elements/features/patterns of the baseline i.e., pre-development landscape and/or introduction of elements that are not uncharacteristic with the surrounding landscape approximating to a 'no-change' situation.	Very slight change in baseline, i.e. pre-development view, – change barely distinguishable from the surroundings. Composition and character of view substantially unaltered.

Significance of Effects

- 5.110 It is recognised that new development will lead to some landscape and visual effects. However, it should be stressed that not all landscape and visual effects arising will be significant.
- 5.111 GLVIA explains, at paragraph 5.55, that a staged approach can be adopted when assessing landscape significance *“susceptibility to change and value can be combined into an assessment of sensitivity for each receptor, and size/scale, geographical extent and duration and reversibility can be combined into an assessment of magnitude for each effect. Magnitude and sensitivity can then be combined to assess overall significance.”*
- 5.112 Within this assessment, the assessment of significance has taken the following into account (as appropriate):
 - reference to regulations or standards;
 - reference to best practice guidance;
 - reference to policy objectives;
 - reference to criteria, for example designations or protection status;
 - outcomes of consultation to date; and
 - professional judgement based on local/regional/specialist experience.
- 5.113 Significance varies depending on the receptor's sensitivity and the magnitude of impact of the Proposed Development. The distance to the Proposed Development can be a major factor in determining the magnitude of the impact. Those resources or receptors closer to the project are likely to experience a greater significance of effects than those further away.
- 5.114 A significant effect would not necessarily mean that the effect is unacceptable in planning terms. What is important is that the likely effects of any proposal are transparently assessed and understood in order that the determining authority can bring a balanced and well-informed judgement to bear when making any decision. This judgement should be based upon weighing up the benefits of the proposal against the anticipated effects, both positive and negative.
- 5.115 The matrix at **Table 5.7** has been used to guide the assessment of effects. Where the matrix provides a choice of level of effects, e.g., Minor to Moderate, the assessor has exercised professional judgement in determining which of the levels is more appropriate.

Table 5.7: Assessment Matrix

Sensitivity	Magnitude of Impact			
	Negligible	Small	Medium	Large
Negligible	Negligible	Negligible to Minor	Negligible to Minor	Minor
Low	Negligible to Minor	Negligible to Minor	Minor	Minor to Moderate
Medium	Negligible to Minor	Minor	Moderate	Moderate to Major
High	Minor	Minor to Moderate	Moderate to Major	Major to Substantial
Very high	Minor	Moderate to Major	Major to Substantial	Substantial

5.116 The significance of effect on landscape, views and visual amenity has been described according to the five-point scale shown in the above matrix (Substantial, Major, Medium, Minor or Negligible). A description of these terms is provided in **Table 5.8** below.

Table 5.8: Definitions of Significance Criteria

Magnitude	Typical Descriptors Landscape Resource	Visual Resource
Substantial	Where proposed changes would be uncharacteristic and/or would significantly alter a landscape of exceptional landscape quality (e.g., internationally designated landscapes), or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.
Major	Where proposed changes would be uncharacteristic and/or would significantly alter a valued aspect of (or a high quality) landscape.	Where proposed changes would be uncharacteristic and/or would significantly alter a valued view or a view of high scenic quality.
Moderate	Where proposed changes would be noticeably out of scale or at odds with the character of an area.	Where proposed changes to views would be noticeably out of scale or at odds with the existing view.
Minor	Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.
Negligible	Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.

5.117 Those effects of Moderate and below are not considered to be significant. Those effects of Major and above are considered to be significant.

Limitations of the Assessment

5.118 The visual assessment is based on analysis of OS mapping of the site and surrounding area, and on field survey and analysis of views towards the site from publicly accessible viewpoints in the surrounding landscape. Although every effort has been made to include representative viewpoints in sensitive locations and locations from which the Proposed Development would be most visible, not all public viewpoints from which it would potentially be seen have necessarily been included in

the assessment. Where impacts to residential and other private views (e.g. commercial occupiers) are noted, these have necessarily been estimated.

- 5.119 The fieldwork and visual assessment were undertaken during winter 2021/2022 when deciduous trees were devoid of leaf. As such, judgements have necessarily been made regarding the summer situation when vegetation is in full leaf.

Mitigation Measures Adopted as Part of the Proposed Development

Construction

- 5.120 Trees to be retained within the site will be protected in line with the measures set out in the Tree Survey and Arboricultural Impact Assessment (see **Appendix 5.4**).
- 5.121 Construction of the Proposed Development will involve delivery and installation of the solar panels/modules and ancillary equipment. It will involve little in the way of intrusive works such as concrete footings/foundations and minimal plant will be required on the site and only for short temporary periods. Construction will be short in duration – approximately 6-8 months although not at the same intensity for the entire period. Construction work will only take place during daylight hours. No night-time working is proposed.
- 5.122 A temporary construction compound will be created to facilitate the works. The compound will be located in the south-west of the site. The compounds will contain portable buildings (welfare block, offices, changing room, security hut), equipment, parked vehicles and stored materials, and have been sited to minimise landscape impacts and visibility from sensitive receptors during the construction phase.
- 5.123 PRoWs DRE/47/2 and 3; DRE/50b/1 and 2, located within the site will be temporarily closed or diverted during construction. Appropriate Health and Safety warning signs will be displayed.

Operation

Lighting

- 5.124 No permanent lighting is proposed. Manually operated lights may be attached to the substations and transformer and/or inverter cabinets in the event of an emergency maintenance visit being required in the hours of darkness.
- 5.125 As the proposals do not include external lighting this assessment does not consider night-time effects.

Landscape Proposals

- 5.126 Landscape mitigation is embedded in the overall design and has been formulated to minimise potential landscape and visual impacts and maximise enhancement of landscape features, landscape character and biodiversity of the site. The landscape proposals are presented in **Figure 5.65** - Landscape Strategy Plan and have been informed by advice from arboricultural and ecological consultants where appropriate.

Summary of Landscape Mitigation

- 5.127 The landscape proposals consist of the enhancements to existing onsite hedgerows, as well as new hedgerow and tree planting. The mitigation includes ecology enhancement, hedgerow infill planting, as necessary, in order to gap-up areas where existing hedge planting is sparse in order to redefine field boundaries where they have become fragmented. Appropriate native species will be selected

to reflect locally native flora and to enhance biodiversity. Specific landscape mitigation measures include the following, as illustrated on the Landscape Strategy Plan presented in **Figure 5.65**:

- Gap up/reinforce/replant existing site boundary hedgerows with additional native species planting and appropriate ongoing management where necessary throughout the site including, but not limited to, the edges of Fields C, D and E. Where operational constraints allow existing onsite boundary hedgerows (and where possible offsite hedges within the control of the Applicant) will be maintained at approximately 3m in height, or to another height agreed with the LPA/PEDW and secured by suitable planning condition (or appropriate alternative mechanism). This will ensure that existing boundary hedgerows are redefined and their integrity is restored, will enhance landscape character, and will assist in screening views of the Proposed Development from sensitive visual receptors locally, as well as increasing the biodiversity onsite.
- New hedgerow field boundary in the agricultural field to the south of Field J, within the site, with native species planting and appropriate ongoing management. This will be managed to a height of approximately 3m, or to another height agreed with the LPA/PEDW and secured by suitable planning condition (or appropriate alternative mechanism). This will ensure that the open field boundary to the southwest of the site will be reinstated in order to improve the structure of the landscape, enhance its character and assist in screening views of the Proposed Development from visual receptors to the southwest.
- Planting native species trees and areas of scrub adjacent to field boundary hedgerows and woodland edges within the site with emphasis placed on the following:
 - A woodland scrub strip at the southwestern site boundary woodland edge (Field J) which will act as a buffer to the adjacent SINC area and increase biodiversity at the southern edge of an area of semi improved acid grassland;
 - Understorey and individual trees appropriate to the wet conditions, such as Salix and Alder sp., at the edge of the drain and ditch to the eastern edge of Field A in order to increase biodiversity, reinforce boundary and assist in screening views of parts of the Proposed Development from people using ProW DRE/47/2, located to the eastern edge of Field A;
 - Woodland scrub planting at the edges of Field M. Taller scrub species will be planted adjacent to the existing woodland to provide a natural transition from the species rich grassland and to provide a landscape buffer and promote ecological/wildlife connectivity between habitat types, thus enhancing biodiversity.
- New mixed native species tree planting within the site where appropriate in order to assist in integrating the Proposed Development into the existing landscape and to provide long term enhancements to local character and visual amenity, as well as wildlife habitats and biodiversity.
- Existing grassland is proposed to be retained and managed beneath the solar panels in order to enhance visual amenity and to promote biodiversity.
- Management of existing semi improved acid grassland, areas of marshy grassland, purple moor grass (*Molinia caerulea*) habitats and existing areas of tussocky grassland at the edges of all the fields throughout the site, including supplementary seeding, plug planting, relocation of existing, creation of new grassland habitats where necessary and the rotational management of areas of existing habitats in order to encourage species diversity throughout the site and retain habitats of importance to varying species and priority habitats. Landscape character and the views from the PRoW will also be enhanced.

- The new planting proposed will be confirmed with the project ecologist to ensure maximum biodiversity benefit.
- Individual tree species will include, but not be limited to:
 - Pendunculate oak (*Quercus robur*); field maple (*Acer campestre*); common alder (*Alnus glutinosa*) and willow (*Salix sp.*).
- Hedgerow reinforcement/new hedgerow planting and scrub planting will include:
 - Primary hedgerow species: hawthorn (*Crataegus monogyna*);
 - Secondary hedgerow species: field maple (*Acer campestre*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*), blackthorn (*Prunus spinosa*), dogwood (*Cornus sanguinea*), spindle (*Euonymus europaeus*), wild privet (*Ligustrum vulgare*), buckthorn (*Rhamnus catharticus*), common yew (*Taxus baccata*), goat willow (*Salix caprea*), guelder rose (*Viburnum opulus*).

5.128 Final species mixes are expected to be agreed with the relevant landscape officer post-consent via a suitable planning condition.

Assessment of Construction Effects

5.129 A summary of construction works is provided in Chapter 2 of this ES.

5.130 It is anticipated that those parts of PRowS DRE/47/2, DRE/47/2 and DRE/50b/1 and 2 located within the site will be temporarily closed/diverted during construction. Appropriate Health and Safety warning signs will be displayed.

5.131 There will be a slight increase in traffic on local roads during the construction phase. However, this would generally be limited to the beginning and end of the working day (construction workers arriving and leaving site) and short periods during the working day, associated with deliveries, including that of the compound facilities, PV panels and ancillary equipment.

5.132 Construction will impact the specific landscape characteristics of the site as described below and effects arising will be temporary and reversible.

5.133 Regarding visual amenity, onsite construction activities will be noticeable from roads, PRowS and a few residential properties located immediately surrounding the site and within 1.5km. Construction will be most noticeable to people using the PRowS outlined above and others to the immediate north, that either run within the site or near to it. At a greater distance from the site views would be obtained from a small number of locations beyond 2.5km, particularly on higher ground to the north and south, receptors within these locations are not likely to experience significant visual effects.

5.134 The likely impact of constructing the Proposed Development on the landscape and visual environment is assessed below.

Landscape Effects

5.135 The likely effects on the landscape fabric and character during the temporary, short term construction phase of the Proposed Development are summarised in **Table 5.9** and described below.

National Landscape Character

5.136 At a much broader scale, the construction activities within the site would directly affect a very small part of the NLCA 37: Dyffrynnoedd y De (South Wales Valleys). With the limited removal of key landscape features within the site and the retention and protection of others, it is anticipated that the construction of the Proposed Development, would cause very little change to the inherent

characteristics of this NLCA, as identified at paragraph 5.68 to 5.70 above. The temporary construction activities would cause a Negligible magnitude of impact and no more than a temporary **Negligible Adverse** significance of effect upon the Dyffrynnoedd y De (South Wales Valleys) NLCA, which is not significant.

Regional/District Level Landscape Character

- 5.137 The temporary, short-term construction works would take place within the following LANDMAP Aspect Areas, within which the Proposed Development is located:
- 'Hendre' (CYNONVS572) Visual and Sensory Aspect Area (**Figure 5.39**);
 - unnamed landscape habitat aspect area CYNONLH101 (**Figure 5.41**);
 - 'Designated Landscape Areas' (CYNONCL056) Cultural Landscape Aspect Area (**Figure 5.42**);
 - 'Taff Valley' (CYNONGL015) Geological Landscape Aspect Area (**Figure 5.43**); and,
 - 'Garth-fawr' (CYNONHL994) Historic Landscape Aspect Area (**Figure 5.44**).
- 5.138 The works would occur within these identified LANDMAP Aspect Areas, and would have direct effects upon them, with the introduction of construction vehicles, a compound and other plant materials. Construction works would, however, only occupy a very small and enclosed part of these Aspect Areas.
- 5.139 The physical landscape characteristics which are attributed to these Aspect Areas would largely be retained and protected during construction. There would be the loss of small areas of grassland habitat and hedgerows as the access track is completed and where the invertors are installed. The solar panels themselves, although covering a large area, have a relatively small footprint and the physical removal of landscape features as a result would be minimised.
- 5.140 Construction activities would, over the course of the temporary construction period, introduce additional built form to the landscape. With the existing neighbouring Maes Bach Solar Farm a characteristic feature of the local landscape, the resultant Maes Mawr Solar Park (the Proposed Development) would not be entirely uncharacteristic of the local landscape. Albeit that the Proposed Development would be larger in area.
- 5.141 There would be direct effects upon those Aspect Areas within which the construction activities are located. Overall, the presence of construction vehicles and plant/machinery used for the temporary construction works would cause a Small magnitude of impact to the character of the corresponding Aspect Areas, which is considered to be of medium sensitivity to this type of development, resulting in temporary **Minor Adverse** significance of effects during construction. Which are not judged to be significant.
- 5.142 Beyond the site, the potential for indirect effects due to the construction phase upon the inherent characteristics of the adjacent LANDMAP Aspect Areas would be noticeable to varying degrees. However, it is anticipated that the resultant magnitude of impact and significance of effect would be no greater than Small, resulting in temporary **Minor Adverse** significance of effects at most, which are not significant.

Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA)

- 5.143 The temporary construction works would take place within a small part of the Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA). The primary landscape qualities and features of this SLA are set out above. The ZTV (**Figure 5.3**) indicates that there would be potential intervisibility from higher ground (Garth Hill) and small areas local to the site and to the south which fall within the SLA.

- 5.144 Existing landscape features within this attractive farmland would largely be retained and protected during construction. There would be the loss of small areas of grassland habitat and hedgerows as the access track is completed and other features are installed. The solar panels themselves, although covering a large area, have a relatively small footprint and the physical removal of landscape features as a result would be minimised.
- 5.145 Construction activities would, over the course of the temporary construction period, introduce additional built form to the landscape. This would be a noticeable addition particularly from elevated views from the popular Garth Hill to the south (Representative Viewpoints 8 and 9). The existing neighbouring Maes Bach Solar Farm, a characteristic feature of the local landscape means that the Proposed Development would not be entirely uncharacteristic of the local landscape. Albeit that it would be larger in scale.
- 5.146 There would be direct effects upon a small part of the Efail Isaf, Garth and Nantgarw Western Slopes SLA within which the construction activities are located. Overall, the presence of construction vehicles and plant/machinery used for the temporary construction works would cause a Small magnitude of impact to the character of the SLA, which is considered to be of medium sensitivity to this type of development, resulting in temporary **Minor Adverse** significance of effects during construction, which are not judged to be significant.
- 5.147 All other impacts on the remaining SLAs within the wider 5km study area (see **Figure 5.2**) would be indirect and, given the considerable amount of screening around the site and existing development within views, would be **Negligible**.

Site and Immediate Surrounds

- 5.148 The landscape features, elements and physical characteristics within the site are limited to arable farmland, marshy grassland (and other grassland habitats), hedgerows, individual trees and woodland blocks (at the edges).
- 5.149 Existing hedgerow and tree planting within and adjacent to the site would be predominantly retained and protected during construction. There may be a small loss of vegetation to allow site access and construction of the access tracks and other infrastructure. Hedgerows and trees are considered to be of Low to Medium sensitivity to the proposed construction works, the magnitude of impact on these features during construction, which would be protected throughout, would be of Negligible. Resulting in temporary **Negligible to Minor Adverse** significance of effects during the construction phase, which are not significant.
- 5.150 The arable fields and other grassland habitats have a Low to Medium sensitivity to the temporary construction compounds and other works taking place within the site. The magnitude of impact of construction is assessed as Small for the duration of the works. Considering the reversible nature of the Proposed Development, the significance of effects during construction on the arable farmland and other grassland habitats are judged to be temporary **Negligible to Minor Adverse**, which are not significant.

Potential Visual Effects

- 5.151 Visual impacts result from a change to the appearance of the landscape, resulting from the Proposed Development, either intruding into, or obstructing, existing views or by their overall impact on visual amenity. The ZTV (**Figure 5.3**) establishes the extent to which the project is theoretically visible. It is anticipated that construction plant and would be taller than the installed panels and invertors. As such, the potential visual effects and ZTV envelope would be potentially greater during the construction phase.

Visual Receptor Groups

Public Rights of Way

- 5.152 There are a number of PRowS throughout the 5km study area. People most likely to experience a change in views would be those using PRowS in close proximity to, or within, the site, some of which would be closed or diverted for the duration of the temporary construction period.
- 5.153 PRowS DRE/47/2 and 3, which pass directly through the site from the north, joining Maesmawr Road in the south would likely be temporarily closed, or diverted, during construction. While views of construction activities would not be available from the sections which are closed. Views would be available at the beginning and end of the PRowS where they join other PRowS outwith the site and Maesmawr Road to the south.
- 5.154 Views to much of the construction activities would be screened from view by the layered vegetation through the site, which would be retained. Where views are available, they would be generally open and close. Any fencing used in parts of the site would further screen views to ground level activities with taller plant material and activities seen above in places.
- 5.155 Where more open views are available at the beginning and end of the PRowS there would be a magnitude of change of Medium, resulting in temporary **Moderate Adverse** significance of effects, which are not significant.
- 5.156 PRowS DRE/50b/1 and 2 which pass through the southern part of the site east to west would be similarly diverted during the temporary construction phase. To follow a route, similar to the existing but to the south of the site beyond the perimeter fence, there would be generally uninterrupted views to the southernmost parts of the site from the whole length of the PRowS. Intervening layered vegetation would screen parts of the site to the north and any fencing that may be used around parts of the site would further screen views of the construction activity, particularly at ground level. Fencing and construction activity seen above and through it would be a noticeable change in the views available from the length of the PRowS when looking north.
- 5.157 Where views are available, they would be near to the PRowS, resulting in a Large magnitude of impact, which is judged to have a temporary **Major Adverse** significance of effect for the whole length of these diverted PRowS, which is significant.
- 5.158 PRow DRE/51/2 passes through the northernmost part of the site, before continuing to the west parallel to the A473. Substantial tree and hedgerow vegetation along the length of the PRow and the layered vegetation within the site would screen potential views from much of the PRow. Where the PRow passes through open fields and where there are gaps in the vegetation, open near distant views would be available. Although not directly affected by the construction activities, there would be open views to parts of it, partially screened by any fencing used in places, with construction activities seen above in places.
- 5.159 Where more open views are available, they would be near to the PRow, resulting in a Medium magnitude of impact, which is judged to have a temporary **Moderate Adverse** significance of effect for much of the PRow's length, which is not significant.
- 5.160 PRow DRE/53/2, located off Maesmawr Road to the immediate east of the southernmost part of the site would have a generally open view to a small part of the construction activities from that part of the PRow nearest the road. As the PRow heads further to the east, towards Maesbach Farm, topographical variation is such that less and less of the construction site would be visible. Substantial amounts of roadside vegetation and layered vegetation throughout the site would further screen views. Where the PRow joins Maesmawr Road, construction activity taking place within Fields K and N would be a noticeable feature within views. Should any site fencing be used, this would partly filter views to much of the activity and topographical variation and roadside vegetation would prevent views to construction activity further north.

- 5.161 Where views are available, they would be near to the PRow, resulting in a Small magnitude of impact, which is judged to have a temporary **Minor to Moderate Adverse** significance of effect, from the part of the PRow nearest the site as it joins Maesmawr Road when travelling west, which is not significant.

Dynamic Visual Receptors

- 5.162 Vehicle users and cyclists travelling along Maesmawr Road will have views available of construction activity for a distance of approximately 1km, between Maesmawr Farm and the main access to the existing Maes Bach Solar Farm (Representative Viewpoints 1 and 5). Low level views of the construction works would be partly screened by the hedgerow located to the east and west of Maesmawr Road. Intervening vegetation and topography would further screen views. This would result in there being no point along Maesmawr Road where the whole site would be visible. People within vehicles on the lane (unnamed) located to the south, between Efail Isaf and Garth Isaf Farm would have fleeting views of construction activity from field gates along the length of the lane. Distant views of low-level construction operations will be partly screened by intervening hedgerows.
- 5.163 Given the fleeting nature of views available to vehicle travellers and cyclists in combination with partial screening of low-level views and Low to Medium receptor sensitivity, the visual impact on people within motor vehicles is predicted to be Small in magnitude during construction, resulting in temporary **Negligible to Minor adverse** significance effects, which is not significant.

Representative Viewpoints

- 5.164 During the temporary construction phase, activity including the use of low plant, vehicle movements and material storage would be visible from the surrounding landscape to varying degrees, where not obstructed by existing vegetation and/or topographical variation, particularly along the vehicular routes. Construction activities may result in the minor loss of vegetation and would appear as a new element within the existing views. However, due to the finished height of the Proposed solar panels at 3.2m above EGL, the extensive vegetation cover, topographical variation and presence of the existing Maes Bach Solar Farm, potential visual effects would mostly be comparable to those of the completed operational phases of the Proposed Development. Where there would be the potential for an increased change of potential visual effects, such as movement on the skyline of potentially taller plant compared to the finished structures, these effects would be temporary in nature, compared to those of the operational phase effects, which would be long term for the lifetime of the Proposed Development.

Representative Viewpoint 1: Maesmawr Road to the immediate north of the site looking south

- 5.165 Intervening topographical variation and, in particular, layered vegetation would predominantly screen the temporary construction activities from view at this part of Maesmawr Road. Views to construction activities at ground level would not be discernible, with potential glimpsed heavily filtered views to taller plant and equipment through intervening wooded vegetation. There may be glimpsed filtered views to construction activities in the middle distance, channelled by vegetation. Construction vehicles moving up and do Maesmawr Road would be a noticeable change to the view. Overall, there would be a Small magnitude of impact as a result of glimpsed views and vehicle movement. Vehicle users are judged to be of Low sensitivity, with occasional cyclists being of Medium sensitivity. The temporary construction works would result in a **Negligible to Minor Adverse** significance of effect, which is not judged to be significant.

Representative Viewpoint 2: PRow DRE/47/2 within the northernmost part of the site looking south and Representative Viewpoint 3: PRow DRE/50b/1 at the westernmost edge of the site looking east

- 5.166 Views to construction activities would be very close to this viewpoint. Taller plant and ground level activities on higher ground to the east would be a noticeable feature with the view. The PRows within this part of the landscape would be temporarily closed or diverted during the construction works resulting in an obvious change to the views. PRow users are judged to be of High sensitivity to the change proposed. Due to the proximity of the construction works, although some would be partially screened, there would be a Large magnitude of impact. Resulting in a temporary **Major Adverse** significance of effect, which is significant.

Representative Viewpoint 4: PRow DRE/50b/2 on the eastern edge of the site where the PRow joins Maesmawr Road, looking north

- 5.167 Elevated views to construction activities within much of the site would be obtained from this viewpoint. Generally open views to activity, to the east of Maesmawr Road, would be available. Beyond this, because of the undulating topography, open views to much of the construction activities to the east of Maesmawr Road would be available. Existing layered vegetation to the western parts of the site, retained and protected, would filterer views to construction activity in this part of the site. There would be filtered views and some more open views available to this part of the site. PRow users are judged to be of High sensitivity to the temporary construction activities, which would be noticeable across much of the view, although parts would be screened from view. This would result in a **Moderate Adverse** significance of effect during the temporary construction period which is not judged to be significant.

Representative Viewpoint 5: Maesmawr Road to the south of the site looking north

- 5.168 A very small part of the temporary construction activities would be visible from this elevated view. At the south easternmost corner of the works, adjacent to Maesmawr Road (Fields N and M). Due to intervening vegetation and topography, there would be no appreciation or views available of the majority of construction works from this location. Vehicle users are judged to be of Low sensitivity to the temporary construction works, with the occasional cyclist being of Medium sensitivity. There would be a Small magnitude of impact as a result of the construction activity, with much of it not visible resulting in a temporary **Negligible to Minor Adverse** significance of effect, which is not judged to be significant.

Representative Viewpoint 6: POS area to the north of Parc Nant Celyn southwest of the site looking northeast

- 5.169 Due to intervening layered vegetation and topographical variation, the majority of the site is not discernible from this location. Above the treeline, in winter, the highest parts of the site (Fields D, E and J) and construction activities therein may be glimpsed. However, at this distance and being such a small part of the overall view, the temporary construction activities may go unnoticed. There would be a Negligible magnitude of impact as a result of the temporary construction work, upon High sensitivity users of the POS area and parts of the PRow network. This would result in a temporary **Negligible Adverse** significance of effect during winter months only, judged to be not significant.

Representative Viewpoint 7: unnamed road between Efail Isaf and Garth Isaf Farm, to the south of the site looking north

- 5.170 Where views are available along this stretch of road, e.g. at field gates, there would be short-lived generally open views to parts of the construction activity. Partially filtered by intervening layered vegetation or screened by topography. Where views are available, construction activity, although visible, would not substantially alter views available. Vehicle users are judged to be of Low

sensitivity, with very occasional cyclists Medium sensitivity. The temporary construction works would result in a **Negligible Adverse** visual effect, as a result of a Low magnitude of impact. This effect is not judged to be significant for the duration of the construction works.

Representative Viewpoint 8: PRoW DRE/64/1 to the south of the site looking north and Representative Viewpoint 9: Taff Ely Ridgeway Walk (Garth Hill) to the south of the site looking north

- 5.171 Open elevated views to parts of the site are available from this viewpoint. At construction, intervening layered vegetation and topography would filter/screen much of the construction activities from the view. Where more open views to the southernmost parts of the site, Fields K, L, M and N, are available it would be a visible feature within the view. The temporary construction activities would result in a Small magnitude of impact upon this receptor of High sensitivity, resulting in a **Minor Adverse** significance of effect during construction, which is not judged to be significant.

Representative Viewpoint 10: Taff Ely Ridgeway Walk to the southwest of the site looking northeast

- 5.172 At a distance of some 4km, although construction activity may be discernible within the view, in those parts of the site nearest the A437 and on higher ground near Maesmawr Road, it would not be an obvious change and so not noticeably alter this panoramic view. Temporary construction activity, discernible within the view, would result in a Negligible magnitude of impact and temporary **Minor Adverse** significance of effect upon viewers of High sensitivity using this PRoW, which is judged to be not significant.

Representative Viewpoint 11: Church Village (Central Park/PRoW DRE/38/3) to the west of the site looking east

- 5.173 No part of the Proposed Development would be discernible from this location.

Representative Viewpoint 12: unnamed road/PRoW DRE/14/1 to the west of the site looking east

- 5.174 Middle-range views of construction operations within higher parts of the site, Fields E, D and J for example, not screened by intervening vegetation and housing at Church Village would be obtained beyond arable fields and roadside hedgerows visible from this location. There would be a Low magnitude of impact as a result of the temporary construction works which, although visible, would not substantially alter views. Taking account vehicular users' and cyclists' Low and Medium sensitivity this would result in temporary **Negligible to Minor Adverse** visual effect, which is judged to be not significant.

Representative Viewpoint 13: Penycodcae Road/PRoW ANT/195/1 to the west of the site looking east

- 5.175 At a distance of some 4km, although construction activity may be discernible within the view, in the highest parts of the site, it would not be an obvious change and so not noticeably alter this panoramic view. Temporary construction activity, discernible within the view, would result in a Negligible magnitude of impact and temporary **Minor Adverse** significance of effect upon viewers of High sensitivity using this PRoW, which is judged to be not significant.

Representative Viewpoint 14: PRoW PON/111/3 to the north of the site looking south

- 5.176 No part of the Proposed Development would be discernible from this location.

Representative Viewpoint 15: PRow PON/11/1 and Representative Viewpoint 16: Rhymney Valley Ridgeway Walk to the north of the site looking south

- 5.177 Similarly elevated middle range views are available with construction activities within much of the site not being discernible from these viewpoints, nor much of the length of the PRow network along the ridge to the northeast. Those parts which are visible, within the higher parts of the site, Fields D, E and J, would amount to a very small part of these panoramic views and so not substantially alter the overall composition of them. The temporary construction works would result in a Negligible magnitude of impact, upon viewers of High sensitivity along the PRow and so there would be a **Minor Adverse** significance of effect which is not judged to be significant.

Representative Viewpoint 17: PRow (T E R Trail) within open access land to the east of the site looking west

- 5.178 This provides a middle-range elevated view to the east of the site. The distinct ridgeline, above the Treforest Industrial Estate, prevents views to the majority of the site. Seen behind and to the north of the existing Maes Bach Solar Farm along the ridgeline, there would be glimpsed views to a very small part of the temporary construction works within the highest parts of the site. The overall view would not be greatly affected as a result. There would be a temporary Negligible magnitude of impact as a result of the construction works and a **Negligible Adverse** significance of effect. Temporary construction effects are therefore judged to be not significant.

Further Mitigation

- 5.179 Proposed planting included in the Landscape Strategy for the Proposed Development (Figure 5.6) should be incorporated, where possible, within the first phase of construction to allow it to have the best chance to mature and offer screening as early as possible within the development programme. No further mitigation is considered necessary.

Future Monitoring

- 5.180 Landscape management would be required for a period of five years following completion of the Proposed Development to ensure newly planted and seeded areas become well established and meet their landscape potential. Management would include the replacement of dead, dying or damaged stock or those that fail to establish satisfactorily. Pruning that would be beneficial for plant growth, form and plant health would be undertaken.

Assessment of Operational Effects

- 5.181 This section considers the landscape and visual effects of the operational phase of the Proposed Development during the operation phase at winter Year 1 and summer Year 15.

Potential Landscape Effects

- 5.182 The likely effects on the landscape and townscape fabric and character during the operational phase at winter Year 1 are set out in Table 5.9 and described below. The effects at summer Year 15 are considered comparable within the non-directly affected landscapes. There would be a small reduction in potential effects upon those areas in which the Proposed Development directly effects by summer Year 15 due to the landscape planting reaching its design intention, but this is still not considered substantial enough to change the Year 1 considerations.

National Landscape Character

- 5.183 The Proposed Development would be located within and directly affect a small part of the NLCA 37: Dyffrynnoedd y De (South Wales Valleys). With the limited removal of key landscape features within the site and the retention and protection of others along with the long-term management and

enhancements proposed, it is anticipated that the Proposed Development, during operation, would cause very little change to the inherent characteristics of this NLCA, as identified at paragraphs 5.68 to 5.70 above. The long-term operation activities would cause a Negligible magnitude of impact and no more than a **Negligible Adverse** significance of effect upon the Dyffrynnoedd y De (South Wales Valleys) NLCA. There would be some isolated beneficial effects due to the proposed landscape strategy by summer Year 15, but the overall significance would remain at **Negligible Adverse**, which is not significant.

District Level Landscape/Townscape Character

Direct Effects

- 5.184 The Proposed Development would be located within the following LANDMAP Aspect Areas:
- 'Hendre' (CYNONVS572) Visual and Sensory Aspect Area (**Figure 5.39**);
 - unnamed landscape habitat aspect area CYNONLH101 (**Figure 5.41**);
 - 'Designated Landscape Areas' (CYNONCL056) Cultural Landscape Aspect Area (**Figure 5.42**);
 - 'Taff Valley' (CYNONGLO15) Geological Landscape Aspect Area (**Figure 5.43**); and,
 - 'Garth-fawr' (CYNONHL994) Historic Landscape Aspect Area (**Figure 5.44**).
- 5.185 The long term, reversible effects of the Proposed Development would occur within these identified LANDMAP Aspect Areas, and would have direct effects upon them, with the introduction of solar panel arrays which would occupy much of the site, along with ancillary structures such as CCTV poles, invertors, access tracks and security perimeter fencing. The Proposed Development would only occupy a very small and enclosed part of these Aspect Areas.
- 5.186 The physical landscape characteristics which are attributed to these Aspect Areas would have largely been retained and protected during construction. As such the overall landscape structure of the site would be the same as the baseline situation. Retained vegetation would have been supplemented with new planting, including the gapping up of existing grown out hedgerow, new hedgerow and tree planting and ecological enhancement focused on the species diversity of grassland within the site. This would result in a long-term beneficial effect for the site as a whole. Conversely, adverse landscape effects would be as a result of the agricultural fields being developed, which would result in the most substantial change to the physical characteristics of the local landscape. Other adverse effects would result from the complete loss, albeit reversible, of small areas of grassland habitat and hedgerows due to the access tracks and where invertors have been installed. The solar panels themselves, although covering a large area, have a relatively small footprint and the physical removal of landscape features as a result would be minimised.
- 5.187 With the existing neighbouring Maes Bach Solar Farm a characteristic feature of the local landscape, the Proposed Development would not be entirely uncharacteristic of the local landscape. However, the two solar farms could create what might appear to be a single contiguous, larger solar farm.
- 5.188 There would be direct effects upon those Aspect Areas within which the Proposed Development is located. On balance, when considering the adverse and beneficial effects discussed above, the addition of the Proposed Development to the landscape, within which energy infrastructure of this nature is present would cause a Small magnitude of impact to the character of the corresponding Aspect Areas, which is considered to be of Medium sensitivity to this type of development, resulting in a **Minor Adverse** significance of effect during operation when considering the Aspect Areas as a whole. At a site-based level, it is considered that the Proposed Development would result in a **Minor Beneficial** significance of effect taking into account the restoration and management of grassland habitat. These effects are not considered to be significant.

- 5.189 At summer Year 15, the establishment of proposed planting and the continued grassland management would further help to integrate the Proposed Development into the landscape, particularly when considering the visual and sensory aspect. Resulting in the overall magnitude of impact reducing to Negligible with a **Negligible Adverse** significance of effect. **Minor Beneficial** effects of the landscape management would continue.
- 5.190 Beyond the site, the potential for indirect effects due to the operational phase upon the inherent characteristics of the adjacent LANDMAP Aspect Areas would be noticeable to a varying degree. However, it is anticipated that the Small magnitude of impact would result in **Minor Adverse** significance of effect, at most, which is not significant.

Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA)

- 5.191 The Proposed Development is located within a small part of the Efail Isaf, Garth and Nantgarw Western Slopes SLA. The primary landscape qualities and features of this SLA are set out above. The ZTV (**Figure 5.4**) indicates that there would be potential intervisibility from higher ground (Garth Hill) and small areas local to the Application Site and to the south which fall within the SLA.
- 5.192 The primary landscape qualities and features of this part of the SLA would be largely retained. Long term, due to enhancement implemented as part of the proposed development, including grassland management and new tree and hedgerow planting, there would be some beneficial effects upon the landscape. The solar panels, although covering a large area of existing grassland, would have a relatively small footprint with grassland retained and managed beneath the panels resulting in the physical removal of landscape features being minimised.
- 5.193 On balance, when considering the adverse and beneficial effects, the addition of the proposed development to the landscape, within which energy infrastructure of this nature is present would cause a Small magnitude of impact to the character of the corresponding SLA, which is considered to be of Medium sensitivity, resulting in a **Minor Adverse** significance of effect during operation when considering the SLA as a whole. At a site-based level, it is considered that the proposed development would result in a **Minor beneficial** significance of effect with the restoration and management of grassland habitat. These effects are not considered to be significant.
- 5.194 At summer Year 15, the establishment of proposed planting and the continued grassland management would further help to integrate the proposed development into the landscape. Resulting in the overall magnitude of impact reducing to Negligible with a **Negligible Adverse** significance of effect. Long term beneficial effects of the landscape management would continue.

Site and Immediate Surrounds

- 5.195 The landscape features, elements and physical characteristics within the site comprise grazed, poor semi-improved grassland (bounded by hedgerows, field ditches and watercourses).
- 5.196 Short lengths of hedgerow and small areas of grassland would be affected by the Proposed Development. The majority of hedgerows, trees and areas of grassland would be retained and protected. The hedgerow improvements including the gapping up of sparse areas of hedgerows and the planting of additional trees would have beneficial long-term impacts during operation.
- 5.197 The fields are considered to have a Low to Medium sensitivity to the Proposed Development. Whilst the Proposed Development would cause adverse impacts on an area of Low value arable land, it would also cause beneficial impacts through planting and biodiversity enhancements (involving hedgerow reinforcement, tree planting and species rich/wildflower grassland establishment) that would provide landscape and visual benefits, which would outweigh the potential adverse effects. The magnitude of impact is judged to be Small. On balance, the significance of effect on the site's landscape characteristics (hedgerows, tree cover and grassland) is judged to be **Neutral to Minor beneficial** (not significant) in the longer term.

Potential Visual Effects

Visual Receptor Groups

Public Rights of Way (PRoWs)

- 5.198 There are a number of PRoWs throughout the 5km study area. Users that are most likely to experience the most substantial change in the actual and perceived change in views would be users of those PRoWs in close proximity to or within the site, some of which would be permanently diverted.
- 5.199 PRoWs DRE/47/2 and 3, following construction, would return to their original routes, passing directly through the Proposed Development from the north, joining Maesmawr Road in the south. These PRoW would be in close proximity to the Proposed Development's perimeter fence for their entire length and therefore have generally uninterrupted views to it.
- 5.200 Due to the PRoWs' location, views to much of the Proposed Development would be screened from view by the layered vegetation through the site, which would be retained. Where views are available, they would be generally open and close. Perimeter fencing around the site would partially screen views, but solar panels would be an obvious feature within the foreground of views for the length of the PRoWs.
- 5.201 At winter Year 1, where more open views are available there would be a magnitude of change of Large, resulting in a **Major Adverse** significance of effect, which is significant. By summer Year 15, with the mitigation planting and existing retained vegetation in full leaf, it is anticipated that much of the Proposed Development would be screened from view. As a result, the overall magnitude of change would reduce to Medium and the significance of effect to **Moderate Adverse**, which is not significant. It is acknowledged that, where more open views remain, parts of the Proposed Development would be obvious within views, particularly when seen in close proximity.
- 5.202 PRoWs DRE/50b/1 and 2 which pass through the southern part of the site east to west, would be permanently diverted. Following the perimeter fence to the south before joining Maesmawr Road at its existing location, there would be generally uninterrupted views to the southernmost parts of the site from the whole length of these PRoWs. Intervening layered vegetation would screen parts of the site to the north and fencing around the perimeter of the site would have some screening effect although solar panels beyond this where visible would be prominent within views for much of the PRoWs.
- 5.203 At winter Year 1, where more open views are available, they would be near to the PRoW, resulting in a Large magnitude of impact and a **Major Adverse** significance of effect for much of these diverted PRoWs, which is significant. This quickly decreases as by summer Year 15, with the mitigation planting and existing retained vegetation in full leaf, it is anticipated that much of the Proposed Development would be screened from view. As a result, the overall magnitude of impact would reduce to Medium and the significance of effects to **Moderate Adverse**, which is not significant. It is acknowledged that, where more open views remain, parts of the Proposed Development would be obvious within views particularly when seen in close proximity.
- 5.204 PRoW DRE/51/2 passes through the northernmost part of the site, before continuing to the west parallel to the A473. Substantial tree and hedgerow vegetation along the length of the PRoW and the layered vegetation within the site would screen potential views from much of the PRoW. Where the PRoW passes through open fields and where there are gaps in the vegetation, open near distant views would be available.
- 5.205 Where more open views are available, they would be near to the PRoW, resulting in a magnitude of change of Medium and a **Moderate Adverse** significance of effect for much of the PRoW's length.
- 5.206 PRoW DRE/53/2, located off Maesmawr Road to the immediate east of the southernmost part of the site would have a generally open view to a small part of the Proposed Development from that

part of the PRoW nearest the road. As the PRoW heads further to the east, towards Maesbach Farm, topographical variation is such that less and less of the site would be visible. Substantial roadside vegetation and layered vegetation throughout the site would further screen views. Where the PRoW joins Maesmawr Road, the Proposed Development, particularly within Fields K and N, would be a noticeable feature within views. Site fencing would partially filter views to solar panels, with topographical variation and roadside vegetation preventing views to the Proposed Development further north.

- 5.207 Where views are available, they would be near to the PRoW, resulting in a magnitude of change of Small and **Minor to Moderate Adverse** significance of effect (not significant) from the part of the PRoW nearest the site as it joins Maesmawr Road when travelling west.

Dynamic Visual Receptors

- 5.208 Vehicle users and cyclists travelling along Maesmawr Road will have views available of the Proposed Development for a distance of approximately 1km, between Maesmawr Farm and the main access to the existing Maes Bach Solar Farm (Representative Viewpoint 1 and 5). Low level views of the solar panels and perimeter fencing would be obstructed by the hedgerow located to the east and west of Maesmawr Road. Intervening vegetation and topography would further screen views with no appreciation of the site as a whole from the road. People within vehicles on the lane (unnamed) located to the south, between Efail Isaf and Garth Isaf Farm would have fleeting views of the Proposed Development from field gates along the length of the lane. Distant views of low-level parts of the Proposed Development will be partly screened by intervening hedgerows.
- 5.209 Given the fleeting nature of views available to vehicle travellers in combination with partial screening of low-level views and Low to Medium receptor sensitivity, the visual impact on people within motor vehicles or cyclists is predicted to be no greater than Small in magnitude at operation, resulting in **Negligible to Minor Adverse** significance effects, which are not significant.

Representative Viewpoints – Short Range Views

- 5.210 The eight short-range views are located from the edges of the site, along Maesmawr Road and those parts of the study area, up to 1km from the site, where the ZTV (**Figure 5.4**) has indicated potential intervisibility with the Proposed Development. Given the proximity to these receptors and the scale of the Proposed Development, any change experienced would be most noticeable from these receptors. Although the Proposed Development would introduce a new solar farm, there is an existing solar farm present within some of the pre-development views. As such, the Proposed Development would not be entirely out of character.

Representative Viewpoint 1: Maesmawr Road to the immediate north of the site looking south

- 5.211 At winter Year 1, the majority of the Proposed Development would not be discernible from this location due to intervening layered vegetation and topographical variation. A very small part of the solar panels, the upper most, within Fields E and the edge of Fields C and F, may be noticeable above the hedgerow which is at a lower level in winter months. Additionally, the top part of the perimeter fencing, also within these fields, may also be visible, being at a higher elevation than the panels. These features would be a new built addition to a rural view, albeit heavily screened by existing vegetation. New and supplementary hedgerow planting to the perimeter of Field E would have no effect upon the view and have no screening effect for those limited parts of the Proposed Development that would be noticeable.
- 5.212 Vehicle users and cyclists travelling on Maesmawr Road, south towards the Proposed Development, would experience a fleeting view to the tops of the solar panels and perimeter fence along much of the road. Road users' attention would be on the road, which is very narrow in places, and to some

extent distant scenic views to higher ground in the south. Glimpsed views to a small part of the Proposed Development for these Low sensitivity receptors, would result in a Small magnitude of change and **Minor Adverse** significance of effect at winter Year 1 which is not considered to be significant.

- 5.213 By summer Year 15, it is likely that proposed landscaping, although at full maturity, would still have limited beneficial effects upon views from Maesmawr Road. However, mature hedgerow planting along both sides of the road would be in full leaf and would continue to screen potential views to the majority of the Proposed Development along much of Maesmawr. It is anticipated the very tops of a small part of the solar panels and perimeter fence may remain discernible. Additional screening from existing hedgerows along Maesmawr Road, allowed to grow up, would result in a magnitude of change of Negligible, reducing the overall significance of effect at summer Year 15 to **Negligible Adverse** which is not significant.

Representative Viewpoint 2: PRoW DRE/47/2 within the northernmost part of the site looking south

- 5.214 Located at the edge of the north-western ecological enhancement area, this represents one of the closest, most open view towards the Proposed Development. At winter Year 1, within the foreground of the view, the perimeter fence, with the solar panels behind, would be a prominent feature across much of the view. It is likely that the Proposed Development would also screen much of the existing vegetation in the background which is characteristic of the view. Distant views to higher ground to the southeast would still be available, with the overhead pylons tall vertical elements in the view.
- 5.215 Change would be prominent, and any landscape mitigation would not have a marked effect upon the view at winter Year 1. There would be a Large magnitude of impact upon this receptor of High sensitivity, resulting in a **Major Adverse** significance of effect at winter year 1, which is judged to be significant.
- 5.216 By summer Year 15, proposed landscaping, including individual tree and limited scrub planting to the northern edge of the PRoW and supplementary hedgerow planting to the west, would have some visual amenity benefit to the view and start to break up parts of the Proposed Development. As a result, the overall significance of effect would reduce to **Moderate Adverse** with much of the Proposed Development screened from view. The effects are judged to be significant.

Representative Viewpoint 3: PRoW DRE/50b/1 at the westernmost edge of the site looking east

- 5.217 Similar to Representative Viewpoint 2, this is a near distant view. At the western edge of the Proposed Development, the perimeter fence and solar panels behind would be a prominent feature across the whole view. The Proposed Development would screen much of the view to the wider landscape, although like Viewpoint 2 there would be partial views to higher ground to the east, with the overhead pylons remaining a vertical feature in the view. The Proposed Development, in particular the perimeter fence, would be a prominent feature within the foreground of the view. Resulting in a large magnitude of impact, with additional mitigation having limited effect upon the view. There would be a **Major Adverse** significance of effect as a result, due to the close proximity of the view and High sensitivity of the receptor. This effect is considered to be significant.
- 5.218 By summer Year 15, proposed landscaping, including individual supplementary hedgerow planting to the western edge of the Proposed Development, would have some visual amenity benefit to the view breaking up those parts of the Proposed Development nearest the viewpoint. However, the elements of the Proposed Development seen above the hedgerow would remain a noticeable feature in the view even though much of it would be screened from view. As a result, at summer Year 15 the significance of effect would reduce to **Moderate Adverse**, with the Proposed Development more noticeable in short-range views. The effects are not judged to be significant.

Representative Viewpoint 4: PRow DRE/50b/2 on the eastern edge of the site where the PRow joins Maesmawr Road, looking north

- 5.219 At winter Year 1, the immediate foreground of this view would be predominantly retained as existing grassland habitat. However, the new access track would be a prominent feature in the foreground as it descends the slope, continuing north into the Proposed Development following the line of the existing hedgerow parallel to Maesmawr Road. Existing retained and layered vegetation would screen/filter elevated views to most of the western parts of the site. Although the addition of the solar panels and other infrastructure would be a noticeable addition to the view. The eastern parts of the Proposed Development, Fields J and E, set on higher ground to the east of Maesmawr Road would be more prominent within the view, with less in the way of intervening vegetation.
- 5.220 Change would be noticeable, although much of the Proposed Development would be screened from view. Any landscape mitigation would not have a marked effect upon the view at winter Year 1. There would be a Medium magnitude of impact upon this receptor of High sensitivity, resulting in a **Moderate Adverse** significance of effect at winter Year 1, which is not judged to be significant.
- 5.221 New hedgerow planting and supplementary hedgerow planting to the perimeter of Field J would help to screen views to lower parts of the Proposed Development at the southernmost edge to the east of Maesmawr Road. However, due to the rising topography in this part of the site, the Proposed Development would remain an obvious change to this part of the view. Within the remainder of the site, although glimpses would remain, much of the Proposed Development would be screened from views due to the existing vegetation, in full leaf and supplemented by additional planting which would have reached its design purpose. On balance, with much of the Proposed Development screened, it is considered that the magnitude of impact would reduce to Small. Resulting in a **Minor Adverse** significance of effect, which would not be significant.

Representative Viewpoint 5: Maesmawr Road to the south of the site looking north

- 5.222 Intervening vegetation and, in particular, topographical variation is such that the majority of the Proposed Development would not be discernible within this view, even at winter Year 1. The existing Maes Bach Solar Farm would remain a noticeable feature and most prominent within the view, albeit that much of this is screened from view. A very small part of the proposed view, within Fields N and M nearest Maesmawr Road, would be visible within the centre of the view. Seen as a small continuation of the existing solar farm it would not have a defining effect upon the view and would not detract from the overall composition of it.
- 5.223 Although a small part of it would be visible, much of the Proposed Development would be screened from view. There would be a Small magnitude of impact upon this receptor of Low sensitivity, resulting in a **Negligible Adverse** significance of effect at winter Year 1, which is not judged to be significant.
- 5.224 It is anticipated that a **Negligible Adverse** significance of effect would remain at summer Year 15, due to the elevated position of the view and there being no discernible mitigation proposals at this point.

Representative Viewpoint 6: POS area to the north of Parc Nant Celyn southwest of the site looking northeast

- 5.225 Viewers within this POS area, which includes part of the local PRow network, would have glimpsed, heavily filtered views to a very small part of the Proposed Development. Seen above the trees at winter Year 1, the tops of solar panels in the very highest parts of the Proposed Development, in Fields D, E and J, may be discernible. However, any glimpsed views would not alter the overall composition of the view. Furthermore, with users engaged in leisure activities within the POS and along local footpaths, those small parts of the Proposed Development that may be discernible, may go unnoticed.

- 5.226 There would be a Negligible magnitude of impact upon this receptor of High sensitivity, resulting in a **Negligible Adverse** significance of effect at winter Year 1, which is not considered significant.
- 5.227 By summer Year 15, intervening vegetation in full leaf would further screen any possible views to the Proposed Development. No part of the Proposed Development would be visible within the summer view, resulting in a magnitude of impact and significance of effect of No Change and **No Effect** respectively.

Representative Viewpoint 7: unnamed road between Efail Isaf and Garth Isaf Farm, to the south of the site looking north

- 5.228 Substantial roadside hedgerow along the length of much of this local road, would curtail possible views to the Proposed Development. At winter Year 1, even devoid of leaf the mature hedgebank is substantial enough to prevent views. From the majority of the road, no part of the Proposed Development would be discernible, especial in summer. However, it is acknowledged that there would be fleeting views from this elevated road from a number of the field gates along it. The retained field boundaries within the site would screen some of the Proposed Development and at this distance the field pattern would appear uninterrupted, albeit that the Proposed Development would appear within the fields. The fleeting nature of potential views, perpendicular to the direction of travel, is such that it is likely that the Proposed Development would go unnoticed by motorists whose attention would be on the road and, to some extent on the wider landscape to the east or west dependant on the direction of travel.
- 5.229 At both winter Year 1 and summer Year 15, where fleeting views are available from the road through field gates, there would be a magnitude of impact of Small, resulting in a **Minor Adverse** significance of effect. For the majority of the route, such as that of the Representative Viewpoint, there would be no change and **No Effect**. On balance, there would be **Negligible Adverse** significance of effect for the road as a whole. These effects are not judged to be significant.

Representative Viewpoint 8: PRow DRE/64/1 to the south of the site looking north

- 5.230 Users of this PRow would gain generally open views to much of the Proposed Development. Low level, though intact, field boundaries within Fields K, L, M and N would have limited screening effects at winter Year 1 due to the elevated position. Topographical variation and layered vegetation further to the north would break up the remainder of the Proposed Development. Within much of the centre of the view, the existing Maes Bach Solar Farm is a noticeable feature, partially broken up by field boundary vegetation. To the west of Maesmawr Road, the Proposed Development would be seen as a continuation of the existing solar farm and increase the overall renewable energy infrastructure visible within the view.
- 5.231 Although a part of it would be visible, with much of the Proposed Development screened from view and the presence of the existing Maes Bach Solar Farm, there would be a Small magnitude of impact upon this receptor of High sensitivity, resulting in a **Minor Adverse** significance of effect at winter Year 1, which is not judged to be significant.
- 5.232 It is anticipated that a **Minor Adverse** significance of effect (not significant) would remain at summer Year 15, due to the elevated position of the view meaning that mitigation measures would have a limited capacity to further screen views.

Representative Viewpoints – Medium Range Views

- 5.233 The site and therefore the Proposed Development would be apparent from many of the medium distant Representative Viewpoints selected for this assessment. Within the local area, where views towards the site are available, the existing development, including the Treforest Industrial Estate, residential areas and the Maes Bach Solar Farm are present within the view. As such, the nature of these views is a combination of development with expansive views to open countryside/farmland beyond. Given this, from a greater distance to the site, the magnitude of impact reduces, as although

there would still be some potential intervisibility and the introduction of the Proposed Development may be noticed, the overall composition of the views would be similar to the existing circumstances or would only represent a very slight change to the baseline.

Representative Viewpoint 9: Taff Ely Ridgeway Walk (Garth Hill) to the south of the site looking north

- 5.234 This open elevated view to the south of the Proposed Development is very similar to that of Representative Viewpoint 8. However, because of it being at a slightly higher elevation, more of the Proposed Development would be noticeable within the view, for PRoW and access land users travelling south along the PRoW down the slopes of Garth Hill. In particular, there would be generally open views to the Proposed Development within the majority of Fields L, K, N and M from this location, with existing and proposed vegetation having limited screening effects. Because of the higher elevation, the topographical variation, while still apparent, would have less screening effects upon the higher parts of the Proposed Development within Fields D, E and J. The existing vegetation across the remainder of the site would break up the western and north-western parts of the Proposed Development, although it would be possible to see more of it than at a lower level to the south of the Access Land. Within a small part of this panoramic view, the existing Maes Bach Solar Farm is a visible feature, partially broken up by field boundary vegetation. To the west of Maesmawr Road, the Proposed Development would be seen as a continuation of the existing solar farm and increase the overall renewable energy infrastructure visible within the view.
- 5.235 Although visible, with other parts of the Proposed Development screened from view, it would be seen as a continuation of the existing Maes Bach Solar Farm and not substantially detract from this panoramic view. Albeit that the Proposed Development would noticeably increase the overall renewable infrastructure within the view. There would be a Small magnitude of impact upon this receptor of High sensitivity, resulting in a **Minor Adverse** significance of effect at winter Year 1, which is not judged to be significant.
- 5.236 It is anticipated that a **Minor Adverse** significance of effect (not significant) would remain at summer Year 15, due to the elevated position of the view meaning that mitigation measures would have a limited capacity to further screen views.

Representative Viewpoint 10: Taff Ely Ridgeway Walk to the southwest of the site looking northeast

- 5.237 At some 4km southwest of the Proposed Development this view is right at the edge of the ZTV. Open expansive views across the River Taff valley towards the Proposed Development, a very small part of which would be visible within the treed context and above existing development. The layered vegetation and topographical variation, like many views, would curtail potential views to much of the Proposed Development, particularly the easternmost parts. Where there is higher ground to the west of Maesmawr Road (Fields E, D and J) and to the south, near to the existing Maes Bach Solar Farm (Fields K and N), more of the Proposed Development would be visible.
- 5.238 Although parts of the Proposed Development would be visible within this view, at a distance of 4km, those parts which are visible would not substantially alter the existing view. There would be a Negligible magnitude of impact upon this receptor of High sensitivity, resulting in a **Minor Adverse** significance of effect at winter Year 1, which is not judged to be significant. Due to the elevated position of the view, the scope for mitigation to further screen potential views of the proposed development would be limited. As such, it is anticipated that these effects would remain at summer Year 15.

Representative Viewpoint 11: Church Village (Central Park/PRoW DRE/38/3) to the west of the site looking east

- 5.239 No part of the Proposed Development would be discernible from this location.

Representative Viewpoint 12: Unnamed road/PRoW DRE/14/1 to the west of the site looking east

- 5.240 Characteristic of other medium distant views, this elevated view across the valley has panoramic views of open countryside with the eye drawn to higher ground, such as Garth Hill, to the south and east. Across the middle of the view are the developed areas of Church Village and other existing development as it continues along the valley floor. The higher parts of the Proposed Development, within Fields D, E and J, and lower parts to the east of Maesmawr Road would be visible within the view seen along the ridgeline in the middle of the view. Although visible, those parts to the east of Maesmawr Road would be broken up by the existing and retained layered vegetation. Those parts to the west on higher ground would likely be more visible with less screening effect from intervening vegetation. The Proposed Development would be seen as a continuation of the existing Maes Bach Solar Farm, which is currently visible within the centre of the view. Although as the Proposed Development would extend further down the slope, towards the view, and be seen on higher ground within parts of the landscape that is less treed, it would be more noticeable, covering fields which currently appear as green strips across the view. Although visible, it is anticipated that the Proposed Development would not substantially detract from the overall composition of the view, and for road users driving in the direction of Church Village may go unnoticed. PRoW users, who are specifically looking at the wider landscape in the cause of leisure pursuits, would gain more obvious views, although at a distance of more than 2km views would not be prominent.
- 5.241 Although much of the Proposed Development would be visible within this view, at a distance of 2km or more, those parts which are visible would not substantially alter the existing view. There would be a Small magnitude of impact upon a receptor of High sensitivity (PRoW users on a small part of it as it approaches the road), resulting in a **Minor Adverse** significance of effect at winter Year 1, which is not judged to be significant.
- 5.242 Similarly, to other views, due to the elevated position of the view, the scope for mitigation to further screen potential views of the Proposed Development would be limited. As such, it is anticipated that these effects would remain at summer Year 15.

Representative Viewpoint 13: Penycoedcae Road/PRoW ANT/195/1 to the west of the site looking east

- 5.243 At some 3km from the site, views to the Proposed Development would be seen in the context of the expansive panoramic view across the Taff Valley. Intervening layered vegetation and topographical variation would prevent views to those parts of the Proposed Development furthest to the west from this location. Parts of the Proposed Development on higher ground, particularly Fields D, E and J and a large portion of the Proposed Development to the west of Maesmawr Road would be discernible above intervening vegetation. At this distance however, it is anticipated that the overall composition and character of the view would be largely unaffected by the introduction of the Proposed Development and may go unnoticed by people using the local road and PRoW.
- 5.244 Although much of the Proposed Development would be discernible from this location, at 3km or more away, those parts which are visible would not substantially alter the existing view. There would be a Negligible magnitude of impact upon a receptor of high sensitivity (PRoW users), resulting in a **Minor Adverse** significance of effect at winter Year 1, which is not judged to be significant. These effects would remain at summer Year 15 due to the elevated nature of the view and those parts of the site relative to it.

Representative Viewpoint 14: PRoW PON/111/3 to the north of the site looking south

- 5.245 No part of the Proposed Development would be discernible from this location.

Representative Viewpoint 15: PRow PON/11/1 and Representative Viewpoint 16: Rhymney Valley Ridgeway Walk to the north of the site looking south

- 5.246 These elevated views are representative of views from a part of the study area to the north, containing many local roads and parts of the PRow network including long distance/promoted walks. Due to the changes in angle and topographical variation the extent of visibility to existing built development varies. However, with the Proposed Development in an elevated position, views to it across the valley are similar. The undulating nature of the site, with land falling away to Maesmawr Road, is such that only the highest parts of the Proposed Development (within Fields D, E and J) would be visible from these locations, with much of the Proposed Development not discernible. Parts of the existing Maes Bach Solar Farm is visible within views from these locations. As such middle distant views to renewable energy infrastructure would not be entirely uncharacteristic of the views, although it is acknowledged that the Proposed Development would increase the overall area of the view where renewable energy infrastructure is visible. At up to 3.4km, views to the Proposed Development would not be an obvious change to these panoramic views, with existing development, particularly the larger scale and lightly coloured development with the Treforest Industrial Estate remaining the most noticeable built features within the view.
- 5.247 Much like other views, due to the elevation, effects are likely to be the same at summer Year 15 as those of winter Year 1. The parts of the Proposed Development which are visible would result in a Negligible magnitude of impact and **Minor Adverse** significance of effect, which is not judged to be significant.

Representative Viewpoint 17: PRow (T E R Trail) within open access land to the east of the site looking west

- 5.248 Located at one of the highest points within the study area, this location offers probably the most distant views of existing development with Treforest Industrial Estate within the middle ground stretching north to Pontypridd. Across the middle of the view a distinctive ridgeline along which the Proposed Development would be situated, punctuates the views, separating the existing areas of development. The treed slopes leading up to Maesbach Farm are a key feature in the view. Along this ridge, perpendicular to the viewer, the existing Maes Bach Solar Farm is clearly visible so renewable energy infrastructure is a characteristic of the baseline view. With land falling away beyond this to Maesmawr Road, the majority of the Proposed Development would be screened from view. The north easternmost corner of the Proposed Development, on higher ground adjacent to Maesbach Farm would be visible. These small parts of the Proposed Development, at this distance, would be seen as a continuation of the existing solar farm along the ridgeline beyond Maesbach Farm. As such, it is anticipated that the Proposed Development would not result in a substantial change to the existing view and may go unnoticed to the casual observer whose attention would likely be on the wider panoramic and more distant views to the north.
- 5.249 Due to the elevation, effects are likely to be the same at summer Year 15 as those of winter Year 1. The parts of the Proposed Development which are visible would result in a Negligible magnitude of impact and **Negligible Adverse** significance of effect, which is not judged to be significant.

Further Mitigation

- 5.250 The Proposed Development incorporates a Landscape Strategy that is included as an integral part of the design (Figure 5.6) and would be implemented as part of the Proposed Development. No additional mitigation requirements have been identified as a result of this assessment.

Future Monitoring

- 5.251 Landscape management would be required for a period of five years following completion of the Proposed Development to ensure that the newly planted and seeded areas become well established and meet their landscape potential. Management would include the replacement of dead, dying or

damaged stock or those that fail to establish satisfactorily. Pruning that would be beneficial for plant growth, form and plant health would be promoted.

Accidents/Disasters

- 5.252 With respect to landscape and visual matters, potential accidents/disasters relevant to the Proposed Development are unlikely. There is a potential risk of introduced diseases affecting vegetation, for example ash dieback disease (*Hymenoscyphus fraxineus*). As a precautionary measure common ash would not be specified within proposed planting mixes.

Potential Changes to the Assessment as a Result of Climate Change

- 5.253 Taking into account the information identified in the future baseline section, any future climatic changes are unlikely to change the landscape and visual assessment for the project. If appropriate landscape management in the form of additional or alternative planting and further management of the areas within the immediate local context of the site are implemented, any landscape and visual effects are likely to be marginally less than the levels reported in this chapter.
- 5.254 The Landscape Strategy utilises site appropriate species and incorporates climate change considerations, such as drought tolerance, in the species selection for the design (see **Figure 5.65**). This can be further developed at the detailed design stage, if necessary.

Assessment of Decommissioning Effects

- 5.255 Predicted effects upon the landscape and visual resource during the decommissioning of the Proposed Development would be equivalent to those experienced during construction for the duration of the phase, with the small exception of the proposed vegetation having reached maturity which would offer some additional screening of low-level works within the localised views. The decommissioning of the Proposed Development is not anticipated to cause any significant effects upon the landscape or views.
- 5.256 Assuming the Proposed Development is fully removed, and the site restored to agricultural land/improved grassland habitats which would have been enhanced as part of the Proposed Development, the Proposed Development is likely to have a long-term **Minor Beneficial** effect upon the site.
- 5.257 There would be no significant effects upon the landscape/townscape or visual resource during decommissioning.

Inter-relationships

- 5.258 There are inter-relationships between landscape and visual effects and other topic chapters included within this ES. These include synergies with the biodiversity and historic environment chapters that have influenced the design and the proposed mitigation.
- 5.259 The proposed planting and grassland are designed to provide landscape integration, connectivity and some limited visual screening within and from outside the site. The planting would have a dual function of providing visual interest and assimilation while providing wildlife corridors and continued nature conservation links with adjacent areas.
- 5.260 Further details are provided in Chapters 6 (Biodiversity) and 7 (Historic Environment) of this ES.

Assessment of Cumulative Effects

- 5.261 Only those developments listed in **Table 5.1** above, as derived from the Scoping Direction (**Appendix 4.2**), that fall within the same LANDMAP Aspect Areas or within the ZTV are considered in **Table 5.9** below.
- 5.262 All others, including DNS/3266623 Cwm Ifor Solar have been reviewed and would have no additional impacts on either the landscape resources and receptors or the visual resources and receptors.

Table 5.9: Cumulative Developments considered in the Assessment of Effects on Landscape and Visual Resources

Cumulative development	Distance from the site	Potential effects
DNS/3272053 Tywn Hywel Wind Farm	Approx. 4.3 km to the nearest turbine	<p>Landscape resources and receptors:</p> <p>Tywn Hywel Wind Farm would not fall within any of the same LANDMAP Aspect Areas as the Proposed Development. There would therefore be no direct cumulative effects as a result.</p> <p>Visual receptors:</p> <p>No ZTV has been produced for the Tywn Hywel Wind Farm. However, with turbine tip height of up to 200m it is anticipated that there would be a convergence of the ZTV for that scheme and the Proposed Development.</p> <p>Should there be a temporal overlap of construction programmes there will be a temporary Negligible magnitude of impact on road users, both people in vehicles and cyclists using the Maesmawr Road and other local roads. These receptors have a Low to Medium sensitivity. With the wind farm at 4km or greater from the Proposed Development it is judged that the turbines would be discernible but not be a prominent feature within views. The significance of the temporary effect on visual receptors would be Negligible Adverse, which is not judged to be significant.</p> <p>During the operational phase of the Proposed Development there would remain a Negligible cumulative magnitude of impact on visual receptors, as the Proposed Development particularly is low lying and will be substantially screened by existing vegetation and topographical variation in the local landscape. Even for High sensitivity receptors, the significance of the cumulative effect would be Minor Adverse, which is not significant.</p>
DNS/3280378 Mynydd y Glyn wind farm	Approx. 6.5 km to the nearest turbine (outwith the 5 km study area)	<p>Landscape resources and receptors:</p> <p>Mynydd y Glyn Wind Farm would not fall within any of the same LANDMAP Aspect Areas as the Proposed Development. There would therefore be no direct cumulative effects as a result.</p> <p>Visual receptors:</p> <p>Although beyond the 5km radius study area, the ZTV (ref. Figure 5.2, MYG Environmental Scoping Report, September 2021) indicates that there would be a convergence of the ZTV for this scheme and that of the Proposed Development. With the turbine height used for the Scoping Report set at 175m.</p> <p>Should there be a temporal overlap of construction programmes there will be a temporary Negligible magnitude of impact on road users, both people in vehicles and cyclists using the Maesmawr Road and other local roads. These receptors have a Low to Medium sensitivity. With the wind farm at 6.5km or greater from the Proposed Development it is judged that the turbines would be barely discernible within distant views. The significance of the temporary effect on visual receptors would be Negligible Adverse, which is not judged to be significant.</p>

Cumulative development	Distance from the site	Potential effects
<p>During the operational phase of the Proposed Development there would remain a Negligible cumulative magnitude of impact on visual receptors, as the Proposed Development particularly is low lying and will be substantially screened by existing vegetation and topographical variation in the local landscape. Even for High sensitivity receptors, the significance of the cumulative effect would be Minor Adverse, which is not significant.</p>		

Cumulative Effects on Landscape and Visual Resources and Receptors

- 5.263 The potential effects on the landscape and visual resources and receptors are described in **Table 5.9** above.
- 5.264 None of the cumulative developments considered in **Table 5.9** would have a significant adverse effect taken together with the Proposed Development, either during construction or operational phases.

Effects of Glint and Glare

Introduction

- 5.265 A detailed Solar Photovoltaic Glint and Glare Study has been undertaken by Pager Power (Urban and Renewables) Ltd and is included at **Appendix 5.1** of this ES. The summary and conclusions of the study are set out below.

Glint and Glare Summary and Conclusions

Roads

- 5.266 Following a review of the available imagery and local topography, any solar reflections that are geometrically possible towards road users along a 1.4km section of the A473 (refer to Figure 13 page 33 of the Glint and Glare Assessment, **Appendix 5.1**) are predicted to be significantly screened by intervening vegetation, buildings and/or terrain. Solar reflections are not geometrically possible towards the other assessed section of the A473. No impacts are predicted and no mitigation is required.

Dwellings

- 5.267 Following a review of the available imagery and local topography, any solar reflections that are geometrically possible towards observers in three dwellings, Maes Bach Farm, Gedry Farm and Willowford Cottages (refer to Figure 23, page 40 of the Glint and Glare Assessment, **Appendix 5.1**), are predicted to be significantly screened by intervening vegetation, buildings and/or terrain. Solar reflections are not geometrically possible towards the other two assessed dwellings. No impacts are predicted, and no mitigation is required.

Railways

- 5.268 Following a review of the available imagery and local topography, any solar reflections that are geometrically possible towards train drivers along the assessed 0.7 km section of railway line (refer to Figure 27, page 44 of the Glint and Glare Assessment, **Appendix 5.1**) are predicted to be significantly screened by intervening vegetation, buildings and/or terrain. No impacts are predicted, and no mitigation is required.

ZTV Viewpoints

- 5.269 The modelling has shown that solar reflections are geometrically possible towards six of the 17 assessed ZTV viewpoints.
- 5.270 Based on Pager Power's expertise, previous project experience and industry standard, ZTV viewpoints are considered to be less significant and less sensitive receptors than roads or residents within dwellings. This is in terms of both safety and amenity (road receptors are much more sensitive in terms of safety and dwelling-based receptors are more sensitive in terms of amenity since they are static observers and any reflection that is possible would not necessarily be fleeting).
- 5.271 Overall, no significant impacts on observers at the ZTV viewpoints are predicted and, as such, mitigation is not required.

Summary of Effects

- 5.272 The Proposed Development would introduce a large-scale renewable energy development within an area of land immediate adjoining the existing Maes Bach Solar Farm, albeit separated by Maesmawr Road.
- 5.273 The site sits within an enclosed landscape with substantial vegetative cover, which would be retained and enhanced as part of the Proposed Development. There would be no substantial earthworks required altering the existing varied topography. Also, given the existing character of the landscape, which includes the Maes Bach Solar Farm, there are not anticipated to be any significant effects upon the local landscape character due to the Proposed Development, albeit that there would be an increase in renewable energy infrastructure within the local landscape as a result.
- 5.274 In terms of views, it is anticipated that a low-lying development of this scale would cause some localised obstruction to near views. Particularly from the local public rights of way (PRoWs) that pass through or in close proximity to it. It is considered that the Proposed Development would give rise to a significant visual effect of **Major Adverse** (at winter Year 1 only) from a small number of these local PRoWs, including, DRE/47/2 and 3 which pass through the middle of the site and DRE/50b/1 and 2 which would be diverted around the southern perimeter.
- 5.275 Following the establishment of mitigation planting and the management of exiting vegetation throughout the site, it is anticipated that these significant effects would reduce to **Moderate Adverse** at summer Year 15, which is not significant. However, it is likely that more open and therefore noticeable views to the Proposed Development would remain where parts of the PRoW network pass in close proximity to it.
- 5.276 Similarly, from Representative Viewpoints the most obvious effects as a result of the Proposed Development would be upon those views nearest the site. At winter Year 1, two significant visual effects of **Major Adverse** have been identified, from Representative Viewpoints 2 and 3. These would reduce to **Moderate Adverse** at summer Year 15, i.e. not significant, with the establishment of the proposed mitigation planting and existing retained planting screening much of the Proposed Development from view, albeit that more noticeable and open views would likely remain in places.
- 5.277 However, the nature of views, beyond the immediate vicinity, would be partially or entirely obstructed by intervening vegetation and/or topographical variation. Therefore, it is anticipated that there would be no other significant visual effects from within the 5km study area used for the landscape and visual assessment, with any views to the Proposed Development also being seen as a continuation of the existing adjacent solar farm.
- 5.278 Overall, the quality and character of the landscape and visual resources would be maintained and would have the capacity to accommodate the Proposed Development without significant effects beyond those identified in very close proximity to the site or within it, where mitigation would be very difficult and not entirely appropriate when considering the characteristics of the site.

References

Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management & Assessment, 2013);

Landscape Character Assessment Guidance for England and Scotland (The Countryside Agency and Scottish Natural Heritage, 2002);

An Approach to Landscape Character Assessment (Natural England, 2014);

Technical Guidance Note 06/19, Visual Representation of Development Proposals (Landscape Institute, September 2019);

TGN 02-21: Assessing landscape value outside national designations;

Rhondda Cynon Taf Local Development Plan up to 2021 (adopted March 2011);

Planning Policy Wales (Edition 11, 2021);

Natural Resources Wales (2016). LANDMAP the Welsh landscape baseline;

Natural Resources Wales (2017). National Landscape Character Areas;

Technical Advice Note 5 (TAN5): Nature Conservation and Planning (2009).

MAES MAWR SOLAR FARM

Table 5.10: Summary of Likely Environmental Effects on Landscape and Visual Resources

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Construction phase (temporary effects)							
<i>Landscape resources and receptors</i>							
'Hendre' (CYNONVS572) Visual and Sensory aspect area; unnamed landscape habitat aspect area CYNONLH101; 'Designated Landscape Areas' (CYNONCL056) Cultural Landscape Aspect Area; 'Taff Valley' (CYNONGL015) Geological Landscape Aspect Area; and, 'Garth-fawr' (CYNONHL994) Historic Landscape aspect area	Low to Medium	Direct	Short Term Temporary	Small	Negligible to Minor adverse	Not Significant	
Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA)	Medium	Direct	Short Term Temporary	Small	Minor adverse	Not Significant	
Application Site	Medium	Direct	Short Term Temporary	Negligible	Negligible to Minor adverse	Not Significant	
<i>Visual receptors</i>							
PRoW DRE/47/2	High	Direct	Short Term Temporary	Medium	Moderate adverse	Not Significant	
PRoW DRE/47/3	High	Direct	Short Term Temporary	Medium	Moderate adverse	Not Significant	
PRoW DRE/50b/1	High	Direct	Short Term Temporary	Large	Major Adverse	Not Significant	

MAES MAWR SOLAR FARM

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
PRoW DRE/50b/2	High	Direct	Short Term Temporary	Large	Major Adverse	Not Significant	
PRoW DRE/51/2	High	Indirect	Short Term Temporary	Small	Minor to Moderate adverse	Not Significant	
PRoW DRE/53/2	High	Indirect	Short Term Temporary	Small	Minor to Moderate adverse	Not Significant	
Representative Viewpoints	N/A	N/A	N/A	N/A	N/A	N/A	Construction effects upon Representative Viewpoints anticipated to be same as that of operation winter Year 1.
Representative Viewpoint 1: Vehicles and Cyclists	Low to Medium	Indirect	Short Term Temporary	Small	Minor Adverse	Not Significant	
Representative Viewpoint 2: PRoW users	High	Direct	Short Term Temporary	Large	Major Adverse	Significant	
Representative Viewpoint 3: PRoW users	High	Indirect	Short Term Temporary	Large	Major Adverse	Significant	
Representative Viewpoint 4: PRoW users	High	Direct	Short Term Temporary	Medium	Moderate Adverse	Not Significant	
Representative Viewpoint 5: Vehicles and Cyclists	Low to Medium	Indirect	Short Term Temporary	Small	Negligible Adverse	Not Significant	
Representative Viewpoint 6: PRoW and POS users	High	Indirect	Short Term Temporary	Negligible	Negligible adverse	Not Significant	
Representative Viewpoint 7: Vehicles and Cyclists	Low to Medium	Indirect	Short Term Temporary	Small	Minor adverse	Not Significant	
Representative Viewpoint 8:	High	Indirect	Short Term Temporary	Small	Minor Adverse	Not Significant	

MAES MAWR SOLAR FARM

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
PRoW users							
Representative Viewpoint 9: PRoW users	High	Indirect	Short Term Temporary	Small	Minor Adverse	Not Significant	
Representative Viewpoint 10: PRoW users	High	Indirect	Short Term Temporary	Negligible	Minor Adverse	Not Significant	
Representative Viewpoint 11: PRoW users	High	Indirect	Short Term Temporary	No Impact	No Effect	N/A	
Representative Viewpoint 12: PRoW and vehicles	Low to High	Indirect	Short Term Temporary	Small	Minor Adverse	Not Significant	
Representative Viewpoint 13: Vehicles and Cyclists	Low to Medium	Indirect	Short Term Temporary	Negligible	Minor Adverse	Not Significant	
Representative Viewpoint 14: PRoW users	High	Indirect	Short Term Temporary	No Impact	No Effect	N/A	
Representative Viewpoint 15: PRoW users	High	Indirect	Short Term Temporary	Negligible	Minor Adverse	Not Significant	
Representative Viewpoint 16: PRoW users	High	Indirect	Short Term Temporary	Negligible	Minor Adverse	Not Significant	
Representative Viewpoint 17: PRoW users	High	Indirect	Short Term Temporary	Negligible	Negligible Adverse	Not Significant	
Operational phase (residual effects) Year 15							
<i>Landscape resources and receptors</i>							

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Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
<p>'Hendre' (CYNONVS572) Visual and Sensory aspect area; unnamed landscape habitat aspect area CYNONLH101; 'Designated Landscape Areas' (CYNONCL056) Cultural Landscape Aspect Area; 'Taff Valley' (CYNONGL015) Geological Landscape Aspect Area; and, 'Garth-fawr' (CYNONHL994) Historic Landscape aspect area</p>	Low to Medium	Direct	Long term	Negligible	Negligible to Minor Adverse	Not Significant	
Efail Isaf, Garth and Nantgarw Western Slopes Special Landscape Area (SLA)	Medium	Direct	Long Term Temporary	Small	Minor adverse	Not Significant	Long term beneficial effects as a result of habitat creation and management.
Application Site characteristics (Arable land)	Medium	Direct	Long Term Temporary	Small	Negligible to Minor beneficial	Not Significant	
<i>Visual receptors</i>							
PRoW DRE/47/2	High	Direct	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	
PRoW DRE/47/3	High	Direct	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	

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Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
PRoW DRE/50b/1	High	Direct	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	
PRoW DRE/50b/2	High	Direct	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	
PRoW DRE/51/2	High	Indirect	Long Term Temporary	Medium	Moderate Adverse	Not Significant	
PRoW DRE/53/2	High	Indirect	Long Term Temporary	Small	Minor to Moderate Adverse	Not Significant	
Representative Viewpoint 1: Vehicles and Cyclists	Low to Medium	Indirect	Long Term Temporary	Small	Minor Adverse (winter Year 1) Negligible Adverse (summer Year 15)	Not Significant	
Representative Viewpoint 2: PRoW users	High	Direct	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	
Representative Viewpoint 3: PRoW users	High	Indirect	Long Term Temporary	Large (winter Year 1) Medium (summer Year 15)	Major Adverse (winter Year 1) Moderate Adverse (summer Year 15)	Significant (winter Year 1 only)	
Representative Viewpoint 4: PRoW users	High	Direct	Long Term Temporary	Medium	Moderate Adverse (winter Year 1)	Not Significant	

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Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
					Minor Adverse (summer Year 15)		
Representative Viewpoint 5: Vehicles and Cyclists	Low to Medium	Indirect	Long Term Temporary	Small	Negligible Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 6: PRoW and POS users	High	Indirect	Long Term Temporary	Negligible	Negligible adverse (winter Year 1) No Effect (summer Year 15)	Not Significant	
Representative Viewpoint 7: Vehicles and Cyclists	Low to Medium	Indirect	Long Term Temporary	Small	No Effect to Minor adverse (winter Year 1 and summer Year 15)	Not Significant	Adverse effects at parts of road where views are available only.
Representative Viewpoint 8: PRoW users	High	Indirect	Long Term Temporary	Small	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 9: PRoW users	High	Indirect	Long Term Temporary	Small	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 10: PRoW users	High	Indirect	Long Term Temporary	Negligible	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 11: PRoW users	High	Indirect	Long Term Temporary	No Impact	No Effect	N/A	No part of proposed development discernible
Representative Viewpoint 12: PRoW and vehicles	Low to High	Indirect	Long Term Temporary	Small	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	

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Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Representative Viewpoint 13: Vehicles and Cyclists	Low to Medium	Indirect	Long Term Temporary	Negligible	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 14: PRoW users	High	Indirect	Long Term Temporary	No Impact	No Effect	N/A	No part of proposed development discernible
Representative Viewpoint 15: PRoW users	High	Indirect	Long Term Temporary	Negligible	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 16: PRoW users	High	Indirect	Long Term Temporary	Negligible	Minor Adverse (winter Year 1 and summer Year 15)	Not Significant	
Representative Viewpoint 17: PRoW users	High	Indirect	Long Term Temporary	Negligible	Negligible Adverse (winter Year 1 and summer Year 15)	Not Significant	