Technical Appendix 1A: Landscape and Visual Appraisal

Penpergwm Solar Farm

25/06/2021

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STATEMENT OF PURPOSE

This draft Landscape and Visual Appraisal is being published to accompany pre-application consultation carried out under Articles 8 and 9 of the Development of National Significance (Procedure) (Wales) Order 2016. The formal pre-application consultation runs until 25th August 2021. This report is to be read in conjunction with the accompanying reports and plans:

- *Volume 2: Planning Application Drawings*
- *Volume 3, Technical Appendix 1B: Green Infrastructure Strategy*
- *Technical Appendix 2A: Ecological Assessment (EcA)*
- *Volume 3, Technical Appendix 2B: Ecological Design Strategy ("EDS")*
- *Technical Appendix 3: Cultural Heritage Impact Assessment (CHIA)*
- *Volume 3, Technical Appendix 10A: Tree Constraints*
- *Volume 3, Technical Appendix 10B: Arboricultural Impact Assessment and Tree Protection Plan*

EXECUTIVE SUMMARY

1.1. Neo Environmental Ltd has been appointed by Great House Energy Centre Ltd (the "Applicant") to undertake a Landscape and Visual Appraisal (LVA) for a proposed solar farm development and associated infrastructure (the "Proposed Development") on lands circa 0.5km north of Penpergwm c. 3.9km southeast of Abergavenny, Monmouthshire (the "Application Site").

1.2. The introduction of the Proposed Development will locally alter the existing agricultural use of the Application Site to a landscape comprising a solar farm with associated infrastructure, mixed agricultural land use and new hedgerow and tree planting. During operation, the Proposed Development will initially have a **Moderate adverse** landscape effect on the characteristics of the Application Site. Although mitigation planting will help contain the lower elevations of the Proposed Development.

1.3. The Proposed Solar Farm will directly affect Landscape Character Areas (LCA) 39: Raglan Hinterland and LCA 53: Northern Hills and will result in a solar farm located over 70.03 hectares (ha) of this landscape, with only c. 17.61 hectares of the landscape under the solar arrays themselves. This will result in a localised direct **Moderate adverse** landscape effect within c. 2km and a **Minor adverse** effect across the wider extents of these landscapes.

1.4. In terms of designated landscapes, the introduction of the Proposed Development will indirectly affect a small eastern part of the Brecon Beacons National Park (BBNP) and the Blaenavon Industrial Landscape World Heritage Site (BILWHS). During operation, effects on a localised to moderate geographical area of the eastern parts of these designated landscapes will range from **Minor adverse** to **No change**. It is considered unlikely that the Special Qualities of the BBNP and the Outstanding Value of the BILWHS will be compromised by the introduction of the Proposed Development.

1.5. Potential views of the Proposed Development will be experienced by a number of local receptors including some of the nearest residential receptors and passing transient receptors on recreational routes and minor roads. Longer distance views will be largely limited to a small part of the overall Proposed Development experienced from lower lying areas to the south and higher elevations to the south and southwest within the BBNP and BILWHS.

1.6. The lower elevations of the solar farm and associated structures will be partly contained by the mix of hedgerows and trees within the boundaries of the Application Site and surrounding farmland, along with screening by built elements and local topographical variations. The higher elevations of the Proposed Development will be evident in longer distance views largely to the south, southeast and southwest.

1.7. The appraisal identifies operational **Major/Moderate adverse** visual effects from Viewpoints 1 and 2 from the Public Rights of Way (PRoW) within the Application Site. **Moderate adverse** visual effects are identified from the recreational routes and residential receptors represented by Viewpoints 3, 5, and 6 within 2km. Beyond a distance of c. 2km where the

Proposed Development is evident in views, visual effects largely reduce to Minor adverse and include effects experienced from The Blorenge (Viewpoints 14 and 15).

1.8. Cumulative effects are largely limited to localised interactions with the baseline of existing pylon lines and the presence of Manor Solar Farm within LCA 53: Northern Hills which result in Minor adverse cumulative landscape effects on LCA 39: Raglan Hinterland and LCA 53: Northern Hills. Minor adverse to no change cumulative visual effects are anticipated for the majority of visual receptors considered in the appraisal.

1.9. Mitigation measures are proposed to reduce any potential landscape and visual effects. The existing trees and hedgerows around the Application Site will be retained as far as is practicable. Trees will be introduced along sections of the north-western and southern western boundaries. Hedgerows and infill planting will also be introduced along open sections of the boundaries to help screen inward views and provide additional biodiversity opportunities. These mitigation and biodiversity measures alongside the green infrastructure proposals respond to Policies 17 and 18 of Future Wales – The National Plan 2040 and Planning Policy Wales 11 (PPW 11).

1.10. As the mitigation planting becomes established it will help contain elements of the Proposed Development at lower elevation. At the end of the Proposed Development's lifespan, the predicted effects are reversible and a process of decommissioning and restoration will commence. This will involve removal of all development infrastructure, retaining and protecting all existing and established green infrastructure and restoration of the lands to accommodate its current use.

1.11. The Proposed Development has been designed to demonstrate accordance with Policies 17 and 18 of Future Wales: The National Plan 2040 and Planning Policy Wales 11 (PPW 11).

INTRODUCTION

Background

1.12. Neo Environmental Ltd has been appointed by Great House Energy Centre Ltd to undertake a Landscape and Visual Appraisal (LVA) for a proposed solar farm development and associated infrastructure (the "Proposed Development") on lands at Penpergwm and c. 3.9km southeast of Abergavenny, Monmouthshire (the "Application Site").

1.13. Please see **Figure 5 of Volume 2: Planning Application Drawings** for the layout of the Proposed Development.

1.14. This report has been undertaken in compliance with the principles of Landscape and Visual Impact Assessment (LVIA) in accordance with GLVIA3[1]. This LVA provides an appraisal of the potential effects of the Proposed Development on the existing landscape and visual amenity of the Application Site and surrounding area. The appraisal methodology for the LVA is detailed in **Appendix 1C**.

1.15. This appraisal deals with landscape and visual effects separately, including consideration of cumulative landscape and visual effects. The LVA is supported by **Figures 1.1** to **1.27** found within **Appendix 1A** including the **Green Infrastructure Figures** (**Figure 1.23 – 1.25**) which shows the landscape mitigation measures incorporated into the overall design scheme.

Development Description

1.16. The Proposed Development consists of the construction of a 40MW solar farm and will comprise PV panels mounted on metal frames, inverter and transformer units, new access tracks, underground cabling, perimeter fencing with CCTV cameras and access gates, a temporary construction compound and all ancillary grid infrastructure and associated works.

Site Description

1.17. The Application Site is located on land 0.5km north of Penpergwm and c. 3.9km southeast of Abergavenny, Monmouthshire; the approximate centre point of which is Grid Reference E332954, N211435. Comprising 14 agricultural fields, the Application Site measures 70.03 hectares (ha) in total with only c. 17.61 hectares of the landscape under the solar arrays themselves. See **Figure 1 of Volume 2: Planning Application Drawings** for details.

1.18. The Application Site is not located within any nationally or locally designated landscapes, however the Brecon Beacons National Park (BBNP) is located c. 3.65km to the west and c.

[1] Landscape Institute and the Institute of Environmental Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

3.8km the north of the Application Site's outer boundary, while the Blaenavon Industrial Landscape World Heritage Site (BILWHS) is located c. 3km west of the Application Site.

1.19. Land within the Application Site itself is undulating, ranging between 61 – 140m Above Ordnance Datum (AOD) and consists of fields typically of medium scale, bound by a mixture of grassy field margins, semi-mature hedgerows, and intermittent trees (see **Figure 3 of Volume 2: Planning Application Drawings** for field numbers).

1.20. The Application Site is in an area with existing electricity infrastructure with a pylon line crossing Field 3 to the north and running in a north – south direction between Fields 6 and 7 and to the west of Field 8.

1.21. The local area is largely agricultural in nature, punctuated by individual properties and farmsteads; the nearest residential areas are the villages of Penpergwm and The Bryn; located 0.5km and 0.9km north respectively. Recreational Routes include two Public Rights of Way (PRoW) which pass through Fields 8, 9, 10 and 11 in the southern section of the site and an Other Route with Public Access (ORPA) which passes from Great House along the eastern boundary of Field 14 and through the treeline on the southern border of Fields 5, 6 and 7. Another PRoW passes along the northern boundary of Fields 1, 3 and 4.

1.22. While there are a number of drains and watercourses throughout the Application Site, including a small tributary of the Ffrwd Brook bordering Field 11, the site is entirely contained within Flood Zone A, an area described as having a "*Low probability*" of flooding.

1.23. The Application Site will be accessed via an improved farm access situated on the southern boundary. Traffic will approach the site entrance from the south using a local road from Penpergwm for approximately 800m. Traffic will be routed to Penpergwm from the north via the B4598. This road connects to the strategic road network south of Abergavenny at the A40 / A465 interchange.

Purpose of this Report

1.24. This LVA provides an appraisal of the potential effects of the Proposed Development on the existing landscape and visual amenity of the Application Site and surrounding area. In accordance with the GLVIA3 guidance, the level of appraisal is considered proportional to the development's scale, type and likely effects.

1.25. While landscape and visual effects are closely related, they are separately assessed in this appraisal:

- Landscape effects as a result of the Proposed Development may be defined as changes in the physical landscape which may give rise to changes in its character and quality, landscape patterns, designations, features and elements;

- Visual effects as a result of the Proposed Development comprise changes to the composition of existing views and visual amenity experienced by people, such as residents, recreational or vehicular users; and

- Cumulative landscape and visual effects with other similar existing consented not constructed or Developments (pending planning) in the surrounding area will also be considered where appropriate. Cumulative effects are defined by the GLVIA3 paragraph 7.2 as:

"Result from additional changes to the landscape or visual amenity caused by the Proposed Development in conjunction with other developments (associated with or separate to it), actions that occurred in the past, present or are likely to occur in the foreseeable future."

1.26. These effects may have a direct or indirect, adverse (negative), beneficial (positive) or neutral nature. They may vary in duration from short to long-term and have irreversible or reversible effects.

Statement of Authority

1.27. This LVA was prepared by Graham Cameron BSc MA and Naomh Turbett BSc MLA CMLI. Graham Cameron is a Landscape Architect and Associate Member of the Landscape Institute with over seven years post qualification consultancy experience. Prior to joining Neo Environmental Graham has specialised in landscape and visual impact assessment, appraisal, and landscape planning projects including renewable energy, linear infrastructure, large infrastructure, mining, and commercial and residential projects in the UK. While at Neo Environmental Graham has conducted landscape and visual impact assessments, appraisals and landscape plans for a wide variety of project types including energy, residential and commercial projects across the UK and Ireland.

1.28. Naomh Turbett is a Landscape Architect and Chartered Member of the Landscape Institute with over seven years post qualification consultancy experience. Prior to joining Neo Environmental Naomh has a range of experience in landscape design projects such as housing, public path network, community growing spaces and public parks, prepared park management plans and undertook landscape and visual impact assessment and appraisal projects including renewable energy and infrastructure on behalf of Scottish Water. While at Neo Environmental Naomh has conducted landscape and visual impact assessments, appraisals and landscape plans for a variety of project types.

Scope of the Appraisal

1.29. The study area for the appraisal is defined as a 5km radius from the boundaries of the Application Site and extends to include views from 'The Blorenge' c. 5.8km west of the Proposed Development. The study area is deemed proportional to the size and scale of the

Proposed Development and was confirmed with Monmouthshire Council (Andrew Nevill) via email and phone call in March 2021.

1.30. A Zone of Theoretical Visibility (ZTV) map was produced indicating areas where the Proposed Development may be visible within the study area. The ZTV was based on bare earth topography and does not therefore take account of potential screening by intervening vegetation and buildings. The ZTV is used as a tool for understanding where potential visual effects may occur. Receptors which are outside the ZTV will not be affected by the Proposed Development and are therefore not considered further in this appraisal. The ZTV and study area are shown on **Figure 1.7.**

Effects Assessed

1.31. The following effects have been assessed in accordance with the principles of GLVIA3:

- Effects on the physical landscape of the Application Site;
- Effects on landscape character directly affected by the Proposed Development;
- Effects on LANDMAP aspect areas within 2km;
- Effects which could be of relevance to the reasons for designation as described by key characteristics and special qualities of designated landscapes within the study area;
- Effects on visual receptors (people) at representative viewpoints;
- Effects on visual receptors within settlements;
- Effects on visual amenity experienced by visual receptors at publicly accessible locations in the vicinity of residential properties located within 1km of the Proposed Development;
- Effect on views experienced by visual receptors travelling along roads and recreational routes within the study area; and.
- Cumulative landscape and visual effects (including combined, successive and sequential visual effects).

Effects Not Considered

1.32. On the basis of the desk-based appraisal and fieldwork undertaken, the professional judgment of the LVA team, experience from other relevant projects and policy guidance or standards, the following topic areas are not considered within this appraisal:

- Effects on landscape character and visual receptors beyond a 5km radius from the Proposed Development (with account given to longer distance views experienced from the Blorenge c. 5.8km to the west), where it is judged that potential adverse effects are unlikely to occur;
- Effects on designated landscapes beyond a 5km radius from the Application Site, from where it is judged that potential adverse effects on key characteristics and/or special qualities, or views are judged unlikely to occur;
- Effects on landscape and visual receptors (people) that have minimal or no theoretical visibility as indicated by the ZTV and accounted for during fieldwork, and are therefore unlikely to experience the Proposed Development;
- Effects on residential views experienced by the Landowners for the Proposed Development, namely Great House Farm, this is on the basis that the landowners have a vested interest in the Proposed Development; and
- Cumulative landscape and visual effects beyond 5km, where it is judged that potential adverse cumulative effects are unlikely to occur.

Assumptions / Constraints

1.33. It is necessary to select a range of representative viewpoints across the study area as the scope of the appraisal does not allow for all potential visual receptors to be assessed individually. As part of the viewpoint selection process a consultation with Monmouthshire Council took place on July 2020 and March 2021 as detailed below and in **Table 1-1**. Many receptors are located within private lands, e.g. residences, and cannot be accessed, therefore, where required, a nearby representative point was chosen on the public road. Variations in the weather can bring about differences in the degree of visibility experienced within the Application Site or from a viewpoint on the day of the field work, and any other given day. Fieldwork, including baseline photography was carried out in September 2020 under sunny and overcast conditions when deciduous trees were in full leaf.

1.34. This appraisal only considers the Proposed Development as per the site layout in **Figures 1 of Volume 2: Planning Application Drawings.**

Supporting Documents

1.35. The report is supported by the following Figures and Technical Appendices:

Appendix 1A: Figures;

- Figure 1.1 – LANDMAP Aspect Areas: Visual and Sensory

- Figure 1.27 – Viewing Platform
- Figure 1.28 – Visual Receptors with ZTV (forthcoming)
- **Appendix 1B: Plates;**

– Site Photographs 1 to 5

- **Appendix 1C: Methodology**

Consultation

1.36. Consultation with Monmouthshire Council (Collette Bosley and Andrew Nevill) was undertaken in July 2020 and March 2021. The following requests were made:

- Consideration of the Monmouthshire Landscape Study (2001). Effects on Landscape Character Areas (LCAs) 39: Raglan Hinterland and 53: Northern Hills are considered in the appraisal.
- Additional viewpoints, suggestions received from Monmouthshire Council are detailed in **Table 1-1** below. Where practicable these have been included and an explanation given where this has not been possible or an alternative viewpoint has been used.

Table 1-1 – Viewpoint requests[2]				
Location Name	Approx. Co-ordinates		Reason for selection	Approx. Distance
	X	Y		
The Blorenge	326983	211844	Included as Viewpoint 15 - The Blorenge.	5.8km
Punchbowl	328260	211615	Represents views experienced by recreational users at the Punchbowl part of the Iron Mountain Trail. Views looking northeast towards the site are foreshortened by landform and screened by vegetation.	4.6km
Hills Tramline	327785	211637	Included as Viewpoint 14 - Iron Mountain Trail on eastern side of the Blorenge. Views looking east - northeast towards the Application Site from tramlines on the western side of the Blorenge and from the lower northern slopes (the winch house) will be screened by landform and vegetation.	4.9km
Llanfoist canal	328604	213302	Representative of recreational views experienced from the Llanfoist canal. In views looking west from the canal the entirety of the Application Site is screened by intervening landform. A representative viewpoint for the Monmouthshire and Brecon Canal/NCN 49 is included as Viewpoint 12.	4.5km

[2] All viewpoint locations requested by Monmouthshire Council.

Settlements and hamlets in elevated locations with captured views	-	-	Potential effects on residential views experienced from settlements within the study area will be considered as part of the appraisal. Representative viewpoints include Viewpoints: 4. B4598/Penpergwm Lodge; 7. Coed Morgan PRoW; 11. A4042 south of Llanover and 12. PRoW near Upper Llanover. Viewpoints from the following locations were not included given intervening screening by landform and vegetation; The Bryn, Abergavenny, Brynygwenin, Llanddewi Rhydderch, Llanfair Kilgeddin, Llanellen, Lower Llannover.	-
PRoW (e.g Iron Mountain trail and Usk Valley Walk)	-	-	Potential effects on recreational routes within the study area will be considered as part of the appraisal. PRoW close to the Application Suite are included as Viewpoints: 1. PRoW near Great House, 2. Minor road/PRoW north of Tyler's Wood, 3. South of Ffos Farm. Views experienced from the Iron Mountain Trail are represented by Viewpoints 14. Iron Mountain Trail on eastern side of the Blorenge and 15. The Blorenge. Views experienced from the Usk Valley Walk are represented by Viewpoint 8. Usk Valley Walk.	-
NCN along canal (Monmouthshire Brecon Canal)	330057	330057	Included as Viewpoint 10 - Monmouthshire and Brecon Canal/NCN 49.	3.2km

Little Skirrid (including paths up)	333113	218279	Potential effects on recreational receptors (walkers). Much of the site is foreshortened by landform and vegetation at a distance beyond 5km (the summit is c.6.5km to the north). Adverse visual effects at this distance on walkers on the slopes and summit of Little Skirrid (Ysgyryd Fawr) are considered unlikely and this location has therefore not been included. Viewpoint 9. The PRoW at Ysgryd Fach has been included and is representative of elevated views to the north within 2km of the Application Site.	6.5km
Sugarloaf (paths up to)	-	-	Potential effects on recreational receptors (walkers). Paths up the southern slopes are over 5.5km northwest of the Application Site. Views looking southeast towards the Application Site from these paths will be screened by landform. Adverse visual effects on walkers on the paths up Sugarloaf and from the summit (beyond 9km) are considered unlikely, therefore this location has not been included.	5.5km

Historic parks and gardens	-	-	There are several registered parks and gardens with 5km of the Application Site. However, it is considered unlikely that the introduction of the Proposed Development would adversely affect character and setting. It was noted to check potential visibility from Coldbrook House (c. 1.4km to the west) and Pant-y -Goitre (c. 1.8km to the southeast). Coldbrook House is outside the ZTV, theoretical visibility is indicated, however actual views looking northwest towards the Application Site are filtered and screened by mature vegetation. A viewpoint has therefore not been included from these locations.	
Small private aerodrome (nr Hardwick Inn /Raglan Rd)	331596	211142	This location is not within the ZTV and has therefore not been included as a viewpoint, however consideration will be given to glint and glare.	1.1km
Hang gliding club	326983	211844	Included as Viewpoint 15 - The Blorenge. Consideration will be given to glint and glare.	5.8km
Hardwick Inn	331486	211447	This location is not within the ZTV and has therefore not been included as a viewpoint.	1.30km
A and B roads	-	-	Transient routes will be considered including A and B roads, minor road network railway line (Abergavenny to Pontypool).	-

Explore recreational routes between Llanover and Llanover Church	-	-	Transient views from the A4042 south of Llanover are represented by Viewpoint 11. Views from the recreational routes Llanover and Llanover Church are represented by **Plates 4 and 5 of Appendix 1B**.	-

1.37. Consultation with the Brecon Beacons National Park Authority (Tracy Nettleton) was undertaken in March 2021. It was noted that:

- The proposed 5km study area and inclusion of the Blorenge was broadly appropriate;
- Viewpoints identified within the National Park were broadly appropriate;
- In terms of potential glint and glare effects within the Brecon Beacons National Park (BBNP), the park is located outside the ground based receptor study zone, so is not considered within the Glint and Glare Assessment.
- A request was made that the number of photomontages be increased and that photomontages including planting at circa Year 15. Two photomontages are included from within the National Park including Viewpoint 12 Near Upper Llanover and Viewpoint 15 The Blorenge. It is considered likely that photomontages for these locations are representative of similar views experienced from within the BBNP. Given the intervening distance it is considered likely that mitigation measures will be seen as a distant feature and have therefore not been included at circa Year 15.

Legislation, Policy and Guidance

1.38. National and Local Planning Authority (LPA) policies of relevance to landscape and visual issues in relation to the Proposed Development and the 5km study area are outlined below.

Future Wales -The National Plan 2040

1.39. The Welsh Assembly Government published the new policy document Future Wales – The National Plan 2040 on 24th February 2021. It includes specific targets for the whole of Wales and sets out that

"in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency".

1.40. Along with the eleventh edition of Planning Policy Wales (PPW 11), it sets out that,

"the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs" and that the planning system should "maximise renewable and low carbon energy generation".

1.41. The Proposed Development which can be described as a large-scaled energy development, is considered a 'Developments of National Significance'. Policies 17 and 18 should be considered in the determination of DNS projects, they set Future Wales' approach to renewable energy generation across Wales.

"Policies 17 and 18 contain strategic spatial and detailed-criteria based policies respectively and should be considered together in the determination of applications, along with detailed advice on assessing benefits and impacts in Planning Policy Wales".

1.42. Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure supports the principle of developing renewable and low carbon energy from all technologies and at all scales as means to meet Wales' international commitments and its' need to meet the target to generate 70% of consumed electricity by renewable means by 2030.

1.43. In terms of landscape impact, policy 17 states:

"Applications for …solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment."

1.44. Policy 18 - Renewable and Low Carbon Energy Developments of National Significance, sets out eleven criteria that DNS must demonstrate that they are in accordance with. The relevant criteria in terms of this assessment are:

"1. outside of the Pre-Assessed Areas for wind developments and everywhere for al other technologies, the proposed development does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);

2. there are no unacceptable adverse visual impacts on nearby communities and individual dwellings.

11. there are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

The cumulative impacts of existing and consented renewable energy schemes should also be considered."

Planning Policy Wales 11 (PPW 11)

1.45. Planning Policy Wales (PPW) [3] sets out the land use planning policies of the Welsh Government.

1.46. Planning Policy Wales identifies five *National Sustainable Placemaking Outcomes*. *Generating its own renewable energy* falls under the outcome *Growing Our Economy in a Sustainable Manner*. By generating its own renewable energy the *PPW Themes and Well-being Goals* that are being addresses are; Strategic and Spatial Choices, Productive and Enterprising, Globally Responsible, Prosperous and Resilient. The PPW recognises that prosperity can be achieved through investing in renewable and low carbon energy sources and that …

"Wales' topography also lends itself to renewable energy production."

It also sets out that at a national scale a healthier Wales can be achieved as a result of generating energy from non-carbon sources and at a global scale Wales will be acting responsibly by reducing their carbon footprint through the promotion of renewable energy.

1.47. In paragraph 5.9.21 of the PPW 11 it states;

"Prior to an application being submitted, developers for renewable and low carbon energy developments should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures."

1.48. In paragraph 6.2.5 of the PPW 11 it states that;

"The quality of the built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design."

1.49. In paragraph 6.3.3 of the PPW 11 it states that;

[3] Planning Policy Wales. Available at: https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf

"All the landscapes of Wales are valued for their intrinsic contribution to a sense of place, and local authorities should protect and enhance their special characteristics, whilst paying due regard to the social, economic, environmental and cultural benefits they provide, and to their role in creating valued places."

1.50. In paragraph 6.3.5 of the PPW 11 it states that;

"The statutory landscape designations that apply in Wales are National Parks, and AONBs. Planning authorities have a statutory duty to have regard to National Parks and AONB purposes. This duty applies in relation to all activities affecting National Parks and AONBs, whether those activities lie within, or in the setting of, the designated areas."

1.51. In paragraph 6.3.9 of the PPW 11 it states that;

"The special qualities of designated areas should be given weight in the development planning and the development management process. Proposals in National Parks and AONBs must be carefully assessed to ensure that their effects on those features which the designation is intended to protect are acceptable. The contribution that development makes to the sustainable management of the designated area must be considered."

Planning Policy Wales (PPW) Technical Advice Note (TAN) 12: Design

1.52. TAN 11[4] provides technical advice to supplement the policy set out in Planning Policy Wales (PPW). Paragraph 5.5.2 states:

1.53. *"In general terms, good design will almost always be dependent on working within the natural constraints and the historic character of the landscape and this should be the starting point from which the design of development evolves. The aim should be to achieve good design solutions which maximise the natural landscape assets and minimise environmental impact on the landscape. It is particularly important that proposals to amend or create new landscape are not considered as an afterthought and that the long-term impact of development on the landscape is fully understood. The quality of implementation and the long- term management of changes implicit in planting schemes are fundamental to a scheme's success."*

Local Planning Policy

1.54. The Application Site is covered by the Monmouthshire County Council Adopted Local Development Plan [5], Adopted February 2014. Selected polices relevant to landscape and visual considerations include:

[4] TAN 12: Design. Available at https://gov.wales/sites/default/files/publications/2018-09/tan12-design.pdf

[5] Monmouthshire Council (2014) Local Development Plan. Available at https://www.monmouthshire.gov.uk/app/uploads/2017/05/Adopted-Local-Development-Plan-with-PDF-tags.pdf

Policy SD1 - Renewable Energy

"Renewable energy schemes will be permitted where:

(1) There are no unacceptable adverse impacts upon the landscape, townscape and historic features and there is compliance with Policy LC5, with regard to protection and enhancement of landscape character;

(2) There are no unacceptable adverse impacts on biodiversity;

(3) There are no unacceptable adverse impacts on the amenities of nearby residents by way of noise, dust, odour or increases in traffic;

(4) The wider environmental, economic, social and community benefits directly related to the scheme outweigh any potentially adverse impacts; and

(5) The distinct identity of Monmouthshire will not be compromised.

For all types of renewable energy, cumulative impacts will be an important consideration where there are other renewable energy schemes currently operating in the area.

When the technology is no longer operational there is a requirement to decommission, remove the facility and complete a restoration of the site to its original condition."

Policy LC3 – Brecon Beacons National Park

"Development in the vicinity of the Brecon Beacons National Park will only be permitted where it would:

a) preserve or enhance the landscape setting, as defined through the LANDMAP process;

b) have no serious adverse effect on significant views into and out of the National Park.

Development that would cause unacceptable harm to the qualities that justify the designation of the Brecon Beacons National Park or its setting will not be permitted."

Policy LC5 - Protection and Enhancement of Landscape Character

"Development proposals that would impact upon landscape character, as defined by LANDMAP Landscape Character Assessment, must demonstrate through a landscape assessment how landscape character has influenced their design, scale, nature and site selection.

Development will be permitted provided it would not have an unacceptable adverse effect on the special character or quality of Monmouthshire's landscape in terms of its visual, historic, geological, ecological or cultural aspects by:

a) Causing significant visual intrusion;

b) Causing significant adverse change in the character of the built or natural landscape;

c) Being insensitively and unsympathetically sited within the landscape;

d) Introducing or intensifying a use which is incompatible with its location;

e) Failing to harmonise with, or enhance the landform and landscape; and /or

f) Losing or failing to incorporate important traditional features, patterns, structures and layout of settlements and landscapes of both the built and natural environment.

Particular emphasis will be given to those landscapes identified through the LANDMAP Landscape Character Assessment as being of high and outstanding quality because of a certain landscape quality or combination of qualities."

Policy GI1 – Green Infrastructure

" Development proposals will be expected to maintain, protect and enhance Monmouthshire's diverse green infrastructure network by:

a) Ensuring that individual green assets are retained wherever possible and integrated into new development. Where loss of green infrastructure is unavoidable in order to secure sustainable development appropriate mitigation and/or compensation of the lost assets will be required;

b) Incorporating new and /or enhanced green infrastructure of an appropriate type, standard and size. Where on-site provision of green infrastructure is not possible, contributions will be sought to make appropriate provision for green infrastructure off-site.

APPRAISAL METHODOLOGY

Methodology

1.55. The Environmental Impact Assessment (EIA) Screening Opinion provided by Planning Inspectorate (PINS) Wales sets out the reasons why the Proposed Development does not constitute EIA development and therefore why an EIA is not required to support the planning application.

1.56. For non-EIA development types, the Landscape Institute (LI) GLVIA3 Statement of Clarification[6] states that:

"*In carrying out appraisals, the same principles and process as LVIA may be applied but, in so doing, it is not required to establish whether the effects arising are, or are not, significant given that the exercise is not being undertaken for EIA purposes.*"

1.57. The scope of the LVA methodology found within **Appendix 1C** reflects the fact that the Proposed Development does not require EIA in the following ways:

- This appraisal does not provide judgement on the relative level of 'significance' of landscape and visual effects, given this terms relation to formal EIA; and
- The term 'degree' of landscape or visual effect is used rather than 'significance'.

1.58. The appraisal of landscape and visual effects considers both the sensitivity of the landscape or visual receptor and the magnitude of effect. **Appendix 1C** provides details of the criteria considered in judging the identified aspects of sensitivity (combining judgements of susceptibility and value) and magnitude of change (combining judgements of size/scale, geographical extent, duration and reversibility), and the grades used to describe each. It explains how these judgements are combined to make an informed professional judgment on the degrees of landscape and visual effect.

1.59. The asserted '*degrees of effects*' used within this LVA are provided in **Table 1-2** below. These effects are attained by combining the level of sensitivity with the level of magnitude of change to provide the effects upon each receptor. These effects are identified as **Major, Major/Moderate, Moderate, Moderate/Minor, Minor or No Change**, either direct or indirect effects and can be characterised as adverse or beneficial. This matrix approach, while helpful, is not a prescriptive tool, as at times the table may not provide a clear correlated degree of effect which is where professional judgment plays an important role in determining the overall degree of effect.

[6] Landscape Institute Statement of Clarification 1/13, 10th June 2013

Table 1-2: Degree of landscape and visual effects

Sensitivity (Susceptibility & Value)	Magnitude of Change				
	High	Medium	Low	Negligible	None
High	Major	Major/ Moderate	Moderate	Moderate/ Minor	No Change
Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor	No Change
Low	Moderate	Moderate/ Minor	Minor	Minor/No Change	No Change
Negligible	Moderate/ Minor	Minor	Minor/ No Change	No Change	No Change
None	No Change	No Change	No Change	No Change	No Change

Duration of Effects

1.60. For the purposes of this appraisal, all construction and decommissioning effects are considered to be short term, temporary and reversible. All operational effects are considered long term and reversible.

BASELINE CONDITIONS

1.61. This section presents an overview of the landscape and visual baseline within the study area.

Landscape Baseline

1.62. The purpose of collecting and describing the landscape baseline data for the study area is to help establish the context of the landscape into which the Proposed Development is seeking to be located, later using this to assess the potential effects of the Proposed Development.

Application Site

1.63. The Application Site comprises 14 largely rectilinear arable fields delineated by internal hedgerows with individual trees and covers an area of circa. 70.03 hectares. The topography of the site is undulating with an elevation range of approximately 61m to 140m AOD, higher areas are found in the western part of the site. The farmstead Great House with associated properties and Great House residential property lies between the northeastern and south, south-eastern parts of the site.

1.64. The north-western part of the Application Site is bound at lower elevation by a watercourse and mature treeline. The north-eastern part of the site is bound by lower formal hedgerows and individual trees along the access to Great House. The southeastern boundaries are largely characterised by lower hedgerows with the south parts of Fields 8 and 11 bordering a farm access and minor road respectively. The southwestern part of the site is bound at lower elevation by a mature tree line with the western site boundary defined by a mix of mature treeline and hedgerow.

1.65. Two Public Rights of Way (PRoW), and an Other Route with Public Access (ORPA) are found in the southern part of the site. Part of PRoW 368/55/1 passes through Fields 8 and 9 to the south connecting Great House with the access to farmsteads to the south. Part of PRoW 368/56/1 passes through Fields 10 and 11 in the southeastern part of the site connecting Great House with the minor road on the southeastern site boundary. The ORPA passes From Great House between Fields 7 and 9 and through the treeline on the southern border of Fields 5, 6 and 7.

1.66. Recreational routes are also located close to the Application Site, PRoW 368/182/1 passes along the northern boundary of Fields 1, 3 and 4. PRoW 368/10/1 and, 368/11/1 pass with c. 0.2km of Great House and eastern Fields 4 and 10, providing recreational connectivity north of the Application Site.

1.67. In terms of existing electricity infrastructure, a pylon line traverses the Application Site over Fields 3, 6 and 12 in a north northwestern to south southeastern trajectory.

Study Area

1.68. The study area extends to a 5km radius from the site boundaries of the Application Site and includes the Blorenge[7] c. 5.8km to the southwest. The entirety of the study area is located within the Monmouthshire Council Area.

1.69. The Application Site is set within a wider, predominately settled, rolling lowland rural valley landscape influenced by a number of existing electricity infrastructure features. The immediate landscape around the site to the north, east and south comprises agricultural fields delineated by a mix of mature informal hedgerows and individual trees. Pockets of mixed woodland are found to the south and east.

1.70. The Usk River south of the Application Site largely divides the rolling lowland to the north and west and the uplands to the west and southwest which lie within the Breacon Beacons National Park (BBNP) and the Blaenavon Industrial Landscape World Heritage Site (BILWHS). The hills of the uplands are predominantly open moorland on higher ground with pasture and woodland on lower slopes. The highest points in the study area include the Blorenge (552m AOD) within the BBNP 5.8km southwest and Ysgyrd Fach (250m) 2.3km northwest of the site. Lower elevations cover the Usk valley floor, and the Monmouthshire Brecon Canal, located on the eastern edge of the BBNP (within c. 2.9km at the closest point).

1.71. Settlements are largely associated with the river valley and main transport routes; the largest population centre Abergavenny lies c. 3.9km to the northwest of the site. A number of individual residential properties and farmsteads lie in relatively close proximity (within 1km) to the Application Site. Smaller villages within the Study Area are accessed by main transport routes including the A40, A4042, B4233, B4598 and a network of minor roads. The Merthyr, Tredegar and Abergavenny Railway is also found in the study area passing over the Usk River and running largely parallel to the south of the A40 to Abergavenny.

1.72. Recreational routes in the study area include a network of PRoW, the Usk Valley Walk, National Cycle and National Cycle Network (NCN) Routes 42, 49, and 46. More distant walking routes include the Iron Mountain Trail a circular walking around the Blorenge.

1.73. Existing elements of electricity infrastructure present within the surrounding landscape and with the 5km study area a solar farm at Manor Farm c. 4.5km north. Four pylon lines are found in the study area and are evident against localised and more distant skylines. These include the pylon lines which cross the Application Site from north to south and pylon lines which pass further west of the Application site and south of Ysgyryd Fach.

Landscape Character

1.74. At a national level, the Application Site is located within National Landscape Character Area (NLA) 31 Central Monmouthshire[8]. The Monmouthshire Landscape Study (2001) provided

[7] Agreed during consultation with Monmouthshire Council

[8] Natural Resources Wales (2020). National Landscape Character Areas (NLCA). Available online at:

information on Landscape Character Areas (LCAs) at a more local level but is no longer publicly available, having been superseded by LANDMAP[9]. However, as requested by Monmouthshire Council[10] potential effects on the LCAs which will be directly affected by the Proposed Development are considered in the appraisal. The eastern part of the Application Site is located within LCA 39: Raglan Hinterland and the western part within LCA 53: Northern Hills.

LANDMAP

1.75. LANDMAP is a GIS (Geographical Information System) base landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. LANDMAP separates information into five 'aspect layer's as follows:

- Geological Landscape: identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology;
- Landscape Habitats: identifies the characteristics and spatial relationships of habitats and vegetation;
- Visual & Sensory: identifies perceptual landscape qualities as well as including information on individual physical attributes of landform and land cover, and the relationships between them;
- Historic Landscape: identifies those qualities that depend on key historic land uses, patterns and features; and
- Cultural Landscape: includes information on the relationship between people and places, meaning of places to people, how landscape has shaped peoples' actions and how peoples' actions have shaped the landscape.

1.76. LANDMAP also includes evaluation scores which are defined as 'Outstanding' (important at an international or national level), 'High' (important at a regional or county level), 'Moderate' (important at a local level), or 'Low' (little or no importance). This LVA assesses Geological Landscape, Landscape Habitats, Visual & Sensory and Historic Landscape aspects within 2km of the Proposed Development in accordance with Guidance Note 046[11] accounting for a 2km

https://naturalresources.wales/evidence-and-data/maps/nlca/?lang=en

[9] LANDMAP - the Welsh landscape baseline. Available at: https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/landmap-the-welsh-landscape-baseline/?lang=en

[10] Monmouthshire Landscape Study (2001) descriptions for LCAs 39 and 53 were provided by Monmouthshire Council in June 2020

[11] Natural Resources Wales Guidance (January 2021) Note 046 Using LANDMAP in Landscape and Visual Impact Assessments (LVIA)

LANDMAP study area for structures below 25m. Cultural Landscape aspects directly affected by the Proposed Development are also considered within the appraisal.

1.77. The LANDMAP aspects are listed in the **Table 1-3** below. The theoretical intervisibility with the Proposed Development, as shown on **Figures 1.1 to 1.5**, is used as a means of identifying which aspects require further appraisal and which aspects are not considered further because they are unlikely to experience adverse effects arising from the Proposed Development.

Table 1-3: LANDMAP Aspect Areas within 2km

Name and Reference	Overall Evaluation	Theoretical Visibility of Proposed Development within 2km radius
Geological Landscape		
Llangattock-Newcastle MNMTHGL016	High	Much of the north western part of the Application Site is located within this aspect **considered within the appraisal**.
Raglan MNMTHGL037	Moderate	Much of the south eastern and a small part of the north western part of Application Site are located within this aspect **considered within the appraisal**.
Llantilio Pertholey MNMTHGL042	High	Largely outside ZTV coverage, however it is considered unlikely that the Proposed Development will affect the underlying geological characteristics of this aspect. Therefore, this aspect is not considered further.
Llanvihangel Gobion MNMTHGL041 Usk-Nant y Wilcae MNMTHGL040 Llanfoist MNMTHGL044	Moderate	Within ZTV coverage, however it is considered unlikely that the Proposed Development will affect the underlying geological characteristics of this aspect. Therefore, this aspect is not considered further.
Landscape Habitats		
N. rural Monmouthshire MNMTHLH098	Moderate	Much of the north western part of the Application Site is located within this aspect **considered within the appraisal**.
Central rural Monmouthshire MNMTHLH130	Moderate	Much of the south eastern and a small part of the north western part of Application Site are located within this aspect **considered within the appraisal**.

Skirrid Fach MNMTHLH003	Moderate	Partly within ZTV coverage, however it is considered unlikely that the Proposed Development will affect the landscape habitats within this aspect. Therefore, this aspect is not considered further.
River Usk''s floodplain MNMTHLH121 Farmland to E. of Llanover MNMTHLH064	Moderate	Within ZTV coverage, however it is considered unlikely that the Proposed Development will affect the landscape habitats within these aspects. Therefore, this aspect is not considered further.
River Usk MNMTHLH140	High	Within ZTV coverage, however it is considered unlikely that the Proposed Development will affect the landscape habitats within this aspect. Therefore, this aspect is not considered further.
Visual and Sensory		
Northern Hills MNMTHVS015	High	Much of the north western part of the Application Site is located within this aspect considered within the appraisal.
Northern Raglan MNMTHVS038	High	Much of the south eastern and a small part of the north western part of Application Site are located within this aspect considered within the appraisal.
Upper Usk Valley MNMTHVS046	High	Partly within ZTV coverage and considered in the appraisal.
Ysgyryd Fach MNMTHVS013	High	Partly within ZTV coverage and considered in the appraisal.
River Usk MNMTHVS087	Outstanding	Partly within ZTV coverage and considered in the appraisal.
A40 MNMTHVS048	Moderate	Partly within ZTV coverage and considered in the appraisal.
Historic Landscape		
East Bergavenny MNMTHHL049	Outstanding	The entirety Application Site is located within this aspect considered within the appraisal.

Coldbrook Park MNMTHHL075	High	Outside the ZTV, therefore not considered further.
Usk Valley MNMTHHL061	High	Largely within ZTV coverage, **considered within the appraisal**.
Cultural Landscape		
Northern Hills MNMTHCLS015	N/A	Much of the north western part of the Application Site is located within this aspect **considered within the appraisal**.
Northern Raglan MNMTHCLS042	N/A	Much of the south eastern and a small part of the north western part of Application Site are located within this aspect **considered within the appraisal**.

Landscape Designations

National to Local Landscape Designations

1.78. The Application Site is not located within any nationally or locally designated landscapes. However, the high sensitivity of the local and surrounding landscape was identified during pre-application meetings with Monmouthshire Council in June 2020 and November 2020 and has been taken into consideration within the appraisal of landscape effects.

1.79. The Brecon Beacons National Park (BBNP) is located c. 3.65km to the west and c. 3.8km the north of the Application Site's outer boundary. The Blaenavon Industrial Landscape World Heritage Site (BILWHS) is also located c. 3km west of the Application Site. **Potential effects on the outstanding value of the BILWHS (and buffer zone) and the special qualities of the BBNP will be considered in the appraisal**.

1.80. Landscape designations are show on **Figure 1.6: Appendix 1A**.

Other Designations

Built, Archaeology & Cultural Heritage and Ecological Designations

1.81. A number of historic and ecological designations which contribute to the area's landscape characteristics and quality are found within the study area. These designations are briefly outlined below and considered in detail within **Technical Appendix 3: Cultural Heritage Impact Assessment (CHIA)** and **Technical Appendix 2: Ecological Assessment (EcA)** and their supporting figures.

Visual Baseline

Analysis of Visibility of the Proposed Development

1.82. The ZTV (**Figure 1.7 : Appendix 1A**) indicates theoretical visibility is largely focused within 2km, with ZTV coverage indicated beyond 2km from lower and elevated areas to the east, south and west.

1.83. During field work it was observed that longer distance views of the lower southeastern fields were largely limited by intervening landform and vegetation. Although from the highest elevations including the Blorenge (Viewpoint 15), Field 11 within the southeastern part of the Application Site was evident in long distance views. Visibility of the higher elevated Fields 5, 6 and 7 within the northwestern parts of the Application Site vary but are evident from a number of lower lying and higher elevations as indicated by Viewpoints 8, 10, 11, 12, 13, 14 and 15. It should be noted that the northern halves of Fields 5 and 6 are without development. Beyond c. 2km north of the Application Site visibility is largely limited by intervening landform.

1.84. Several views have been recorded from within the study area, which help illustrate visibility (**See Appendix 1B**).

Viewpoint Selection for Appraisal

1.85. The viewpoint list is a representative selection of locations identified through desk study and fieldwork. It is not an exhaustive list of locations from which the Proposed Development will be visible.

1.86. A total of fifteen viewpoints were identified, this includes four viewpoints illustrated by photomontage (VP 2, 3, 12 and 15). Viewpoints are all in locations which can be accessed by the public and were confirmed with Monmouthshire Council during consultation. The viewpoints include:

- Locations selected to represent the experience of different types of receptor;
- Locations at different distances to provide a representative range of viewing distances (i.e. short, medium and longer distance views); and
- Locations which represent a range of viewing experiences (i.e. static views and points along sequential routes).

1.87. The views have been recorded and annotated to show the extent of the Proposed Development within each photo view and whether it is visible or not, as illustrated in **Figures 1.8** to **1.22**; **Appendix 1A**. The Proposed Development has been modelled onto four existing view (Viewpoints 2, 3, 12 and 15) to show how it will appear at Year 0 (with the initial planting), see Figures **1.9b, 1.10b, 1.19b and 1.22b**: **Appendix 1A**, and the anticipated view at Year 5

(which is representative of the final maintained hedge height of 4m), see **1.9c and 1.10c** : **Appendix 1A**.

1.88. Viewpoints used to assess visual effects are listed in the table below and their locations are shown on **Figures 1.7**.

Table 1-4: Appraisal Viewpoints

Viewpoint		Landscape Designation	Reason for choosing	OS Grid Reference		Distance (km)[12]
1	PRoW near Great House	N/A	Represents views experienced by recreational users on the PRoW which passes through the Application Site and similar views experienced from Great House.	333522	211075	0km
2	Minor road/PRoW north of Tyler's Wood	N/A	Represents views experienced by road users and similar views experienced by recreational users on the footpath north-west of Tyler's Wood.	333992	210754	0.01km
3	South of Ffos Farm	N/A	Represents residential views and similar views from PRoW northwest of the Application Site.	332734	212052	0.3km
4	B4598/Penpergwm Lodge	N/A	Represents views experienced by road users on the B4598 and similar views experienced from Penpergwm Lodge, south of the Application Site.	333399	210302	0.5km
5	Upper Farm	N/A	Represents views experienced from residential properties and	333596	212331	0.7km

[12] Approximate distance measured in kilometres from the nearest boundary of the Application Site.

			similar views gained from the minor road north of the Application Site.			
6	Pentre Farm	N/A	Represents views experienced from residential properties and similar views gained from the minor road northeast of the Application Site.	334395	212431	0.9km
7	Coed Morgan PRoW	N/A	Represents views experienced by walkers on the PRoW near Coed Morgan and similar views gained from the minor road network and residential views from the scattered settlement of Coed Morgan. East of the Application Site.	336307	210846	1km
8	Usk Valley Walk	N/A	Represents views experienced by recreational users on the Usk Valley Walk (south of the Application Site).	333053	209418	1.4km
9	PRoW Ysgryd Fach	N/A	Represents views experienced by walkers on the PRoW close to the high point northwest of the site.	332380	213348	1.7km
10	Monmouthshire and Brecon Canal/NCN 49	BBNP	Represents views experienced by recreational users on National Cycle Network Route 49 and similar views experienced from the minor road network on the edge of the Brecon Beacons National	330057	209785	3.2km

			Park. Southwest of the Application Site.			
11	A4042 south of Llanover	N/A	Represents transient views experienced by road users on the A4042, southwest of the Application Site.	331577	207720	3.5km
12	PRoW near Upper Llanover	BBNP	Represents elevated views experienced by road users and similar residential views from properties within the Brecon Beacons National Park, southwest of the Application Site.	330058	208535	3.9km
13	Minor Road/NCN42 Bettws Newydd	N/A	Represents longer distance views from National Cycle Network route 42 southeast of the Application Site.	335954	206494	4.6km
14	Iron Mountain Trail on eastern side of the Blorenge	BBNP & BILWHS	Represents elevated views experienced by walkers on the PROW on the eastern side of the Blorenge, within the Brecon Beacons National Park and the Blaenavon Industrial Landscape World Heritage Site.	327785	211637	4.9km
15	The Blorenge	BBNP & BILWHS	Represents elevated views experienced by walkers at the summit of the Blorenge part of the Iron Mountain Trail, within the Brecon Beacons National	326983	211844	5.8km

			Park and Blaenavon Industrial Landscape World Heritage Site.			

Settlements

1.89. Settlements are those defined as such within the Monmouthshire Local Development Plan. The theoretical visibility of the Proposed Development is described in the **Table 1-5** below. This is used as a means of identifying which settlements are to be assessed, those that are assessed are identified on plan, refer to **Appendix 1A: Figure 1.28 (forthcoming)**.

Table 1-5: Settlements

Settlement	Theoretical Visibility of the Proposed Development
Penpergwm	Within c. 0.5km south of the Proposed Development the settlement is located within the ZTV. **Considered in the appraisal**.
The Bryn	Within c. 0.8km south of the Proposed Development. The ZTV indicates visibility across the settlement. However, views looking north towards the site of Proposed Development will be screened by mature woodland along the northern edge of the settlement south of the A40. This settlement is therefore not considered further.
Llanddewi Rhydderch	Within c. 1.9km north of the Proposed Development. The settlement is located outside the ZTV and is therefore not considered further.
Llanellen	Within c. 2.3km south west of the Proposed Development. The ZTV indicates theoretical visibility from a small southern part of the settlement. Views looking southeast towards the Proposed Development from this part of the settlement will be screened by intervening buildings and vegetation. Therefore, this settlement is not considered further.
Abergavenny	Within c. 3.9km northwest of the Proposed Development. The settlement is located outside the ZTV and is therefore not considered further.
Llanover	Within c. 3.4km southwest of the Proposed Development, the ZTV indicates theoretical visibility from much of the settlement. However mature woodland northwest of this settlement will screen outward views looking northeast towards the Proposed Development. **However, similar views are represented by Viewpoint 11 of the appraisal.**
Brynygwenin	Within c. 4.1km north of the Proposed Development, the ZTV indicates theoretical visibility from southern parts of the settlement. However, views looking south towards the Proposed Development will be limited by the intervening distance and screening by field boundary vegetation. Therefore, this settlement is not considered further.

Llanarth	Within c. 3.5km east of the Proposed Development, the ZTV indicates theoretical visibility from much of the settlement. However mature mixed woodland northwest of this settlement will screen outward views. Therefore, this settlement is not considered further.
Llanvair Kilgeddin	Within c. 3.7km south of the Proposed Development. The settlement is located largely outside the ZTV, views looking north towards the Proposed Development will be limited by pockets of woodland and field boundary vegetation. Therefore, this settlement is not considered further.
Llanfoist	Within c. 3.8km west of the Proposed Development. Outside the ZTV. Therefore, this settlement is not considered further.
Llanvapley	Within c. 3.8km northeast of the Proposed Development. Outside the ZTV. Therefore, this settlement is not considered further.

Residential Visual Amenity

1.90. During fieldwork it was identified that potential adverse visual effects on residential views were unlikely to be experienced beyond c. 1km of the Application Site given screening by localised undulations in landform and by intervening vegetation. Consideration of residential properties within the appraisal has therefore been limited to those within 1km. The theoretical visibility of the Proposed Development is described in **Table 1- 6** below. This is used as a means of identifying which residential properties are to be assessed. Where properties are likely to experience similar views, they have been grouped. Those that are assessed are identified on plan, refer to **Appendix 1A: Figure 1.28 (forthcoming)**.

Table 1-6: Residential Properties

Residential Property	Theoretical Visibility of the Proposed Development
Great House Farm cluster (Landowner for the Proposed Development)	Within c. 0.12km east of the Proposed Development. Residential views from landowner properties are not considered within the appraisal, owing to their vested interest in the Proposed Development.
Great House	Within c. 0.01km east of the Proposed Development. Residential views from this property are considered within the appraisal within Viewpoints 1, 2, 6 and 7.
Broadstone Barn	Within c. 0.3km north of the Proposed Development. In views looking south from this property the Proposed Development will be largely screened by landform and vegetation. Not considered further within the appraisal.

Acre Farm, Upper Farm and The Bungalow	Within c. 0.7km north of the Proposed Development. **Considered within the appraisal** given proximity to the Proposed Development.
Tresaison and Little Tresaison, Bannut – Tree and Pentree Cottage	Within c. 0.2km northeast of the Proposed Development. **Considered within the appraisal** given proximity to the Proposed Development.
Llangattock Mill Farm cluster	Within c. 0.3km northeast of the Proposed Development. **Considered within the appraisal** given proximity to the Proposed Development.
Mount Pleasant Farm cluster, including the Manse, Pwll-y carw and Trewarren	Within c. 0.1km northeast of the Proposed Development. **Considered within the appraisal** given proximity to the Proposed Development.
Ty-nat and Glan Dwr cluster	Within c. 0.3km northeast of the Proposed Development, within ZTV coverage. Inward views looking southwest are foreshortened by landform and largely screened by intervening treelines and hedgerows, not considered further.
Redhouse Farm cluster and Brooklands	Within c. 0.5km northeast of the Proposed Development, within ZTV coverage. Inward views looking southwest are foreshortened by landform and largely screened by intervening treelines and hedgerows, not considered further.
Llananant Cottage, Primrose Cottage and Ty-draw Farm	Within c. 0.8km east of the Proposed Development, within ZTV coverage. Inward views looking west are largely screened by intervening treelines and hedgerows, not considered further.
Llanynant cluster	Within c. 0.8km east of the Proposed Development, within ZTV coverage. Inward views looking west are largely screened by intervening treelines and hedgerows, not considered further.
Box Cottage, Little Oak Cottage, Kinsey Cottage, Herbert's Cottage's, Rushoime and Pen-yr-heal	Within c. 0.9km southeast of the Proposed Development, within ZTV coverage. Largely glimpsed views through intervening vegetations, **considered within the appraisal** given potential for change to existing views.
Brynhydderch Farm cluster and Cedar Bungalow	Within c. 0.4km southeast of the Proposed Development, within ZTV coverage. Inward views looking northwest are foreshortened by landform and largely screened by intervening treelines and hedgerows, not considered further.
Upper Court Farm cluster	Within c. 0.1km south of the Proposed Development, within ZTV coverage. Inward views looking north are foreshortened by landform and largely screened by intervening treelines and hedgerows. **Considered within the appraisal** given the proximity of the access to Upper Court Farm and the Proposed Development.

Park Llettis cluster	Within c. 0.1km south of the Proposed Development, within ZTV coverage. Inward views looking northwest are foreshortened by landform and largely screened by intervening treelines and hedgerows, not considered further.
Cae-Bryn Bungalow	Within c. 0.6km south of the Proposed Development, within ZTV coverage. Inward views looking north are foreshortened by landform and largely screened by intervening agricultural buildings, treelines and hedgerows, not considered further.
Blorenge View, Llyn Cecil Farm, Amberleigh House and Hardwick Lodge	Within c. 1km west of the Proposed Development, outside the ZTV therefore views from these properties are not considered further.
Veddu Fach and Upper Veddu Veaur	Within c. 0.1km northwest of the Proposed Development. **Considered within the appraisal** given proximity to the Proposed Development.
Fedw-Isaf	Within 0.4km views looking south towards the Proposed Development will be largely screened by intervening landform and vegetation, not considered further.
Ffos Farm	Within c. 0.1km northwest of the Proposed Development, within the ZTV Largely glimpsed views through intervening vegetations, **considered within the appraisal** given potential for change to existing views.

Routes

1.91. Visual effects on roads, and recreational routes located within the 2km study area and that fall within the ZTV are listed in the table below. Those that are assessed are identified on plan, refer to **Appendix 1A: Figure 1.28 (forthcoming)**.

Table 1-7: Routes

Route	Theoretical Visibility of the Proposed Development
Roads	
Minor Road Network	Minor road within the Proposed Development and the minor road network within c. 1km are **considered within the appraisal**.
A40	Within c. 0.7km south of the Proposed Development. The ZTV indicates theoretical visibility from much of the eastern section of this route within the study area **considered within the appraisal**.
A4042	Within c. 2.1km southwest of the Proposed Development. the ZTV indicates theoretical visibility from much of the southern section of this route within the study area **considered within the appraisal**.

A465 and the associated road network around Abergavenny (Including the A4143 and B4521)	Within 2.6km west of the Proposed Development. Outside the ZTV, therefore this route is not considered further.
B4598	Within c. 0.7km south of the Proposed Development. The ZTV indicates theoretical visibility from much of the eastern section of this route within the study area considered within the appraisal.
B4269	Within c. 2.4km west of the Proposed Development. Outside the ZTV, therefore this route is not considered further.
B4233	Within c. 2.4km north of the Proposed Development. Outside the ZTV, therefore this route is not considered further.
Railway line	
Abergavenny to Pontypool	Within c. 0.7km south of the Proposed Development. The ZTV indicates theoretical visibility from much of the eastern section of this route within the study area considered within the appraisal.
Cycling and Walking Routes	
PRoW network	The ZTV indicates theoretical visibility across much of the local PRoW network. Actual visibility will be limited by landform and intervening vegetation to inward views from the closest recreational routes. Viewpoints 1, 2, 3, 4, 5, 7 and 9 represent views from the PRoW within closest proximity to the Application Site. These locations represent a 'maximum or worst-case scenario' and are considered within the appraisal.
BBNP & BILWHS recreational routes	The ZTV indicates theoretical visibility from a number of routes with the BBNP and BILWHS. 'Maximum or worse case' scenario views are represented by viewpoints 14 and 15 considered within the appraisal.
Usk Valley Way	Within c. 0.7km south of the Proposed Development. The ZTV indicates theoretical visibility from much of the eastern section of this route within the study area considered within the appraisal.
NCN Route 42	Within c. 2.2km east of the Proposed Development. The ZTV indicates theoretical visibility from much of the southern section of this route within the study area considered within the appraisal.
NCN Route 46	Within c. 2.7km northwest of the Proposed Development. Outside the ZTV, not considered further
NCN Rout 49	Within c. 3.9km west, southwest of the Proposed Development. The ZTV indicates theoretical visibility from much of the southern section of this route within the study area considered within the appraisal.

IDENTIFICATION OF CUMULATIVE DEVELOPMENTS

1.92. GLVIA3 refers to Scottish Natural Heritage (SNH) guidance in describing cumulative effect as: "*the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effects of a set of developments, taken together*" (SNH, 2012: 4[13]).

1.93. A search of the Monmouthshire Council online planning application portal accessed on the 14th April 2021 was undertaken and incorporated a 5km study area. Similar cumulative developments including solar farms, wind turbines and elements of existing electricity infrastructure are identified in **Table 1-8** below. No similar application developments in planning were identified during the planning application search.

Table 1-8: Cumulative Developments

Ref. No:	Name	Development	Status	Distance & Direction from the Site
DC/2013/00006	Manor Farm	Solar Farm	Operational	c. 4.5km north of the Application Site
DC/2011/01150	Main Farm House	Wind Turbine (15m tower Height)	Operational	c. 3.5km northwest of the Application Site

1.94. It is considered unlikely that the introduction of the Proposed Development will result in cumulative interactions with the wind turbine at Main Farm House given the height of this development. Any potential for cumulative interactions will be further limited by distance and screening from landform and vegetation. The location of the wind turbine at Main Farm House located c. 2.03m north northeast from the location of Viewpoint 9. Viewpoint is at an elevation of c. 196m AOD and the wind turbine is c. 183m AOD. Viewpoint 9 assessed a **Minor adverse** visual effect from 1.7m distance and from a significantly more elevated point. Any potential for cumulative interactions will be further limited by distance (c. 3.5km) and further screening from landform and vegetation than that described within Viewpoint 9 due to the wind turbine being located at a lower elevation, therefore Main Farm House is not considered further. **Potential cumulative interactions with Manor Farm are considered in the cumulative appraisal**.

[13] SNH (2012) Assessing the cumulative impact of onshore wind energy developments

POTENTIAL FOR LANDSCAPE AND VISUAL EFFECTS

1.95. The three different phases of the Proposed Development are: construction, operation and decommissioning. Each phase will have varying effects on landscape resources and visual amenity. These phases are briefly outlined below and will be fully considered in this appraisal. Full details on the built structures, overall site layout and construction works are provided within the Planning Statement and illustrated by the supporting figures in **Volume 2: Planning Application Drawings**.

Sources of Effects During Construction

1.96. The construction period will occur over a duration of approximately 6 months and be of a temporary nature. The Application Site will be accessed from the local road which runs north from Penpergwm. The main construction activities across the Application Site which may potentially impact upon the landscape resources or visual amenity include:

- Clearance of vegetation and breaks in the hedgerow at new or widened access points within the Application Site, including visibility splay at the existing access (c. 10.6m of hedgerow to be removed, 58.1m of hedgerow realignment, 50.5m of hedgerow trimmed back));
- Movement of site traffic to/from the site and through the site;
- Erection of the security fencing around the site boundary and CCTV poles - the fence line being set back 5m from the existing field boundaries;
- Installation of 1 x temporary site compound areas covering an area of approximately 4,000m² in total;
- Clearing of topsoil, up to 300mm depth, and laying of 4m wide gravel access track by the main entrance and internal tracks stretching 3km long track through the fields and hardstanding areas next to the Inverter Substations and Grid Substation;
- Clearing of the ground, laying of concrete foundations and installation of the Inverter Substations and Grid Substation;
- Piling of supporting steel posts into the ground and the installation of panels onto the open aluminium frames;
- Trenching and backfilling of the electrical cabling running from the CCTV and rear of the solar arrays to the Inverter and Grid Substations, within trenches of circa 1m deep and up to 1m wide, estimated at 5,000m²; and

- Implementation of the landscaping and ecological enhancement measures once all other site works are complete.

Sources of Effect During Operation

1.97. Once constructed, the Proposed Development will remain on these lands for the agreed planning consent period of 40 years. The completed site will consist of the final elements which may potentially impact upon the landscape resources or its visual amenity. These include:

- The solar panels attached up to a maximum of 4 panels deep to aluminium frames known as 'solar arrays' which are tilted between 25 degrees and fixed to the pile driven galvanised steel posts. The maximum height of the arrays will be 2.8m high;
- 1,542 module racks, 74,178 modules. 14,496 pile driven poles;
- 1 x Grid Substation – circa 2,000m^2.
- 10 x MV Transformers (3.74m(L) x 2.95m(W)) = 110.33m2 in total
- The external finish of the substation will be agreed with the local authority;
- Fence is deer fencing with wooden posts at 3m centres. Fence is 2.4m high with badger gates. In total it is 6,487m long. 2,162 posts in total;
- CCTV Posts are 3.5m in height and there are 58;
- No lighting in site except for emergency lighting on the substation buildings which will only be turned on when required for servicing;
- Structural landscape planting will consist of a mix of native tree and hedgerow planting added to the outer field boundaries as detailed further on the Landscape Plan, see **Figure 1.26 Appendix 1A**. A grassland mix will be added to the lands between and beneath the arrays to allow the lands to retain an agricultural use maintained by sheep grazing or cutting;
- Wildflower meadow with mown path and viewing platform and interpretive signage along with habitat housing in the form of bat and bird boxes, beetle banks, hibernaculum, invertebrate hotels and badger gates within the security fencing will also be provided as part of the ecological enhancement measures; and

- Occasional access by light traffic vehicles and a small number of personnel will be required to manage the landscape mitigation boundary planting, grassland and to service the Proposed Development's various structures.

1.98. Overall, the proposed footprint constitutes a relatively small percentage of the total area of the Application Site (70.03ha):

- 23,110.33m^2 for infrastructure (c. 3.30% of the Application Site area); and
- 180.83m^2 for piling (c. 0.03% of the Application Site area).

Decommissioning Phase

1.99. Decommissioning works will be similar in nature to those undertaken during the construction phase but in reverse order, including:

- Movement of site traffic to, from and through the site during the works;
- Removal of the above-ground Proposed Development's structures from the site, with some temporary storage of materials necessary; and
- Where necessary, disturbed ground will be gently graded, cultivated and reseeded to return it to suitable conditions for agricultural use.

MITIGATION

Mitigation During Construction

1.100. A Construction Environmental Management Plan (CEMP) will be prepared prior to construction. The following good practice measures will be implemented throughout the construction phase:

- Existing landscape features such as hedgerows, woodland, and treelines will be retained as far as practicable, including the protection of existing vegetation within the Application Site boundaries;
- Construction vehicles will not track across undisturbed areas outside their defined working areas and access corridor;
- Materials and machinery will be stored tidily during the works. Machinery will not be left in place for longer than required for construction purposes to minimise effects on views and visual amenity;
- Any disturbance to or temporary removal of existing field boundaries to facilitate construction will be undertaken sensitively to ensure successful reinstatement of these features following completion of construction activities;
- Lighting of compounds and works will be restricted to agreed working hours and that which is necessary for security; and
- On completion of construction, all remaining construction materials and equipment will be removed from the site, and any disturbed areas, including temporary areas of hard standing, broken up and restored.

Mitigation During Operation

- Lighting is associated with the sub-station and will be restricted to agreed working hours and that which is necessary for security only so as not to contribute to light pollution;
- The proposed colour of the fencing around the substation will be RAL 6005, Moss Green which has been selected to be unobtrusive and reflect the existing environment;
- The site will be maintained in a clean and uncluttered state and this will be monitored;

- Existing vegetation will be retained as far as practicable (**See Figures 10A. 1 and 10B. 1 of Appendix 10B: Arboricultural Impact Assessment (AIA)** and protected in accordance with best practice (including *BS 5837: 2012 Trees in relation to design, demolition and construction*); and

- Mitigation planting and ecological measures are shown on **Figure 1.26** Hedgerow and infill planting will be introduced along the boundaries of Fields 2, 3, 5, 6, 10 and 11 and allowed to mature to c. 4m in height. Tree planting will be introduced along parts of the northwestern and south western red line boundary.

RESIDUAL EFFECTS

Residual Construction Effects

1.101. The appraisal of effects assumes all construction related mitigation measures are implemented. Therefore, the residual effects arising from construction will remain as identified in the appraisal below.

Residual Operational Effects

1.102. The appraisal of operational affects assumes all proposed mitigation is implemented (as indicated in **Figure 1.26**); therefore, the residual effects arising during the operational phase will remain as identified in the appraisal below.

It is anticipated that by c. Year 5 proposed vegetation will have established as indicated in **Figures 1.9c**, and **1.10c.**

APPRAISAL OF LANDSCAPE EFFECTS

1.103. This section describes the operational effects resulting from the Proposed Development on the landscape fabric of the Application Site, LCAs and LANDMAP aspects identified as requiring detailed consideration in the **Landscape Baseline**.

Duration of Effects

1.104. All construction and decommissioning landscape effects are considered to be short term, temporary and reversible. All operational landscape effects are considered to be long term and reversible.

Landscape Effects on the Application Site

Location and baseline description:

1.105. The site is described in detail in the Site Description section above.

Sensitivity:

1.106. The Application Site covers an area of existing rolling agricultural land use, a common feature of the landscape within the study area and can be restored to this state after the lifetime of the Proposed Development. The Application Site is directly and indirectly influenced by existing pylon lines within and close to the site. The agricultural fields delineated by hedgerows with individual trees and treelines at lower elevations are considered to have a medium susceptibility to the type of change proposed. Fields at higher elevation (including Fields 5, 6 and 7) are considered to have a higher susceptibility to change given their visual relationship with the surrounding landscape. The farmland and vegetated boundaries of the Application Site are of reasonable quality and a number of recreational routes are found within and bordering the site which are considered to contribute to a high landscape value.

1.107. Overall, the sensitivity of the site is judged to be **High**.

Appraisal of construction effects:

1.108. During the construction phase, there will be a notable change in the land use from agriculture to a construction site across the extent of the Application Site. The main activity will be centred around the temporary compound area located in Fields 11 (See **Figure 3 of Volume 2: Planning Application Drawings** for field numbers).

1.109. The proposed site works will involve the movement of machinery, temporary construction compound, construction staff car parking, and the installation of the solar arrays, substation, inverter stations, cabling, access tracks and landscaping. It is anticipated that, access to short

sections of recreational routes including the ORPA (between Field 14 and), PRoW 368/55/1 (Fields 8 and 9) and PRoW 368/56/1 (Fields 10 and 11) will need to be managed for short periods of time for health and safety reasons accounting for vehicle and material movements. However, the construction phase is temporary and will last for a short duration of c. 6 months.

1.110. The Proposed Development will follow the existing topography of the site with only very minor grading required to provide a level base for the various buildings or trackways. Any disturbance to the ground surface from the installation of the various structures, cabling and movement of machinery will be reinstated by gently grading back and reseeding to minimise any adverse effects.

1.111. The proposed structures will be offset by approximately 5m from the nearest existing hedgerows and 2m from watercourses and field drains. The new access tracks and buildings will be clustered together close to the field boundaries, largely using the existing farm tracks and field entrances where possible. Some small areas of existing vegetation will need to be removed to facilitate the introduction of the access tracks and security fence. Micro-siting of the security fence will help minimise disturbance to the vegetated field boundaries. Retained field hedgerows will be enhanced with similar species as part of the mitigation planting.

1.112. The Proposed Development will result in a medium size change to the landscape of the Application Site experienced locally, contained within the existing field pattern. Overall, the magnitude of landscape change for the Application Site is judged to be **Medium**. Taking account of the high sensitivity of the site, this will result in a **Temporary Major/Moderate adverse** degree landscape effect during construction.

Appraisal of operational effects:

1.113. Once operational, the Proposed Development will result in the placement of a series of solar arrays and associated infrastructure across the extent of the Application Site for the duration of the permitted planning consent period.

1.114. The existing mature field boundary vegetation, mitigation hedgerow and infill planting will be maintained throughout the operational phase helping to improve the condition of these hedgerows and further enclosing the new solar farm structures within each field.

1.115. The additional mitigation planting will also be maintained to help increase biodiversity across the Application Site. The current areas of agricultural landcover will be replaced by a species rich grassland between the solar arrays which will be managed by light grazing of sheep or maintained by cutting.

1.116. The Proposed Development will be unmanned, with only occasional servicing of the solar farm equipment and landscape maintenance as required throughout the year. The level of traffic will be minimal with one or two vehicles and a small number of personnel requiring access at any given time.

1.117. The introduction of the operational Proposed Development will increase the influence of electricity infrastructure in combination with existing the existing pylon lines at the site level.

1.118. The Proposed Development will result in a medium scale change experienced locally. Overall, the magnitude of landscape change for the Application Site is judged to be **Medium** reducing as mitigation planting matures. Taking account of the high sensitivity of the Application Site this will result in a **Moderate adverse** landscape effect during the operational period. While the mitigation measures will help further contain the Proposed Development by c. Year 5 they are unlikely to fully screen elements at higher elevations.

Appraisal of decommissioning effects

1.119. Activities across the Application Site will be similar to those of the Construction Phase. The disturbed lands will be reinstated to a similar state to their current agricultural use. The mature mitigation planting will be left intact. The proposed planting along the boundaries of the Application Site will partly screen these activities. The direct effects upon the Application Site during the construction phase will be temporary and short-term lasting for the construction period. They will have a **Medium** magnitude of change which will result in a **Temporary Major/Moderate adverse** degree landscape effect during decommissioning.

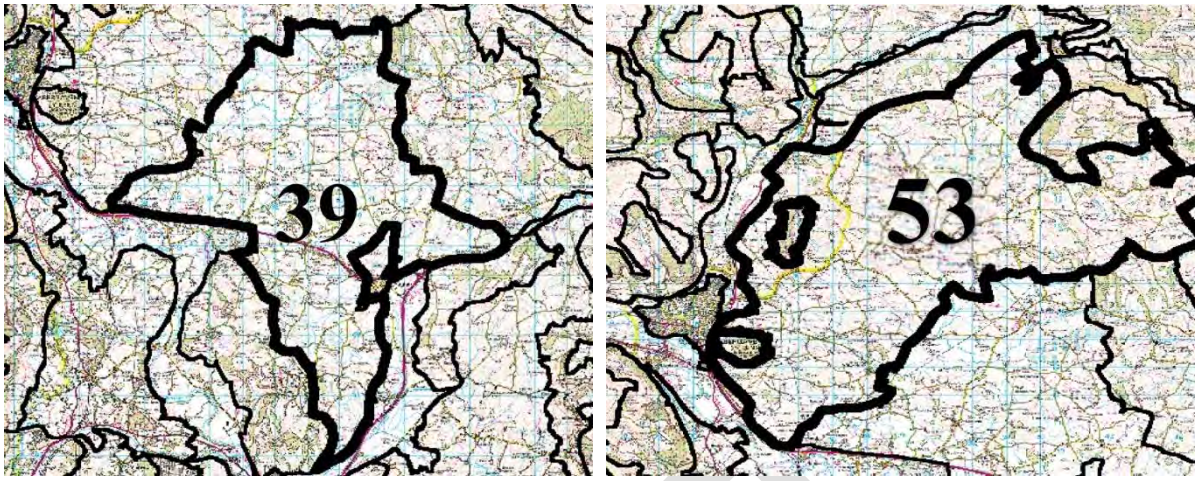
Post Decommissioning

1.120. The landscape of the Application Site will have returned to its previous use with the proposed planting (which will have matured) retained. This will result in a **Minor beneficial** degree landscape effect at the Application Site level.

Landscape Effects on LCA 39: Raglan Hinterland and LCA 53: Northern Hills Upper Tamar and Ottery Valleys

1.121. LCA 39 and 53 from the Monmouthshire Landscape Study (2001) are indicated on the images below.

Insert Image 1-1: LCAs ,Monmouthshire Landscape Study (2001)



Location and baseline description:

1.122. The Proposed Developments southeastern Fields 9, 10 and 11 and parts of Fields 8 and 12 are located within LCA 39, although Field 12 does not contain any proposals for infrastructure development. The Summary and Overall Character of LCA 39 is described in the Monmouthshire Landscape Study (2001) as:

"A gently rolling lowland landscape formed over an extensive area of Lower Old Red Sandstone with pockets of sands and gravels to the northern and central sections dissected and drained by the River Trothy with numerous streams and tributaries. On high ground there are external panoramic views, though internal views are restricted. It is farmed landscape of large fields of mixed pasture and arable crops; though to the north and south smaller more irregular fields of permanent pasture occur.

Enclaves of species-rich grasslands and mires providing important habitats for both flora and fauna. Enclosure is proved by a strong structural network of traditional field boundaries and small woodlands though disrupted in places by large-scale intensive orchards. It is a well settled landscape, with a wealth of historical and archaeological features ranging from Iron Age fortifications, post medieval settlements."

1.123. Key qualities are stated as:

- *"This gently rolling, domesticated, mixed arable and pastoral lowland, diverse and intimate in character is representative of the Monmouthshire countryside and is a valuable landscape resource.*
- *The landscape is generally of unspoilt character and has retained its integrity with little new development except the A40 and A449 roads and limited development around Raglan.*

- *The area is of high historic conservation interest with the distinctive motte and bailey castle at Penrhos reflecting the influence of Raglan castle [Area 42] lying in a pivotal position to the east and Whitecastle to the north [Area 53].*

- *Settlement remained scattered, influenced by the monastic holdings and medieval hunting parks. The breakdown of the medieval system saw the establishment of large estates such as Llanarth Court and their associated parks and gardens."*

1.124. The Proposed Developments northwestern Fields 1, 2, 3, 4, 5, 6, 7, 13 and 14 are located within LCA 53, although Fields 13 and 14 do not contain any proposals for infrastructure development. The Summary and Overall Character of LCA 53 is described in the Monmouthshire Landscape Study (2001) as:

1.125. *An undulating complex of hills and valleys interspersed with broad shallow valleys and drained by wooded streams and tributaries. It is an open farmland of mainly mixed pasture becoming more arable further south. Interspersed between Pandy and Grosmont is Blaentrothy meadow an enclave of unimproved neutral grassland and of particular biodiversity interest and an important species rich habitat for both flora and fauna. Enclosure is provided by a strong network of traditional field boundaries and tree lines, though in places over management has led to their breakdown and replacement with post and wire fencing. There is a distinct lack of recorded archaeological remains, however the area is home to Whitecastle, one of the three major castle sites. Linear squatter settlements at Bont and the consolidation of land leading to designed parks and gardens at Coldbrook which have their origins in the dissolution of the monasteries.*

1.126. Key qualities are stated as:

- *"A domesticated open farmland of undulating hills and valleys, the area is representative of the Monmouthshire landscape in its character.*

- *It is an area of farmland of mainly medium-scale fields of mixed pasture to the north, becoming more arable and large-scale to the south. The area has a high scenic quality arising from its traditional undulating patchwork of managed hedges, hedgebanks, hedgerow trees and small copses and treelines typically bordering the numerous streams.*

- *Overall the area has an unspoilt character and maintains its integrity with settlement limited to small linear hamlets and scattered farmstead and houses interconnected by a network of narrow winding roads.*

- *Other conservation interest includes White Castle one of the three Castles, historically commanding part of the Trothy Valley and distinctive settlement of medieval and post medieval times.*

Sensitivity:

1.127. The lower lying characteristics of these landscapes are judged to combine in a medium susceptibility to renewable energy development of this nature, given the partly contained nature of the lower areas and the presence of the existing pylon lines. Areas at higher elevation within LCA 53 are considered to have a higher susceptibility to change given their visual relationship with the surrounding landscape. Landscape value is considered to be high for much of LCA 39 and 53 with areas of value associated with rolling and undulating agricultural land of reasonable quality, more open elevated areas and a network of recreational routes.

1.128. Taking into account the judgements of susceptibility and value, overall sensitivity is judged to be **High**.

Appraisal of construction effects:

1.129. During the temporary construction phase there will be a notable increase of construction activity occurring across the extent of the Application Site. The works will have a localised temporary disturbance to a small part of the rural landscape of LCA 39 and LCA 53.

1.130. The Proposed Development will locally alter the character of LCA 39 and LCA 53. The scale of change is considered to be large locally up to around c. 2km representing a localised geographical extent.

1.131. The magnitude of landscape change is judged to be **Medium to High** locally, reducing to **Low** beyond a distance of around c. 2km. Taking account of the high sensitivity of this landscape and construction phase of c. 6 months, there will be a **Temporary Major/Moderate adverse** landscape effect locally and a **Temporary Minor adverse** effect LCA 39 and LCA 53 as a whole.

Appraisal of operational effects:

1.132. Once operational, the Proposed Solar Farm and associated infrastructure elements will be located over 70.03 hectares of agricultural lands within LCA 39 and LCA 53. This will directly affect the key characteristic rolling and undulating farmland fields.

1.133. However, the Proposed Development has been designed around the confines of the existing field boundaries, retaining as much of the existing site's elements, features and agricultural land use as possible, which already contribute to the rural character. The land around and beneath the solar arrays can be lightly grazed or cut, maintaining an agricultural use throughout the lifespan of the Proposed Development.

1.134. The mitigation measures and landscape management will help improve the condition of the existing hedgerows within the red line boundary over the lifespan of the Proposed Development. The retention of the Application Site's field hedgerows and additional similar hedgerow and tree planting will help contain the various structures of the Proposed Development within the local area.

1.135. The Proposed Development will mainly locally alter the internal character of the agricultural fields within the Application Site within LCA 39 and LCA 53. Field pattern and landform will remain largely unaltered. The size/scale of change is considered to be medium locally within around c. 2km of the site, representing a localised geographical extent.

1.136. Overall, the magnitude of landscape change for the LCA 39: Raglan Hinterland and LCA 53: Northern Hills Upper Tamar and Ottery Valleys is judged to be **Medium** locally, extending to approximately 2km radius from the Proposed Development, reducing with distance and as mitigation planting matures. Taking account of the high sensitivity of the landscape this will result in a **Moderate adverse** landscape effect experienced locally and a **Minor adverse** effect for LCA 39 and LCA 53 as a whole. While the mitigation planting will help contain the lower elevations of the Proposed Development it will do little to screen areas at higher elevation and is unlikely to reduce the overall landscape effect as mitigation becomes established by c. Year 5.

Appraisal of decommissioning effects:

1.137. Activities across the Application Site will be similar to those of the Construction Phase. The disturbed lands will be reinstated to a similar agricultural use. A similar magnitude of change and degree of landscape effect is anticipated for the decommissioning phase. This will result in a very localised **Temporary Major/Moderate adverse** and a **Temporary Minor adverse** landscape effect on the LCA 39 and LCA 53 as a whole during decommissioning.

Post Decommissioning

1.138. Post decommissioning the mitigation planting which will have matured will be retained resulting in a localised **Minor beneficial** effect.

APPRAISAL OF VISUAL EFFECTS

1.139. This section presents the assessment of visual effects of the Proposed Development on views and visual amenity for receptors identified in **Tables 1-3, 1-4, 1-5 ,1-6** and 1-7 of the **Visual Baseline**.

Visibility of the Proposed Development & Potential Receptors

Duration of Effects

1.140. All construction and decommissioning visual effects are considered to be short term, temporary and reversible. All operational visual effects are considered to be long term and reversible.

Visual Effects on Appraisal Viewpoints

1.141. The appraisal of visual effects from the fifteen viewpoints selected to represent views of the Proposed Development are set out below.

Viewpoint 1. PRoW near Great House

Grid Reference	333522, 211075	**Figure Number**	1.8
Direction of view	South, southeast	**Distance from Proposed Development**	0.0km

Viewpoint location and existing view:

1.142. This viewpoint represents sequential views experienced by recreational users on PRoW 368/55/1, similar views gained from the adjacent ORPA and similar views from Great House.

1.143. In views looking south - southeast, the gently rolling agricultural land of Fields 8, 9, 10 11 and 12 are seen in the foreground and middle distance of view bound by hedgerows with some hedgerow trees, although Field 12 does not contain any proposals for infrastructure development. Elevated Coed y Bwndd and Trostrey Hill are seen in the background of view forming the skyline.

1.144. The views from Great House will be lesser than those in **Figure 1.8 of Appendix 1**A due to screening from intervening field boundary vegetation and tree cover. Refer to **Site Photo 5**, **Appendix 1B.**

1.145. Part of Field 14 is seen in successive views looking north from this location, although Field 14 does not contain any proposals for infrastructure development. The other northwestern

fields of the Proposed Development are largely foreshortened by landform and screened by vegetation, refer to Figure 1.8 of Appendix 1A.

1.146. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.147. Residential and recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route, both residential and recreational receptors are considered to place value on the available view. The overall sensitivity of recreational receptors at this viewpoint is judged to be High.

Appraisal of construction effects:

1.148. Construction activities within Fields 8, 9, 10, and 11 will be apparent in the foreground and middle distance of view. This will include activities and elements outlined in paragraph headed '*Sources of Effects During Construction*' which will include the temporary construction compound with Field 11. Access along PRoW 368/55/1 will need to be managed for short periods of time for health and safety reasons accounting for vehicle and material movements.

1.149. This will result in a large scale change experienced locally from the entirety of PRoW 368/55/1 for the temporary duration of the build out period.

Appraisal of operational effects:

1.150. Once operational the Proposed Development will introduce a new renewable energy feature within the foreground and middle distance of view backclothed by landform and vegetation. This will include much of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 8, 9, 10, and 11. The inverters within Fields 9 and 10 will be partially screened by the existing hedgerows. The new access track within Field 9 will be evident within the foreground, the access tracks within Fields 10 and 11 will be partly screened by the existing field boundary vegetation.

1.151. Mitigation measures including additional hedgerow and infill planting will screen the lower section of arrays located near to the field boundaries of the Proposed Development. As the existing and proposed hedgerow planting matures to a height of 4m within c. 5 years, a greater extent of the solar arrays near to the field boundaries will be screened. Given the proximity of view and the elevated vantage, much of the solar arrays will be visible. However, the visual prominence of the field boundaries will strengthen as the hedgerows increase in height and width which will reinforce the existing field system character within the landscape. Visible elements will become more apparent in the winter months following leaf fall.

1.152. The introduction of the Proposed Development will result in a medium to large scale change experienced locally.

Appraisal of decommissioning effects:

1.153. Decommissioning activities will be similar to those of the construction phase. This will result in a large scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **High** (Construction); **Medium** (all Operational Years) reducing to **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Major adverse** (Construction); **Major/Moderate adverse** (all Operational Years); **Temporary, Major adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 2. Minor road/PRoW north of Tyler's Wood

Grid Reference	333992, 210754	**Figure Number**	1.9a/b/c
Direction of view	Northwest	**Distance from Proposed Development**	0.01km

Viewpoint location and existing view:

1.154. This viewpoint represents sequential views experienced by recreational users on PRoW 368/56/1 and similar views gained from the minor road directly southeast of Field 11.

1.155. In views looking northwest, the gently rolling agriculture land of Fields 8, 9, 10, 11 and 12 are seen in the foreground and middle distance of view bound by hedgerows with some hedgerow trees, although Field 12 does not contain any proposals for infrastructure development. Properties associated with Great House are seen in the middle distance between intervening field boundary vegetation, only the roof of Great House is visible behind the built form in front of it. The elevated landform of Fields 7 and 12, and more distant rolling elevated agricultural landforms the horizon, with a pylon line seen against the skyline, refer to **Appendix 1: Figure 1.9**.

1.156. The other north western fields of the Proposed Development are largely foreshortened by landform and screened by vegetation. Similar largely oblique views will be experienced from a short section of the minor road north of Penpergwm.

1.157. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.158. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.159. Construction activities within Fields 8, 9, 10, and 11 will be apparent in the foreground and middle distance of view. This will include activities and elements outlined in paragraph headed '*Sources of Effects During Construction'* which will include the temporary construction compound with Field 11. Access along the section of PRoW 368/56/1 will need to be managed for short periods of time for health and safety reasons accounting for vehicle and material movements. Some additional vehicle movements along the minor road are also likely to be experienced during the construction phase.

1.160. This will result in a large scale change experienced locally from the majority of PRoW 368/55/1 north of the minor road and from a section of this route south of the minor road, between the road and the field boundary northwest of Brynhydderch Farm.

Appraisal of operational effects:

1.161. Once operational the Proposed Development will introduce a new renewable energy feature within the foreground and middle distance of view, backclothed by landform and vegetation. This will include much of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 8, 9, 10 and 11. The inverters within Fields 9 and 10 will be partially screened by the existing hedgerows. The new access track within Field 9 will be evident within the foreground, the access tracks within Fields 10 and 11 will be partly screened by the existing field boundary vegetation.

1.162. Mitigation measures including additional hedgerow and infill planting will screen the lower section of arrays located near to the field boundaries of the Proposed Development, **Appendix 1: Figure 1.9b**. As the existing and proposed hedgerow planting matures to a height of 4m within c. 5 years a greater extent of the solar arrays near to the field boundaries will be screened. Given the proximity of view and the elevated vantage, much of the solar arrays will be visible. However, the visual prominence of the field boundaries will strengthen as the hedgerows increase in height and width which will reinforce the existing field system character within the landscape, **Appendix 1: Figure 1.9c**. Visible elements will become more apparent in the winter months following leaf fall.

1.163. The introduction of the Proposed Development will result in a medium to large scale change experienced locally.

Appraisal of decommissioning effects:

1.164. Decommissioning activities will be similar to those of the construction phase. This will result in a large scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **High** (Construction); **Medium** (all Operational Years) reducing to **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Major adverse** (Construction); **Major/Moderate adverse** (all Operational Years); **Temporary, Major adverse** (Decommissioning); No **Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 3. South of Ffos Farm

Grid Reference	332734, 212052	**Figure Number**	1.10a/b/c/
Direction of view	Southeast	**Distance from Proposed Development**	0.3km

Viewpoint location and existing view:

1.165. This viewpoint represents sequential views experienced by recreational users on PRoW 368/209/1 and similar residential views experienced from the rear and curtilage of properties at Veddu Fach. PRoW 368/209/1 lies largely between Ffos Farm and Veddu Fach. Similar views will be experienced from much of PRoW 368/206/2, 368/207/1 and 368/208/1 to the east, south and west of this location respectively.

1.166. In views looking southeast, Fields 1, 2, 3, 4, 5, and 6 are partially visible in the middle distance of view as indicated by **Appendix 1A: Figure 1.10a** backed by elevated hills in the background of view. The residential property Fedw-Isaf is seen in the middle distance below and to the northwest of Field 1. A pylon line is seen in the centre of view backclothed by landform.

1.167. The other southern fields of the Proposed Development are largely foreshortened by landform and screened by vegetation.

1.168. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.169. Residential and recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route, both residential and

recreational receptors are considered to place value on the available view. The overall sensitivity of receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.170. Construction activities within the middle distance of view on the higher more open areas of Fields 2, 3, 4, 5 and 6 will be more apparent than the lower areas of Field 1 which are largely screened by an intervening treeline. Although, the upper gibs of machinery may occasionally be seen above the intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects'* During Construction.

1.171. This will result in a medium to large scale change experienced locally from much of PRoW 368/209/1 south of Ffos Farm. Similar views will be experienced from the curtilages of properties at Veddu Fach, rear views from these properties will be largely oblique.

Appraisal of operational effects:

1.172. Once operational the Proposed Development will introduce a new renewable energy feature within the middle distance of view, partly foreshortened by landform, partly screened by vegetation and backclothed by landform (as indicated by **Appendix 1A: Figure 1.10b/c**). This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 2, 3, 4, 5 and 6. Development within Field 1 will remain largely screened by vegetation. The substation and access track within Field 3 will be largely foreshortened by landform and party screened by vegetation. The access track within Field 2 will be largely screened by vegetation.

1.173. Mitigation measures including additional hedgerow planting will help screen elements of the Proposed Development within Fields 5 and 6 but will not screen the visible elements within Fields 2, 3, and 4. Visible elements will become more apparent in the winter months following leaf fall. However, a small part of the overall Proposed Development will be evident party screened by vegetation in views from this location.

1.174. The introduction of the Proposed Development will result in a medium scale change experienced locally.

Appraisal of decommissioning effects:

1.175. Decommissioning activities will be similar to those of the construction phase. This will result in a medium to large scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **High to medium** (Construction); **Medium** (all Operational Years) reducing to **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 4. B4598/Penpergwm Lodge

Grid Reference	333399, 210302	**Figure Number**	1.11
LCT	LCT 5A	**Landscape Designation**	N/A
Direction of view	North	**Distance from Proposed Development**	0.5km

Viewpoint location and existing view:

1.176. This viewpoint represents sequential views experienced by recreational receptors on the PRoW 368/54/1 (directly west of Penpergwm Lodge and north of the B4598) and similar views experienced from Penpergwm and the B4598.

1.177. In views looking north Fields 12 is partially visible in the middle distance of view as indicated by **Appendix 1A: Figure 1.11** and in part forms the horizon with the treeline in the background of view, although Field 12 does not contain any proposals for infrastructure development. A pylon line is seen in the foreground and background of view, with the top of one steel lattice tower evident against the skyline. Plate 1 of **Appendix 1B** similar views from the B4598 south of the viewpoint location.

1.178. The other southern fields of the Proposed Development are largely screened by vegetation.

1.179. No operational solar farms are evident within the field of view or in successive views to the, east, south and west.

Sensitivity:

1.180. Residential and recreational and receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route, both residential and recreational receptors are considered to place value on the available view. The overall sensitivity of receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.181. Construction activities within the Application Site will be largely screened from view from this location, although the upper gibs of machinery may occasionally be seen above and through gaps in the intervening trees.

1.182. This will result in a small scale change experienced locally from much of PRoW 368/54/1 and from much of Penpergwm.

Appraisal of operational effects:

1.183. Once operation the Proposed Development will be largely screened from view by intervening landform and vegetation. The introduction of the Proposed Development will result in a barely perceptible to small scale change experienced locally from Penpergwm.

Appraisal of decommissioning effects:

1.184. Decommissioning activities will be similar to those of the construction phase. This will result in a small scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Low** (Construction); **Low to None** (Operational); **Low** (Decommissioning).

Degree of Visual Effect: **Temporary Minor adverse** (Construction); **Minor Adverse to No Change** (Operational Years 0 and 5); **Temporary Minor adverse** (Decommissioning). **Minor beneficial** to **No Change** (Post Decommissioning).

Viewpoint 5. Upper Farm

Grid Reference	333596, 212331	**Figure Number**	1.12
Direction of view	South	**Distance from Proposed Development**	0.7km

Viewpoint location and existing view:

1.185. This viewpoint represents residential views experienced from Upper Farm, The Bungalow and Acre Farm, and similar views experienced from the minor road and PRoW 368/101/1. The residential properties represented by this viewpoint are orientated with principal views looking south, southwest.

1.186. In views looking south from the viewpoint location Fields 2, 3, 4, 5, 7, 6, 10, 11, 13, and 14 are partially visible in the middle distance of view as indicated by **Appendix 1A: Figure 1.12** backed by elevated hills in the background of view, although Fields 13 and 14 do not contain any proposals for infrastructure development. A pylon line is seen against the skyline in the centre of view. Views from the properties and their associated curtilages represented by this

viewpoint will vary with some direct to slightly oblique principal views partly filtered by immediate and intervening field boundary vegetation.

1.187. The other southern fields of the Proposed Development are largely foreshortened by landform and screened by vegetation.

1.188. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.189. Residential and recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route, both residential and recreational receptors are considered to place value on the available view. The overall sensitivity of receptors at this viewpoint is judged to be High.

Appraisal of construction effects:

1.190. Construction activities within the middle distance of view on the higher more open areas of Fields 2, 3, 4, 5, 6 and 7 will be more apparent than the lower areas of Field 10 and 11 which are largely screened by an intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*.

1.191. This will result in a medium to large scale change experienced locally, similar views will be experienced from Upper Farm, The Bungalow and Acre Farm, from a short section of the minor road and from much of PRoW 368/101/1.

Appraisal of operational effects:

1.192. Once operation the Proposed Development will introduce a new renewable energy feature within the middle distance of view, partly foreshortened by landform, partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 2, 3, 4, 5, 6 and 7. Development within Field 10 and 11 will remain largely screened by vegetation. The substation and access track within Field 3 will be partly foreshortened by landform and partly screened by vegetation. The access track within Field 2 will be largely screened by vegetation.

1.193. Mitigation measures including additional hedgerow planting will partially screen elements of the Proposed Development within Fields 5, 6 and 7 but will do little to screen elements within Fields 2, 3 and 4. The Proposed Development will become more apparent in the winter months following leaf fall. However, a small part of the overall Proposed Development will be evident, with some elements partial screened by vegetation in views from this location.

1.194. The introduction of the Proposed Development will result in a medium scale change experienced locally. Similar views will be experienced from Upper Farm, The Bungalow and Acre Farm, from a short section of the minor road and from much of PRoW 368/101/1.

Appraisal of decommissioning effects:

1.195. Decommissioning activities will be similar to those of the construction phase. This will result in a large to medium scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning).

Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 6. Pentre Farm

Grid Reference	334395, 212431	**Figure Number**	1.13
Direction of view	Southwest	**Distance from Proposed Development**	0.9km

Viewpoint location and existing view:

1.196. This viewpoint represents residential views experienced from Pentre Farm and similar views from Chapel Cottage, The Hall Farm, and the adjacent minor road. The residential properties represented by this viewpoint are orientated with principal views looking southeast.

1.197. In views looking southwest from the viewpoint location Fields 2, 3, 4, 5, 6, 10, 11, 13, and 14 are partially visible in the middle distance of view as indicated by **Appendix 1A: Figure 1.13** backed by elevated hills in the background of view, although Fields 13 and 14 do not contain any proposals for infrastructure development. Only the roof of Great House is seen above intervening vegetation and a pylon line is seen against the skyline in the centre of view. Views from the properties and their associated curtilages represented by this viewpoint will vary with largely oblique views from the actual properties partly filtered by immediate and intervening field boundary vegetation.

1.198. The other southern fields of the Proposed Development are largely foreshortened by landform and screened by vegetation.

1.199. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.200. Residential receptors are considered to be of high susceptibility to changes in view. The viewpoint is located on a minor road where transient receptors are considered to be of lower susceptibility. Residential receptors are considered to place value on the available view. The overall sensitivity of recreational receptors at this viewpoint is judged to be High.

Appraisal of construction effects:

1.201. Construction activities within the middle distance of view on the higher more open areas of Fields 2, 3, 4, 5, and 6 will be more apparent than the lower areas of Field 10 and 11 which are largely screened by an intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction*'.

1.202. This will result in a medium to large scale change experienced locally from the viewpoint, with similar views experienced from Pentre Farm and similar views from Chapel Cottage, The Hall Farm, from a short section of the minor road.

Appraisal of operational effects:

1.203. Once operation the Proposed Development will introduce a new renewable energy feature within the middle distance of view, partly foreshortened by landform, partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 2, 3, 4, 5, and 6. Development within Field 10 and 11 will remain largely screened by vegetation. The substation and access track within Field 3 will be partly screened by vegetation. The access track within Field 2 will be largely screened by vegetation.

1.204. Mitigation measures including additional hedgerow planting will partially screen elements of the Proposed Development within Fields 5 and 6 but will do little to screen elements within Fields 2, 3 and 4. The Proposed Development will become more apparent in the winter months following leaf fall. However, a small part of the overall Proposed Development will be evident, with some elements partial screened by vegetation in views from this location.

1.205. The introduction of the Proposed Development will result in a medium scale change experienced locally from Pentre Farm and similar views from Chapel Cottage, The Hall Farm, from a short section of the minor road.

Appraisal of decommissioning effects:

1.206. Decommissioning activities will be similar to those of the construction phase. This will result in a medium to large scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning).

Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 7. Coed Morgan PRoW

Grid Reference	335307, 210846	Figure Number	1.14
West	Northwest	Distance from Proposed Development	1.0km

Viewpoint location and existing view:

1.207. This viewpoint represents recreational views from Coed Morgan PRoW 36/52/1, 361/75/1, NCN route 42 and similar views experienced from the residential property Pwll-yr-hwyad and the adjacent road.

1.208. In views looking northwest from the viewpoint location Fields 1, 2, 5, 6, 7, 8, 9, 12, 13, and 14 are partially visible in the background of view as indicated by **Appendix 1A: Figure 1.14** backclothed by the elevated landform of the Blorange, although Fields 12, 13 and 14 do not contain any proposals for infrastructure development. Great House is seen just above the intervening vegetation and a pylon line is seen against the skyline in the centre of view backclothed by landform. Pwll-yr-hwyad is oriented west, northwest and will experienced similar views partly filtered by immediate vegetation on the western boundary of the property's curtilage.

1.209. The other fields of the Proposed Development are largely foreshortened by landform and screened by vegetation.

1.210. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.211. Recreational and residential receptors are considered to be of high susceptibility to changes in view. Recreational and residential receptors are considered to place value on the available view. The overall sensitivity of receptors at this viewpoint are judged to be **High**.

Appraisal of construction effects:

1.212. Construction activities within the background of view on the higher more open areas of Fields 1, 2, 3, 4, 5, and 6 and 7 will be more apparent than the lower areas of Field 8 and 9 which are largely screened by an intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*.

1.213. This will result in a medium change experienced locally from the viewpoint. Similar views will be experienced from much of PRoW 36/52/1, 361/75/1, from a short section of NCN route 42 and shared minor road between the A40 and Coed Morgan. More filtered and partly screened by vegetation experienced from Pwll-yr-hwyad.

Appraisal of operational effects:

1.214. Once operational the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within 1, 2, 3, 4, 5, and 6 and 7. Development within Field 10 and 11 will remain largely screened by vegetation. The substation and access track within Field 3 will be partly screened by vegetation. The access track within Field 2 will be largely screened by vegetation.

1.215. Mitigation measures including additional hedgerow planting will partially screen elements of the Proposed Development within Fields 5, 6 and 7 but will do little to screen elements within Fields 1, 2, 3 and 4. The Proposed Development will become more apparent in the winter months following leaf fall. However, a small part of the overall Proposed Development will be evident in views from this location.

1.216. The introduction of the Proposed Development will result in a small to medium scale change experienced locally from much of PRoW 36/52/1, 361/75/1, from a short section of NCN route 42 and the shared minor road between the A40 and Coed Morgan. More filtered and partly screened by vegetation experienced from Pwll-yr-hwyad.

Appraisal of decommissioning effects:

1.217. Decommissioning activities will be similar to those of the construction phase. This will result in a medium scale change experienced locally. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium** (Construction); **Medium to Low** (all Operational Years); **Medium** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate adverse** (Construction); **Moderate/Minor adverse** (all Operational Years) **Temporary, Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 8. Usk Valley Walk

Grid Reference	333053, 209418	Figure Number	1.15
Direction of view	North	Distance from Proposed Development	1.4km

Viewpoint location and existing view:

1.218. This viewpoint represents recreational views from the Usk Valley Walk. In views looking north from the viewpoint location Fields 3, 5 and 6 are partially visible in the background of view as indicated by **Appendix 1A : Figure 1.15**. Rectory Farm is seen in the foreground of view and a pylon line is seen against the skyline in the background of view.

1.219. The other fields of the Proposed Development are screened by landform and screened by vegetation.

1.220. No operational solar farms are evident within the field of view or in successive views to the south, east, and west.

Sensitivity:

1.221. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.222. Construction activities within the background of view on the higher ground of Fields 3, 5 and 6 will be seen in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. The upper gibs of machinery may occasionally be seen against the skyline during the construction phase from this location.

1.223. This will result in a small to medium scale change experienced from a local to moderate geographical extent of the Usk Valley Walk within 2km. Similar views with varying visibility will

be experienced from a section of this route approximately between Llanvihangel Gobion and to the north of Llanover Church.

Appraisal of operational effects:

1.224. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, largely screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 3, 5, and 6. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of the Usk Valley Walk (approximately between Llanvihangel Gobion and to the north of Llanover Church).

Appraisal of decommissioning effects:

1.225. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 9. PRoW Ysgryd Fach

Grid Reference	332380, 213348	**Figure Number**	1.16
Direction of view	Southeast	**Distance from Proposed Development**	1.7km

Viewpoint location and existing view:

1.226. This viewpoint represents recreational views from PRoW 368/218A/1 and similar views gained from PRoW 368/218/1 and 368/217/4. In views looking north from the viewpoint location Fields 2, 5, 6, 10, 11 and 13 are partially visible in the middle distance of view as indicated by **Appendix 1A: Figure 1.16** backclothed by elevated landform, although Field 13 does not contain any proposals for infrastructure development. Two parallel pylon lines are

seen against the skyline in the foreground of view and a pylon line is seen crossing Field 6 in the middle distance.

1.227. The other fields of the Proposed Development are screened by landform and screened by vegetation.

1.228. No operational solar farms are evident within the field of view or in successive views to the north, east, and west.

Sensitivity:

1.229. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.230. Construction activities within the middle distance of view on the higher ground of Fields 2, 5 and 6 will be seen in the middle distance of view. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. Construction works within the more distant lower Fields 10 and 11 will be framed by vegetation.

1.231. This will result in a small to medium scale change experienced from a locally from short sections of PRoW 368/218A/1 and similar views gained from PRoW 368/218/1 and 368/217/4.

Appraisal of operational effects:

1.232. Once operation the Proposed Development will introduce a new renewable energy feature within the middle distance of view, partly foreshortened by landform, partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 2, 5, 6, 10, 11.

1.233. Mitigation measures including additional hedgerow planting will partially screen elements of the Proposed Development within Fields 5 and 6 but will do little to screen elements within Fields 2. Elements of the Proposed Development within Fields 10 and 11 will be largely seen as a distant feature framed by existing vegetation. The Proposed Development will become more apparent in the winter months following leaf fall. However, a small part of the overall Proposed Development will be evident in views from this location.

1.234. The introduction of the Proposed Development will result in a small scale change experienced locally from short sections of PRoW 368/218A/1 and similar views gained from PRoW 368/218/1 and 368/217/4.

Appraisal of decommissioning effects:

1.235. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 10. Monmouthshire & Brecon Canal/NCN 49 on the edge of Brecon Beacons National Park

Grid Reference	330057, 209785	**Figure Number**	1.17
Direction of view	East	**Distance from Proposed Development**	3.2km

Viewpoint location and existing view:

1.236. This viewpoint represents recreational views from the Monmouthshire & Brecon Canal and NCN route 49 on the edge of the BBNP. In views looking east from the viewpoint location Fields 5 and 6 are partially visible in the background of view as indicated by **Appendix 1A: Figure 1.17** partly backclothed by landform. A pylon line is seen against the skyline in the background of view passing through Field 6.

1.237. The other fields of the Proposed Development are screened by landform and screened by vegetation.

1.238. No operational solar farms are evident within the field of view or in successive views to the north, south, and west.

Sensitivity:

1.239. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.240. Construction activities within the background of view on the higher ground of Fields 5 and 6 will be seen in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. The upper gibs of machinery may occasionally be seen against the skyline during the construction phase from this location.

1.241. This will result in a small to medium scale change experienced from a local to moderate geographical extent of the Monmouthshire & Brecon Canal and NCN route 49 approximately between Llanellen (north) and Penperlleni (south). Although visibility along this section of this route will vary and subject to localised screening by landform and vegetation.

Appraisal of operational effects:

1.242. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, largely screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5 and 6. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of the Monmouthshire & Brecon Canal and NCN route 49 (approximately between Llanellen and Penperlleni).

Appraisal of decommissioning effects:

1.243. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 11. A4042 South of Llanover

Grid Reference	331577, 207720	Figure Number	1.18
Direction of view	Northeast	Distance from Proposed Development	3.5km

Viewpoint location and existing view:

1.244. This viewpoint represents transient views experienced from the A4042 and similar residential views gained from Llanover. In views looking northeast from the viewpoint location Fields 5 and 6 are partially visible in the background of view, Field 10 is barely perceptible as indicated by **Appendix 1A: Figure 1.18**. Two pylon lines are seen against the skyline, one passing through Field 6 and the other to the northwest of the Application Site.

1.245. The other fields of the Proposed Development are screened by landform and vegetation.

1.246. No operational solar farms are evident within the field of view or in successive views to the north, south, east and west.

1.247. Other views from the PRoW network near Llanover between Llanover Church and Ty Uchaf are included in **Appendix 1B**. Potential effects on these routes are considered in the appraisal of recreational routes below.

Sensitivity:

1.248. Residential receptors are considered to be of high susceptibility to changes in view. The viewpoint is located on a minor road where transient receptors are considered to be of lower susceptibility. Residential receptors are considered to place value on the available view. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.249. Construction activities within the background of view on the higher ground of Fields 5 and 6 will be seen in the background of view framed by intervening vegetation. Activities with Field 10 will be barely perceptible/ These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. The upper gibs of machinery may occasionally be seen backclothed by landform.

1.250. This will result in a small scale to medium change experienced from a local to moderate geographical extent of the A4042, approximately between, Beili-glas (north) and Goytre Hall (south). Although visibility along this section of this route will vary and subject to localised screening by landform and vegetation. Views of the Proposed Development from within Llanover will be largely screened by the mixed mature woodland directly north of the settlement.

Appraisal of operational effects:

1.251. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, and partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5, 6 and barely perceptible Field 10. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of the A4042. From much of Llanover the Proposed Development will be barely perceptible.

Appraisal of decommissioning effects:

1.252. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 12: PRoW near Upper Llanover within the Brecon Beacons National Park

Grid Reference	330058, 208535	**Figure Number**	1.19a/b
Direction of view	Northeast	**Distance from Proposed Development**	3.9km

Viewpoint location and existing view:

1.253. This viewpoint represents recreational views experienced from PRoW 368/253/1 and similar residential views gained from Upper Llanover within the BBNP. In views looking northeast from the viewpoint location Fields 5, 6, 8 and 12 are partially visible in the background of view, as indicated by **Appendix 1A: Figure 1.19a,** although Field 12 does not contain any proposals for infrastructure development. A pylon line is seen against the skyline west of the Proposed Development and a pylon line backclothed by landform is seen passing through Field 6.

1.254. The other fields of the Proposed Development are screened by landform and vegetation.

1.255. No operational solar farms are evident within the field of view or in successive views to the north, south, east and west.

Sensitivity:

1.256. Recreational and residential receptors are considered to be of high susceptibility to changes in view. Recreational and residential receptors are considered to place value on the available view. The overall sensitivity of receptors at this viewpoint are judged to be **High**.

Appraisal of construction effects:

1.257. Construction activities within the background of view on the higher ground of Fields 5 and 6 will be seen in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*.

1.258. This will result in a small scale change experienced from a local to moderate geographical extent of PRoW 368/253/1 and Upper Llanover. Where visible construction activities will affect a small relatively distant portion of the available view.

Appraisal of operational effects:

1.259. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, and partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5 and 6, as indicated by **Appendix 1A: Figure 1.19b**. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of the PRoW 368/253/1 and Upper Llanover. From this distance (3.9km), the growth of mitigation planting will not be visually discernible so a photomontage at Year 5 is not included.

Appraisal of decommissioning effects:

1.260. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 13: NCN 42 Bettws Newydd

Grid Reference	335954, 206494	**Figure Number**	1.20
Direction of view	Northwest	**Distance from Proposed Development**	4.6 km

Viewpoint location and existing view:

1.261. This viewpoint represents recreational views experienced from NCN route 42 near Bettws Newydd. In views looking northwest from the viewpoint location Fields 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 are partially visible in the background of view, as indicated by **Appendix 1A: Figure 1.20,** although Fields 12, 13 and 14 do not contain any proposals for infrastructure development. A pylon line backclothed by landform is seen passing through Field 6 and another pylon line is seen backclothed and evident against the skyline to the west and north of the Application Site.

1.262. The other fields of the Proposed Development are screened by landform and vegetation.

1.263. No operational solar farms are evident within the field of view or in successive views to the north, south, east and west.

Sensitivity:

1.264. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.265. Construction activities within the background of view on the higher ground of Fields 5, 6, 7, 8, 9, and 10 will be seen in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction*'. Activities within the lower elevations of Fields 9, 10 and the majority of Field 11 will be screened by vegetation

1.266. This will result in a small to medium scale change experienced from a local to moderate geographical extent of NCN route 42, approximately between Clytha Park and Bettws Newydd. Visibility of construction activities along this section of the route will vary and subject to localised screening by landform and vegetation. Where visible construction activities will affect a small relatively distant portion of the available view.

Appraisal of operational effects:

1.267. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, and partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5, 6, 7, 8, 9, and 10. Elements of the Proposed Development within other fields will be largely screened by intervening landform and vegetation. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small to medium scale textural change experienced from a local to moderate geographical extent of NCN route 42.

Appraisal of decommissioning effects:

1.268. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 14: Iron Mountain Trail on eastern side of the Blorenge

Grid Reference	327785 N211637	Figure Number	1.21
Direction of view	East	Distance from Proposed Development	4.9 km

Viewpoint location and existing view:

1.269. This viewpoint represents elevated recreational views experienced from the Iron Mountain Trail on the north eastern slopes of The Blorenge within the BBNP and the BILWHS. In views looking northeast from the viewpoint location Fields 5, 6, 8, 9, 10, 11 and 12 are partially visible in the background of view, at lower elevation as indicated by **Appendix 1A: Figure 1.21,** although Field 12 does not contain any proposals for infrastructure development. The Application Site fields form a small part of a larger composition of rolling and undulating agricultural land with a patchwork woodland.

1.270. The other fields of the Proposed Development are screened by landform and vegetation.

1.271. No operational solar farms are evident within the field of view or in successive views to the north, south, east and west.

Sensitivity:

1.272. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.273. Construction activities within the background of view on the higher ground of Fields 5, 6, 7, in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. Activities within the lower elevations of Fields 8, 9, 10 and 11 will be largely screened by vegetation.

1.274. This will result in a small scale change experienced from a local to moderate geographical extent of routes up The Blorenge northeastern slopes.

Appraisal of operational effects:

1.275. Once operation the Proposed Development will introduce a new renewble energy feature in the background of view, partly foreshortened by landform, and partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5, 6, and 7. Elements of the Proposed Development within other fields will be largely screened by intervening landform and vegetation. Taking account of the intervening distance and the small portion of view which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of routes up The Blorenge northeastern slopes.

Appraisal of decommissioning effects:

1.276. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 15: The Blorenge

Grid Reference	326983, 211844	Figure Number	1.22a/b
Direction of view	Northwest	Distance from Proposed Development	5.8 km

Viewpoint location and existing view:

1.277. This viewpoint represents elevated recreational views experienced from The Blorenge within the BBNP and the BILWHS. In views looking northwest from the viewpoint location Fields 5, 6, 7, 8, 9, 10, 11 and 12 are partially visible in the background of view, at lower elevation as indicated by **Appendix 1A : Figure 1.22a,** although Field 12 does not contain any proposals for infrastructure development. The Application Site fields form a small part of a larger composition of rolling and undulating agricultural land with a patch work woodland.

1.278. The other fields of the Proposed Development are screened by landform and vegetation.

1.279. No operational solar farms are evident within the field of view or in successive views to the north, south, east and west.

Sensitivity:

1.280. Recreational receptors are considered to be of higher susceptibility to changes in view. The viewpoint is located on a promoted recreational route. The overall sensitivity of recreational receptors at this viewpoint is judged to be **High**.

Appraisal of construction effects:

1.281. Construction activities within the background of view on the higher ground of Fields 5, 6, 7, in the background of view framed by intervening vegetation. These activities will include elements outlined in paragraph headed '*Sources of Effects During Construction'*. Activities within the lower elevations of Fields 8, 9, 10 and 11 will be largely screened by vegetation.

1.282. This will result in a small scale change experienced from a local to moderate geographical extent of The Blorenge and routes up its north eastern slopes.

Appraisal of operational effects:

1.283. Once operation the Proposed Development will introduce a new renewable energy feature in the background of view, partly foreshortened by landform, and partly screened by vegetation and backclothed by landform. This will include some of the south facing solar arrays, sections of security fence and associated CCTV cameras within Fields 5, 6, and 7. Elements of the Proposed Development within other fields will be largely screened by intervening landform and vegetation. Taking account of the intervening distance and the small portion of view

which will be affected this will result in a small scale textural change experienced from a local to moderate geographical extent of The Blorenge and routes up its north eastern slopes, refer to **Appendix 1A:Figure 1.22b**. From this distance (5.8km), the growth of mitigation planting will not be visually discernible so a photomontage at Year 5 is not included.

Appraisal of decommissioning effects:

1.284. Decommissioning activities will be similar to those of the construction phase. Post Decommissioning mitigation planting will have matured integrating with the surrounding landscape.

Magnitude of Change and Degree of Visual Effect:

Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning).

Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Table 1-9: Summary of Viewpoint Visual Effects

Viewpoint	Magnitude of change and Degree of Effect
Viewpoint 1. PRoW near Great House	Magnitude of Change: **High** (Construction); **Medium** (all Operational Years) reducing to **Low (**Decommissioning). Degree of Visual Effect: **Temporary, Major adverse** (Construction); **Major/Moderate adverse** (all Operational Years); **Temporary, Major adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 2. Minor road/PRoW north of Tyler's Wood	Magnitude of Change: **High** (Construction); **Medium** (all Operational Years) reducing to **Low** (Decommissioning). Degree of Visual Effect: **Temporary, Major adverse** (Construction); **Major/Moderate adverse** (all Operational Years); **Temporary, Major adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 3. South of Ffos Farm	**Magnitude of Change**: High to medium (Construction); **Medium** (all Operational Years) reducing to **Low** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate** adverse (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 4. B4598/Penpergwm Lodge	Magnitude of Change: **Low** (Construction); **Low to None** (Operational); **Low** (Decommissioning). Degree of Visual Effect: **Temporary Minor adverse** (Construction); **Minor Adverse to No Change** (Operational Years 0 and 5); **Temporary Minor**

	adverse (Decommissioning). **Minor beneficial to No Change** (Post Decommissioning).
Viewpoint 5. Upper Farm	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate** adverse (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 6. Pentre Farm	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 7. Coed Morgan PRoW	Magnitude of Change: **Medium** (Construction); **Medium to Low** (all Operational Years); **Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate adverse** (Construction); **Moderate/Minor adverse** (all Operational Years) **Temporary, Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 8. Usk Valley Walk	Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 9. PRoW Ysgryd Fach	Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 10. Monmouthshire & Brecon Canal/NCN 49 on the edge of Brecon Beacons National Park	Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 11. A4042 South of Llanover	Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Viewpoint 12: PRoW near Upper Llanover within the Brecon Beacons National Park	Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 13: NCN 42 Bettws Newydd	Magnitude of Change: **Medium to Low** (Construction); **Low** (all Operational Years); **Medium to Low** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate/Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate/Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 14: Iron Mountain Trail on eastern side of the Blorenge	Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Viewpoint 15: The Blorenge	Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Visual Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Potential Effects on Views from Settlements

1.285. Receptors who will experience views from settlements are assumed in most instances to be local residents at their residential properties and curtilages who will regularly experience the available views. Residential receptors are therefore considered to have a high susceptibility to changes in the view.

Penpergwm

1.286. Potential changes to views experienced from Penpergwm are considered in the appraisal of visual effects for Viewpoint 4. Similar views are anticipated from Penpergwm and the overall degree of visual effect is considered to be **Minor adverse to No change** during the operational phase of the Proposed Development.

Llanover

1.287. Potential changes to views experienced from Llanover are considered in the appraisal of visual effects for Viewpoint 11. Similar views are anticipated from Llanoverand the overall degree of visual effect is considered to be **Minor adverse to No change** during the operational phase of the Proposed Development.

Effects on Views from Residential Properties

1.288. Receptors who will experience views from residential properties are assumed in most instances to be local residents at their residential properties and curtilages who will regularly experience the available views. Residential receptors are therefore considered to have a high susceptibility to changes in the view, consider value in the view and are judged to have an overall **High** sensitivity. The residential receptors are identified on **Figure 1.28 of Appendix 1A (forthcoming)**.

Table 1-10: Potential Effects on Views from Residential Properties

Name	Description	Magnitude of Change and Degree of Visual Effect
Acre Farm, Upper Farm and The Bungalow, c. 0.7km north of the Proposed Development.	Considered in the appraisal of Viewpoint 5.	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Tresaison and Little Tresaison, Bannut – Tree and Pentre Cottage, c. 0.2km northeast of the Proposed Development.	Similar views are anticipated to those experienced from Viewpoints 5 and 6.	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Llangattock Mill Farm cluster, c. 0.3km northeast of the Proposed Development.	Views looking south towards the lower south eastern fields will be largely screened by immediate and intervening vegetation. However, some additional vehicle movements are likely to be experienced along the shared access to Great House, during operation only, this will only be used for maintenance.	Magnitude of Change: **Medium** (Construction); **Low** (all Operational Years); **Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Mount Pleasant Farm cluster, including the Manse, Pwll-y carw and Trewarren, c. 0.1km northeast of the Proposed Development.	Similar views are anticipated to those experienced from Viewpoints 6.	Magnitude of Change: **Medium** (Construction); **Medium** (all Operational Years); **Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Box Cottage, Little Oak Cottage, Kinsey Cottage, Herbert's Cottage's, Rushoime and Pen-yr-heal, c. 0.9km southeast of the Proposed Development.	Views looking east towards the higher elevations of Fields 5, 6 and 7 will be largely filtered and screened by vegetation. Although a very small part of the overall Proposed Development may be visible between gaps in vegetation in the background of view. Other fields within the Application Site will be screened by landform and immediate and intervening vegetation. Where visible a small part of the overall Proposed Development will be evident	Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Visual Effect: **Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Upper Court Farm cluster, c. 0.1km south of the Proposed Development.	Views looking north and east towards the Application Site will be largely screened by landform and vegetation. Although construction activities are likely to be experienced along a short section of the access to this property.	Magnitude of Change: **Medium** (Construction); **Low** (all Operational Years); **Medium** (Decommissioning). Degree of Visual Effect: **Moderate adverse** (Construction); **Minor adverse** (all Operational Years) **Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Veddu Fach and Upper Veddu Veaur, c. 0.1km	Similar views are anticipated to those experienced from Viewpoints 3.	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning).

northwest of the Proposed Development.		Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Ffos Farm, c. 0.1km northwest of the Proposed Development.	Similar views are anticipated to those experienced from Viewpoints 3.	Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Visual Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

Effects on Views from Transport Routes

1.289. The transport routes in the study area from which potential views of the Proposed Development may be experienced are assessed below. Transient receptors are considered to be of medium susceptibility. Some road users will place value on the view given the proximity of these routes to the BBNP, therefore the value of the view is considered to be medium. On balance, the sensitivity of the view is judged to be **Medium**. The operational degree of visual effect is considered below. The transport routes are identified on plan, refer to **Appendix 1A: Figure 1.28 (forthcoming)**.

Table 1-11: Potential Effects on Views from Transport Routes

Name	Description	Degree of Visual Effect
Minor Road Network	Considered in the appraisal of Viewpoints 2, 3, 5, 6 and 7.	Where the Proposed Development is evident in views from short sections of the minor road network closest to the Application Site the degree of visual effect is judged to be **Moderate to Minor adverse,** reducing with distance.
A40	The ZTV indicates theoretical visibility from a section of this road approximately east of The Bryn (west)and west of Bryngwyn (east). Actual visibility will be largely limited by roadside embankments and vegetation. Similar views are indicated from **Plate 2 of Appendix 1B** which shows limited visibility from the bridge over the	Where the Proposed Development is evident in largely glimpsed views from the A40 the degree of visual effect is judged to be **Minor adverse.**

	A40 leading to the Bryn. Where visible a small part of the overall Proposed Development will be evident.	
A4042	Considered in the appraisal of Viewpoint 11. The ZTV indicates theoretical visibility Beili-glas (north) and Goytre Hall. Actual visibility will be subject to localised screening by landform and vegetation. Similar occasional views to those experienced from Viewpoint 11 will be seen from a short section of the A4042. Where visible a small part of the overall Proposed Development will be evident.	Where the Proposed Development is evident in occasional views from the A4042 the degree of visual effect is judged to be **Minor adverse.**
B4598	Considered within the appraisal of Viewpoint 4 Similar views are experienced from **Plate 1 of Appendix 1B**.	Where the Proposed Development is evident in occasional views from the B4598 the degree of visual effect is judged to be **Minor adverse.**
Abergavenny to Pontypool Railway line	The ZTV indicates theoretical visibility from a section of this road approximately east of The Bryn (north) and Nant -y – derry (south). Actual visibility will be largely limited by rail sid embankments and vegetation. Similar views are indicated from **Plate 2 of Appendix 1B** which shows limited visibility from the bridge over the A40 leading to the Bryn. Where visible a small part of the overall Proposed	Where the Proposed Development is evident in largely glimpsed views from Abergavenny to Pontypool Railway line the degree of visual effect is judged to be **Minor adverse.**

	Development will be evident.	

Effects on Views from Recreational Routes

1.290. The transport routes in the study area from which potential views of the Proposed Development may be experienced are assessed below. Recreational receptors are considered to be of high susceptibility and will place value on views therefore the value of the view is considered to be high. On balance, the sensitivity of the view is judged to be **High**. The operational degree of visual effect is considered below. The recreational routes are identified on plan, refer to **Appendix 1A: Figure 1.28 (forthcoming)**.

Table 1-12: Potential Effects on Views from Recreational Routes

Name	Description	Degree of Visual Effect
PRoW Network within c. 2km	Considered in the appraisal of Viewpoints 1, 2, 3, 4, 5, 7 and 9.	Where the Proposed Development is evident in views from the entirety of PRoW 368/55/1 and a section of PRoW 368/56/1 within the Application Site, the degree of visual effect is judged to be **Major/Moderate adverse.** Where the Proposed Development is evident in relatively close proximity views the degree of visual effect will range from **Moderate to Minor adverse** as identified by Viewpoints 3, 4, 5, 7 and 9.
Usk Valley Walk	Considered within the appraisal of Viewpoint 8. The ZTV indicates theoretical visibility will be experienced from a section of this route approximately between Llanvihangel Gobion and to the north of Llanover Church. Actual visibility along this route will vary and subject to localised screening by landform and vegetation. Where visible a small part of the overall Proposed Development will be evident.	Where the Proposed Development is evident in longer distance views the degree of visual effect is judged to be **Minor adverse** as identified by Viewpoints 8.

Llanover PRoW	The ZTV indicates theoretical visibility will be experienced from the majort of the PRoW network between Llanover and Llanover Church. Actual visibility along this route will vary and subject to localised screening by landform and vegetation. Where visible a small part of the overall Proposed Development will be evident. **Plates 4 and 5 of Appendix 1B** indicate screened and partial longer distance views.	Where the Proposed Development is evident in largely longer distance views the degree of visual effect is judged to be **Minor adverse**.
BBNP & BILWHS recreational routes	Considered in the appraisal of Viewpoints 14 and 15. The ZTV indicates theoretical visibility from a number of routes on the north eastern side and summit of the Blorenge. Actual views will be generally unrestricted from the higher open moorland elevations. Where visible a small part of the overall Proposed Development will be evident	Where the Proposed Development is evident in longer distance views the degree of visual effect is judged to be **Minor adverse** as identified by Viewpoints 14 and 15.
NCN route 42	Considered in the appraisal of Viewpoints 7 and 13. The ZTV indicates theoretical visibility approximately between Coed Morgan and Bettws Newydd. Actual views will be subject to localised screening by vegetation and landform. Where visible a small part of the overall Proposed Development will be evident	Where the Proposed Development is evident in middle to long distance views the degree of visual effect will range from **Moderate to Minor adverse** as identified by Viewpoints 7 and 13.

NCN route 49	Considered in the appraisal of Viewpoint 10. The ZTV indicates theoretical visibility approximately between Llanellen (north) and Penperlleni (south). Actual views will be subject to localised screening by vegetation and landform. Where visible a small part of the overall Proposed Development.	Where the Proposed Development is evident in longer distance views the degree of visual effect is judged to be **Minor adverse.**

LANDMAP Appraisal

1.291. The following tables set out an appraisal of the LANDMAP aspect areas in each of the five aspect layers. Where LANDMAP aspect areas have an overall evaluation of High or Outstanding this assessment has categorised these areas as being of High sensitivity. It is acknowledged that LANDMAP aspects identified with an overall evaluation of Outstanding are of the highest sensitivity. This has been taken into account in this assessment when making judgements on the overall significance of effect. Aspect areas having an overall evaluation score of Moderate are judged to be of Medium sensitivity, and those with an overall evaluation score of Low are judged to be of Low sensitivity.

Table 1-13: Potential Effects on Views from LANDMAP aspect areas.

Name and Reference	Overall Evaluation and Justification	Magnitude of change and Degree of Effect
Geological Landscape		
Llangattock-Newcastle MNMTHGL016	**High** Justification of overall evaluation: *Major area of outcrop of Lower Devonian St Maughan''s Group with significant number of Geodiversity Audit sites (see ''Assessment: Field 36) including potential geological SINCs.*	**Description:** *"Extensive area of undulating terrain dominated by Lower Old Red Sandstone mudrocks (Lower Devonian) dissected by many small streams. Sandstone bands mainly in eastern areas produce some short ridges with a characteristic NNW-SSE orientation, especially southwards from the Great Griag-Griag Syfyrddin area to Monmouth. Includes the distinctive, but relatively small knoll of Ysgyrd Fach. Lower areas forming a broad basin surrounding the markedly dendritic upper part of the Trothy valley system include a veneer of glacial clays (till; Quaternary: Pleistocene)."*

		Degree of Effect: Direct operational effects will arise through the introduction of the Proposed Development within Fields 1, 2, 3, 4, 5 and 6, and 7 which will locally alter surface geological/ geomorphological features. Overall disturbance to surface geology would be minimal. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Raglan MNMTHGL037	**Moderate** Justification of overall evaluation: *Few notable sites/landforms recorded and geomorphology typical of feature/process and not known to be exceptional or is widespread.*	**Description:** *"Low, slightly undulating terrain with low hills in E only: forms a broad, low basin with numerous small streams. Extends from Raglan to Llanddew in the NW and N to the Wernrheolydd area. Dominated by glacial deposits with only small outcrops of bedrock geology mainly Upper Silurian mudrocks of the Lower Old Red Sandstone Group."*
		Degree of Effect: Direct operational effects will arise through the introduction of the Proposed Development within Fields 8, 9, 10 and 11 which will locally alter surface geological/ geomorphological features. Overall disturbance to surface geology would be minimal. The size/scale of effect is therefore considered to be small and effects would be experienced at the site level. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Landscape Habitats		
N. rural Monmouthshire MNMTHLH098	**Moderate** Justification of overall evaluation: It is generally quite low ecological value habitat dominated by improved grassland and	**Description**: *This Aspect Area is a large expanse of lowland farmland that is dominated by fields of improved grassland and their associated hedgerows. There is also a small scattered arable element and areas of Broad-leaved woodland are also present throughout but most noticeably in linear strips following streams in the northern end of the Aspect Area.*

	could be evaluated as low but the presence of some small areas of broad-leaved woodland and semi-improved grassland areas that are designated as SINC''s add to the value although it is recognised that these only constitute a small part of the Aspect Area. The deciding factor in increasing the evaluation to moderate is the presence of a large number of key species although it is recognised that part of the reason for the large number of key species is the large area that the Aspect area covers.	**Degree of Effect:** Direct operational effects will arise through the introduction of the Proposed Development within Fields 1, 2, 3, 4, 5 and 6, and 7 which will result in the minimal loss of landscape features including short sections of hedgerow and the introduction of species rich seed mixes and mitigation planting. The size/scale of effect is therefore considered to be small and effects would be experienced at the site level. Beneficial effects will arise at the site level as mitigation planting establishes c. Year 5. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **No Change/ Minor beneficial** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).
Central rural Monmouthshire MNMTHLH130	**Moderate** Justification of overall evaluation: "*The Aspect Area boundaries encompass an area of improved grassland dominated farmland that is separated from the Aspect Area to the north because it has a greater arable element to the farmland, The boundaries to the east are formed by woodland and the settlement of Monmouth. The floodplain of the River Usk forms the boundary to the west. To the south the A40 and A449 form the Aspect Area boundary. To the north the Aspect Area boundary is to some degree arbitrary but has been digitised as shown so that the large area of improved grassland dominated farmland that covers most of the interior*	**Description**: "*This Aspect Area is a large expanse of lowland farmland that is dominated by fields of improved grassland and their associated hedgerows. There is also a small scattered arable element and areas of Broad-leaved woodland are also present throughout but most noticeably in linear strips following streams in the northern end of the Aspect Area.*" **Degree of Effect:** Direct operational effects will arise through the introduction of the Proposed Development within Fields 8, 9 10 and 11 which will result in the minimal loss of landscape features including short sections of hedgerow and the introduction of species rich seed mixes and mitigation planting. The size/scale of effect is therefore considered to be small and effects would be experienced at the site level. Beneficial effects will arise at the site level as mitigation planting establishes c. Year 5. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **No Change/ Minor beneficial** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

	of Monmouthshire is divided into a number of smaller more meaningful areas. The northern boundary roughly follows a series of watercourses as had been digitised in the original study but these have been digitised to ensure that it follows field boundaries, roads etc. as per LANDMAP methodology however."	
Visual and Sensory		
Northern Hills MNMTHVS015	**High** Justification of overall evaluation: "*A traditional and undulating patchwork of managed hedges, hedge banks, hedgerow trees and small copses with streams of high scenic quality. Long views of these undulating valleys occur from valley hills and from the Monnow valley ridge line. The area has an unspoilt character and maintains its integrity and settlement limited to small linear hamlets and scattered farmsteads. The area has a moderate sense of place through its common character, topographic and visual unity and rhythm. A rural landscape of moderate rarity due to lack of development.*	**Description: "***A domesticated open farmland of undulating hills and valleys with distant views of the Blorenge and the Sugar Loaf, with Ysgyrd Fawr and Fach rising out if its western quarters. It is a farmland of mainly medium-scale fields of mixed pasture to the north, becoming more arable and large-scale to the south. It is enclosed by a traditional patchwork of managed hedges, hedgebanks, hedgerow trees and small copses, although intensive farming within the south has led to a breakdown of traditional boundaries. Treelines typically border the numerous streams and tributaries which flow south into the River Trothy, often found in association with a mosaic of grasslands. Farmsteads are fairly small-scale becoming larger and more modern to the south, lacking integration within the surrounding landscape though connected by a network of narrow winding lanes."* **Degree of Effect:** The ZTV indicates theoretical visibility from northern eastern southern and southwestern areas of this aspect within 2km. Areas to the far north and southwest are outside the ZTV. Viewpoints 3, 5, 6 and 9 are located within this aspect. The Magnitude of visual change identified for Viewpoints 3, 5 and 6 during the operational period is **Medium** to **Low** and **Low** for Viewpoint 9. Where visible the Proposed Development will locally directly and indirectly affect the patchwork of agricultural land described. Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning).

		Degree of Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond 2km the degree of effect will be **Minor Adverse to No Change**.
Northern Raglan MNMTHVS038	**High** Justification of overall evaluation: "*One high, two moderate and one low. This aspect area was considered as Moderate in the Consistency review 2011. Following further information from MCC who felt this evaluation would not be consistent with other areas identified as moderate within MCC. The area has a wealth of historical settlement that is part of the fabric of the visual landscape. It is a rich rural farmed landscape important to Monmouthshire. Whilst this aspect area evaluation was reviewed it has been retained as high overall with the original evaluation criteria.*"	**Description: "***Centrally located with distant panoramic views at high points and restricted internal views, this landscape is drained by the River Trothy. It is a gently rolling domesticated mixed arable and pastoral lowland, diverse and intimate in character, becoming more open and exposed along the A40T corridor and around Raglan. In places, large fields of arable crops have resulted in the breakdown of the field boundary structure, with larger regular fields bounded by post and rail fencing. To the north and southwest smaller more irregular fields of permanent pasture are enclosed by a strong structural network of thick hedges, hedgerow trees and treelines, small-scale woodland blocks and orchards. The extensive orchard at Penrhos Farm near Llantilio Crossenny however disrupts this intimate character. Numerous roads wind their way through this well settled landscape with the A40(T) dividing the area in two halves. Settlement forms a mixture of country estates, scattered houses and small villages, with farm complexes both large and small."* **Degree of Effect:** The ZTV indicates theoretical across the majority of this aspect within 2km. Areas to the far north and southwest with the 2km are outside the ZTV. Viewpoints 1, 2, 4 and 7 are located within this aspect. The Magnitude of visual change identified for Viewpoints 1, 2, and 4 during the operational period is **Medium** and **Low** for Viewpoint 4. Where visible the Proposed Development will locally directly and indirectly affect the rolling agricultural land described. Magnitude of Change: **High to Medium** (Construction); **Medium** (all Operational Years); **High to Medium** (Decommissioning). Degree of Effect: **Temporary, Major/Moderate adverse** (Construction); **Moderate adverse** (all Operational Years) **Temporary, Major/Moderate adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

		Beyond 2km the degree of effect will be **Minor Adverse to No Change**.
Upper Usk Valley MNMTHVS046	**High** Justification of overall evaluation: *An attractive flat open landscape focused on the rivers with an attractive backcloth of hills and scarp slopes. The area is generally in good condition with consistent character throughout, unspoilt generally on the valley floor by intrusive development. The area has a distinct and strong sense of place as an extensive valley floor focused on the sinuous River Usk. Extensive flat valley floor is very rare in Monmouthshire.*	**Description:** "*An open flat riparian landscape, sheltered and overlooked by the Blorenge and Sugar Loaf in the north, with the Gwehelog hills to the south. It forms the floodplain for the river Usk which meanders in broad swathes across the flat valley floor, creating spurs and ox-bow lakes... The land cover comprises of medium to large-scale fields of permanent pasture and arable crops interspersed with enclaves of unimproved and semi-improved grassland, bounded by low, intensively managed hedgerows, often replaced by post and wire fencing... Linear tree belts and lines of willow and alder follow the river and stream courses... Mature individual field trees, parkland and orchards, are also typical of this landscape... Golf courses, tennis courts and informal public open spaces are scattered along the course of the floodplain, the former often unsympathetic in design, layout, materials and planting. Settlement is limited to small-scale villages often intruding onto the floodplain creating an alien visual element within an open rural landscape, as at Llanfoist and Gilwern. Country estates and large farmsteads historically well established, are interconnected by the B4598, A49 and the Newport to Hereford railway line.*" **Degree of Effect:** The ZTV indicates theoretical across the south eastern parts of this aspect within 2km. Areas to the northwest within 2km are outside the ZTV. Viewpoints 8 is located within this aspect. The Magnitude of visual change identified for Viewpoints 8 during the operational period is **Low.** Visibility of the Proposed Development from the Upper Usk Valley will be largely limited by intervening screening landform and vegetation. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.

Ysgyryd Fach MNMTHVS013	**High** Justification of overall evaluation: "*The hill is a distinctive and attractive dome rising from the lower ground and forming a visual focus and a backcloth to Abergavenny and to Coldbrook house. The landcover is managed in good condition with the plantation and farmland a consistent character. Its distinct prominent landform gives it a definite sense of place. The hill is rare in its domed character within the lowland of the county.*"	**Description:** "*An outlier rising out of the low lying land with panoramic views and forming an important focal point within the surrounding landscape. It has a more domesticated, farmed character compared to Ysgyryd Fawr and is dominated by a large block of mixed deciduous and coniferous woodland over its valley head. Large fields of permanent pasture occur on lower slopes enclosed by low intensively managed hedges. Settlement is sparse, characterised by small-scale traditional farmsteads and crossed by a network of footpaths.*" **Degree of Effect:** The ZTV indicates theoretical across the southeastern parts of this aspect within 2km. Areas west within 2km are outside the ZTV. Viewpoints 9 is located within close proximity to this aspect. The Magnitude of visual change identified for Viewpoints 9 during the operational period is **Low.** Visibility from Ysgyryd Fach will be largely foreshortened by landform and partly screened by intervening vegetation. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.
Historic Landscape		
East Bergavenny MNMTHHL049	**Outstanding** Justification of overall evaluation: "*An area predominantly displaying outstanding integrity, survival, condition, rarity and considerable potential.*"	**Description:** The description has not been reproduced given its length but can be found at Natural Resources Wales **Degree of Effect:** The ZTV indicates theoretical across the much of the northern, eastern and western parts of this aspect within 2km. Areas west within 2km are outside the ZTV. Although visible from some cultural heritage assets, the Development would not directly affect recognised elements of the historic landscape. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** to **No change** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning).

		Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.
Usk Valley MNMTHHL061	**High** Justification of overall evaluation: *"An area predominantly displaying outstanding integrity, survival, condition, rarity and considerable potential."*	**Description:** The description has not been reproduced given its length but can be found at Natural Resources Wales **Degree of Effect:** The ZTV indicates theoretical across the much of the northern, eastern and western parts of this aspect within 2km. Areas west within 2km are outside the ZTV. Although visible from some cultural heritage assets, the Development would not directly affect recognised elements of the historic landscape. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** to **No change** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.
Cultural Landscape		
Northern Hills MNMTHCLS015	N/A	**Degree of Effect:** The ZTV indicates theoretical across the much of the northern, eastern and western parts of this aspect within 2km. Areas west within 2km are outside the ZTV. Although visible from some cultural heritage assets, the Development would not directly affect recognised elements. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning). Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** to **No change** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.
Northern Raglan MNMTHCLS042	N/A	**Degree of Effect:** The ZTV indicates theoretical across the much of the northern, eastern and western parts of this aspect within 2km. Areas west within 2km are outside the ZTV. Although visible from some cultural heritage assets, the Development would not directly affect recognised. Magnitude of Change: **Low** (Construction); **Low** (all Operational Years); **Low** (Decommissioning).

		Degree of Effect: **Temporary, Minor adverse** (Construction); **Minor adverse** (all Operational Years) **Temporary, Minor adverse** to **No change** (Decommissioning); **No Change/ Minor beneficial** (Post Decommissioning). Beyond c.2km the degree of effect will be **Minor Adverse to No Change**.

LANDSCAPE DESIGNATIONS

Brecon Beacons National Park

1.292. The Special Qualities of the Brecon Beacons National Park[14] are described in Table 3.1 of the Brecon Beacons National Park Management Plan 2015-2020 as:

- *"A National Park offering peace and tranquillity with opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal.*
- *A feeling of vitality and healthfulness that comes from enjoying the Park's fresh air, clean water, rural setting, open land and locally produced foods.*
- *A sense of place and cultural identity - "Welshness" - characterized by the indigenous Welsh language, religious and spiritual connections, unique customs and events, traditional foods and crafts, relatively unspoilt historic towns and villages, family farms and continued practices of traditional skills developed by local inhabitants to live and earn a living here, such as common land practices and grazing.*
- *A sense of discovery where people explore the Park's hidden secrets and stories such as genealogical histories, prehistoric ritual sites, relic medieval rural settlements, early industrial sites, local myths and legends and geological treasures from time immemorial.*
- *The Park's sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes, including marvellous gorges and waterfalls, classic karst geology with caves and sink holes, contrasting glacial landforms such as cliffs and broad valleys carved from old red sandstone and prominent hilltops with extensive views in all directions."*

[14] Brecon Beacons National Park (2015) Brecon Beacons National Park Management Plan 2015-2020

1.293. These special qualities are considered to combine in a high susceptibility, a high value and a **High** overall sensitivity.

1.294. The Proposed Development will not directly affect the BBNP but will affect the *"…extensive views in all directions"* as indicated by Viewpoints 10, 12, 14 and 15. For each of these viewpoints a **Low** magnitude of visual change was identified.

1.295. Visibility of the Proposed Development from within the BBNP will vary, visible elements will be seen as a relatively distant feature partly screened by landform and vegetation and will generally affect a small portion of available longer distance views. This will result in a **Minor adverse** degree of effect affecting a local to moderate geographical area of the southeastern part of the BBNP.

1.296. It is considered improbable that the overall Special Qualities the BBNP will be compromised by the introduction of the Proposed Development.

Blaenavon Industrial Landscape World Heritage Site

1.297. The Statement of Outstanding Value of the BILWHS is described in the Blaenavon Industrial Landscape World Heritage Management Plan 2018-2023[15] Box 2.1. Selected statements relative to the Proposed Development are noted as:

"The area around Blaenavon is evidence of the pre-eminence of South Wales as the world's major producer of iron and coal in the 19th century. All the necessary elements can still be seen - coal and ore mines, quarries, a primitive railway system, furnaces, workers' homes, and the social infrastructure of their community."

Criterion (iii): The Blaenavon Landscape constitutes an exceptional illustration in material form of the social and economic structure of 19th century industry.

Criterion (iv): The components of the Blaenavon Industrial Landscape together make up an outstanding and remarkably complete example of a 19th century industrial landscape.

To ensure the effective after use and sustainable future for monuments and buildings and to make the presentation and interpretation of the property effective it has been necessary in some situations to provide additional structures or to make minor adaptation to the historic fabric. In such cases the work has been carried out in accordance with agreed conservation plans and the changes and additions can be clearly identified.

1.298. The Outstanding Value of the BILWHS is considered to combine in a high susceptibility, a high value and a **High** overall sensitivity.

1.299. The Proposed Development will not directly affect the heritage assets within the BILWHS but will affect outward views from the BILWHS as indicated by Viewpoints 14 and 15. For each of these viewpoints a **Low** magnitude of visual change was identified.

[15] Chris Blandford Associated (2018) Blaenavon Industrial Landscape World Heritage

1.300. Visibility of the Proposed Development from within the BILWHS will vary, visible elements will be seen as a relatively distant feature and will generally affect a small portion of available views. This will result in a Minor adverse degree of effect affecting a local to moderate geographical area of the eastern elevated parts of the BILWHS.

1.301. It is considered improbable that the overall Outstanding Value of the BILWHS will be compromised by the introduction of the Proposed Development.

CUMULATIVE EFFECTS

1.302. Potential interactions resulting from the introduction of the Proposed Development to a baseline that includes one operational solar farm; Manor Farm, is considered below.

Cumulative Landscape Effects

1.303. The introduction of the Proposed Development will locally extend the influence of electricity infrastructure in combination with the existing pylon lines within the north western part of LCA 39: Raglan Hinterland and the south eastern part of LCA 53: Northern Hills.

1.304. Manor Farm is located within LCA 53: Northern Hills c. 4.5km north of the Proposed Development. The introduction of the Proposed Development will introduce solar farm development within the south eastern part of the LCA and will extend the physical presence of solar farms and energy infrastructure development within LCA 53. However, it is considered unlikely that the Proposed Development will be seen in combined, sequential or successive views from within LCA 53 given distance and screening by intervening landform and vegetation.

1.305. Overall, this will result in a **low** magnitude of change and a **Minor adverse** cumulative landscape effect on LCT 5A.

Cumulative Visual Effects

1.306. Localised cumulative visual interactions with the existing pylon lines are experienced from all viewpoints considered in the appraisal. Cumulative visual interactions with Manor Farm are considered unlikely given distance and screening by intervening landform and vegetation.

1.307. Once operational, the addition of the Proposed Development in combination with the existing pylon lines will result in a **low** magnitude of change and a **Minor adverse** cumulative visual effect.

SUMMARY AND CONCLUSION

Landscape:

1.309. The introduction of the Proposed Development will locally alter the existing agricultural use of the Application Site to a landscape comprising a solar farm with associated infrastructure, mixed agricultural land use and new hedgerow and tree planting. During operation, the Proposed Development will initially have a **Moderate adverse** landscape effect on the characteristics of the Application Site. Although mitigation planting will help contain the lower elevations of the Proposed Development.

1.310. The Proposed Solar Farm will directly affect LCA 39: Raglan Hinterland and LCA 53: Northern Hills and will result in a solar farm located over 70.03 hectares of this landscape. This will result in a localised direct **Moderate adverse** landscape effect within c. 2km and a **Minor adverse** effect across the wider extents of these landscapes.

1.311. In terms of designated landscapes, the introduction of the Proposed Development will indirectly affect a small eastern part of the BBNP and the BILWHS. During operation a localised to moderate geographical area of the eastern parts of these designated landscapes will range from **Minor adverse** to **No change**. It is considered unlikely that the Special Qualities of the BBNP and the Outstanding Value of the BILWHS will be compromised by the introduction of the Proposed Development.

Visual:

1.312. Potential views of the Proposed Development will be experienced by a number of local receptors including some of the nearest residential receptors and passing transient receptors on recreational routes and minor roads. Longer distance views will largely be limited to a small part of the overall Proposed Development experienced from lower lying areas to the south, southeast and southwest, and higher elevations to the south and southwest within the BBNP and BILWHS.

1.313. The lower elevations of the solar farm and associated structures will be partly contained by the mix of hedgerows and trees within the boundaries of the Application Site and surrounding farmland, along with screening by built elements and local topographical variations. The higher elevations of the Proposed Development will be evident in longer distance views largely to the south, southeast and southwest. The potential changes to the existing views of these receptors have been determined from the viewpoints in the above appraisal.

1.314. The appraisal identifies operational **Major/Moderate adverse** visual effects from Viewpoints 1 and 2 from the PRoW within the Application Site. **Moderate adverse** visual effects are identified from the recreational and residential receptors represented by Viewpoints 3, 5, and 6. Beyond a distance of c. 2km where the Proposed Development is evident in views visual

effects largely reduce to Minor adverse and include effects experienced from The Blorenge (Viewpoints 14 and 15).

Cumulative:

1.315. Cumulative effects are largely limited to localised interactions with the baseline of existing pylon lines and the presence of Manor Farm within LCA 53: Northern Hills which result in Minor adverse cumulative landscape effects on LCA 39: Raglan Hinterland and LCA 53: Northern Hills. Minor adverse to no change cumulative visual effects are anticipated for the majority of visual receptors considered in the appraisal.

Mitigation:

1.316. Mitigation measures are proposed to help reduce any potential landscape and visual effects. The existing tress and hedgerows around the Application Site will be retained as far as is practicable. Trees will be introduced along sections of the north-western and southwestern boundaries. Hedgerows and infill planting will also be introduced along open sections of the boundaries to help screen inward views and provide additional biodiversity opportunities.

1.317. As the mitigation planting becomes established it will help contain elements of the Proposed Development at lower elevation.

APPENDICES

Appendix 1A – Figures

- Figure 1.1 – LANDMAP Aspect Areas: Visual and Sensory
- Figure 1.2 – LANDMAP Aspect Areas: Landscape Habitats
- Figure 1.3 – LANDMAP Aspect Areas: Historic Landscapes
- Figure 1.4 – LANDMAP Aspect Areas: Geological Landscapes
- Figure 1.5 – LANDMAP Aspect Areas: Cultural Landscape
- Figure 1.6 – Landscape Designations
- Figure 1.7 - Viewpoint Locations Map with ZTV
- Figure 1.8 – Viewpoint 1: PRoW near Great House
- Figure 1.9a/b/c – Viewpoint 2: Minor road/PRoW north of Tyler's Wood
- Figure 1.10a/b/c – Viewpoint 3: South of Ffos Farm
- Figure 1.11 – Viewpoint 4: B4598/Penpergwm Lodge
- Figure 1.12 – Viewpoint 5: Upper Farm
- Figure 1.13 – Viewpoint 6: Pentre Farm
- Figure 1.14 – Viewpoint 7: Coed Morgan PRoW
- Figure 1.15 – Viewpoint 8: Usk Valley Walk
- Figure 1.16 – Viewpoint 9: PRoW Ysgryd Fach
- Figure 1.17 – Viewpoint 10: Monmouthshire and Brecon Canal/NCN 49
- Figure 1.18 – Viewpoint 11: A4042 south of Llanover
- Figure 1.19a/b – Viewpoint 12: PRoW near Upper Llanover
- Figure 1.20– Viewpoint 13: Minor Road/NCN42 Bettws Newydd
- Figure 1.21 – Viewpoint 14: Iron Mountain Trail on eastern side of the Blorenge
- Figure 1.22a/b – Viewpoint 15: The Blorenge

- Figure 1.23 – Green Infrastructure (GI) Assets and Opportunities
- Figure 1.24 – Green Infrastructure (GI) Masterplan
- Figure 1.25 – Green Infrastructure (GI) Management Plan
- Figure 1.26 – Landscape Plan
- Figure 1.27 – Viewing Platform
- Figure 1.28 – Visual Receptors with ZTV (forthcoming)

Appendix 1B – Site Photos

Appendix 1C - LVIA Methodology

Appendix 1A: Figures

Penpergwym Solar Farm
LANDMAP Aspect Areas: Visual & Sensory
Figure 1.1

MNMTHVS012
MNMTHVS051
MNMTHVS072
MNMTHVS013
MNMTHVS015
MNMTHVS079
MNMTHVS097
MNMTHVS099
MNMTHVS045
MNMTHVS078
MNMTHVS003
MNMTHVS038
MNMTHVS028
MNMTHVS046
MNMTHVS048
MNMTHVS087
MNMTHVS017
MNMTHVS042

Key

- Development Boundary
- 2km, 5km Study Area

LANDMAP Visual & Sensory

- Low
- Moderate
- High
- Outstanding
- Zone of Theoretical Visibility

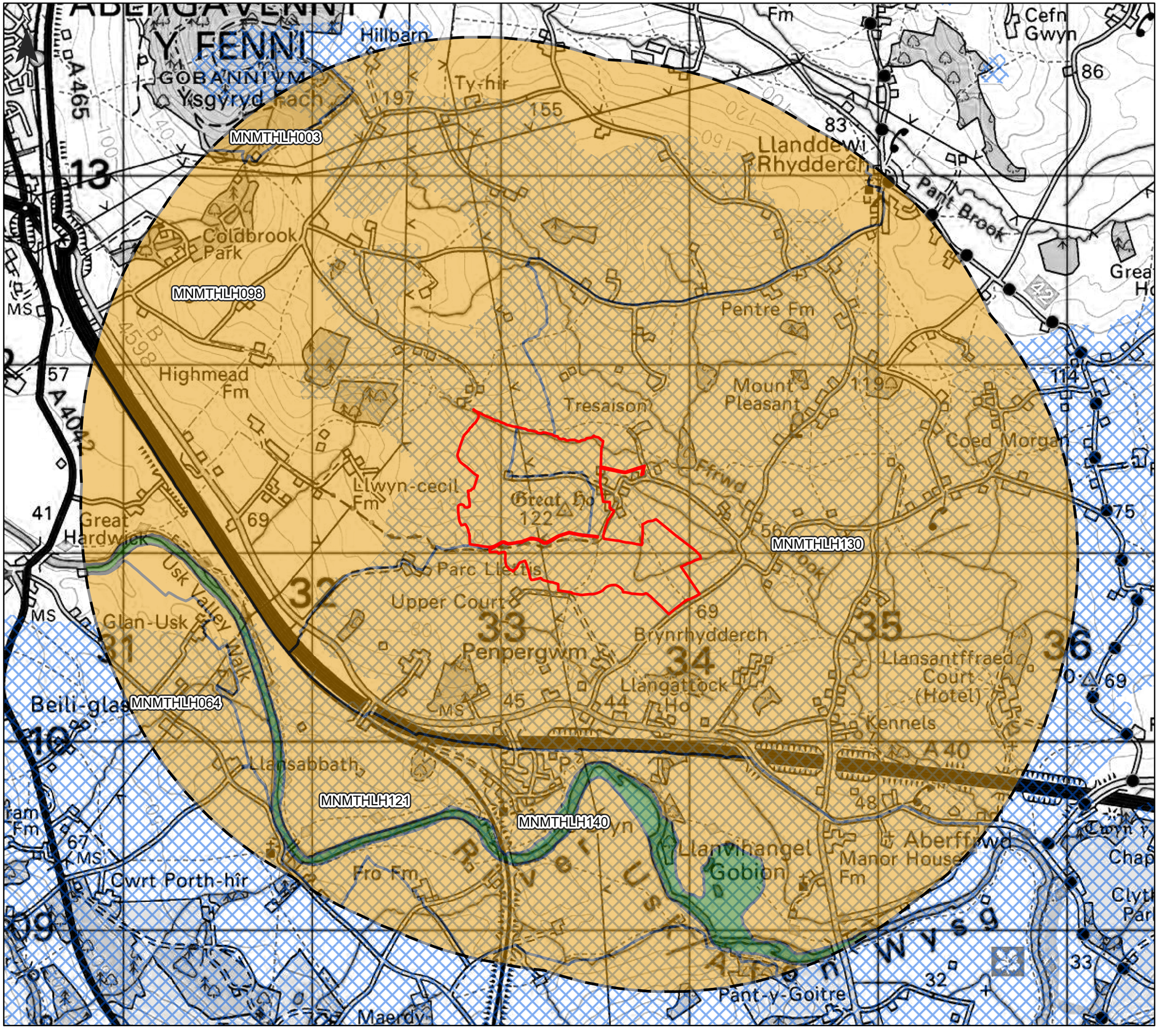
Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

0 1.25 2.5 5 Kilometers

Date: 13/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:42,500
Drawing No: NEO00667/023I/B

neo ENVIRONMENTAL

Penpergwym Solar Farm
LANDMAP Aspect Areas: Landscape Habitats
Figure 1.2



0 0.5 1 2 Kilometers

Key

- Development Boundary
- 2km Study Area

LANDMAP Landscape Habitats

- Moderate
- Outstanding
- Zone of Theoretical Visibility

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Date: 13/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:20,000
Drawing No: NEO00667/024I/A

neo ENVIRONMENTAL

Penpergwm Solar Farm LANDMAP Aspect Areas: Historic Landscapes Figure 1.3

Key

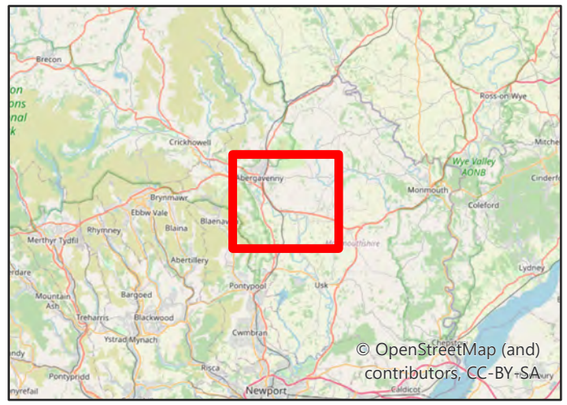
- Development Boundary
- 2km, 5km Study Area

LANDMAP Historic Landscapes

- Moderate
- High
- Outstanding
- Zone of Theoretical Visibility

0 1.25 2.5 5 Kilometers

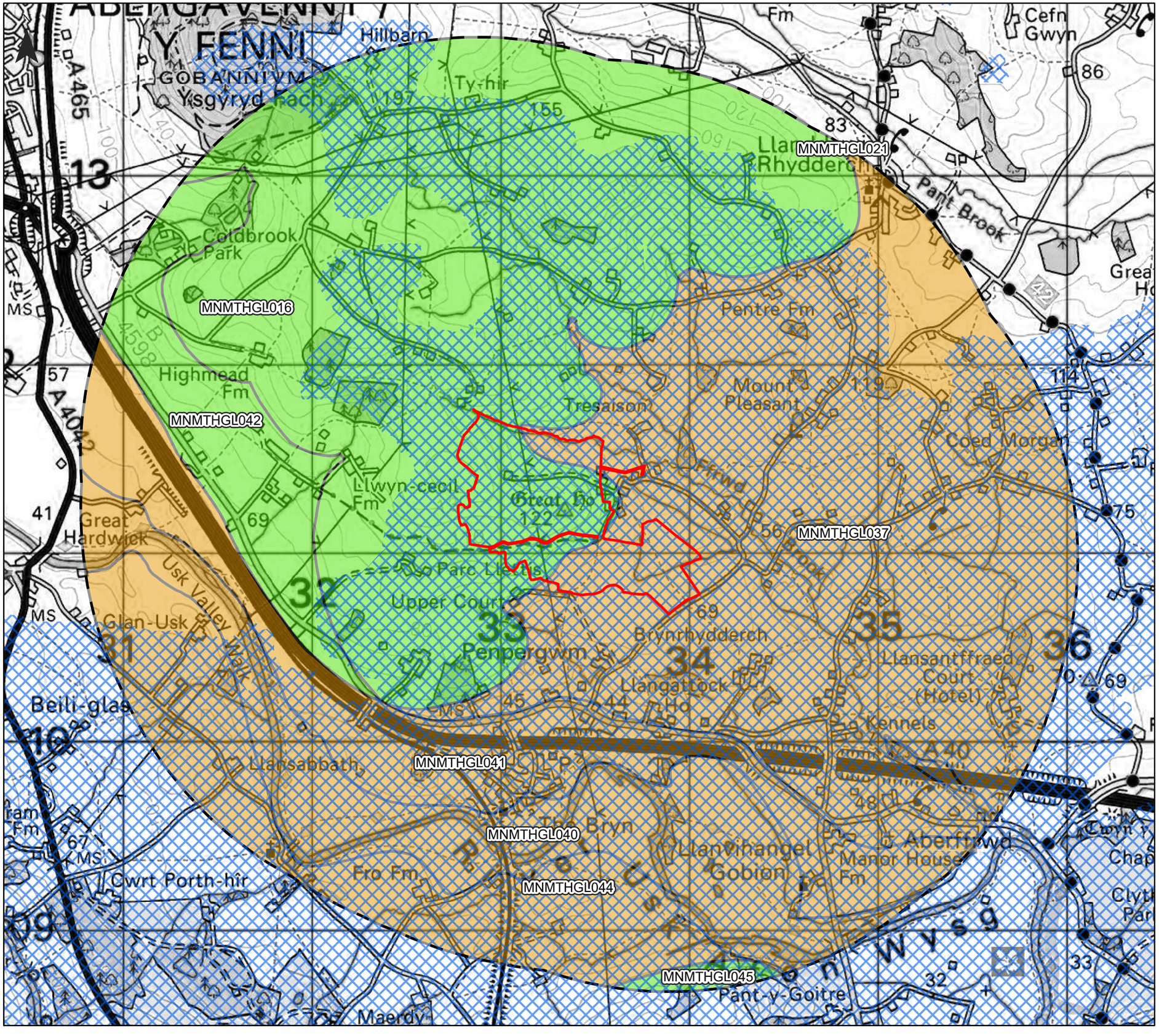
Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP



Date: 13/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:42,500
Drawing No: NEO00667/025/A

neo ENVIRONMENTAL

Penpergwym Solar Farm
LANDMAP Aspect Areas: Geological Landscapes
Figure 1.4



Key

- Development Boundary
- 2km Study Area

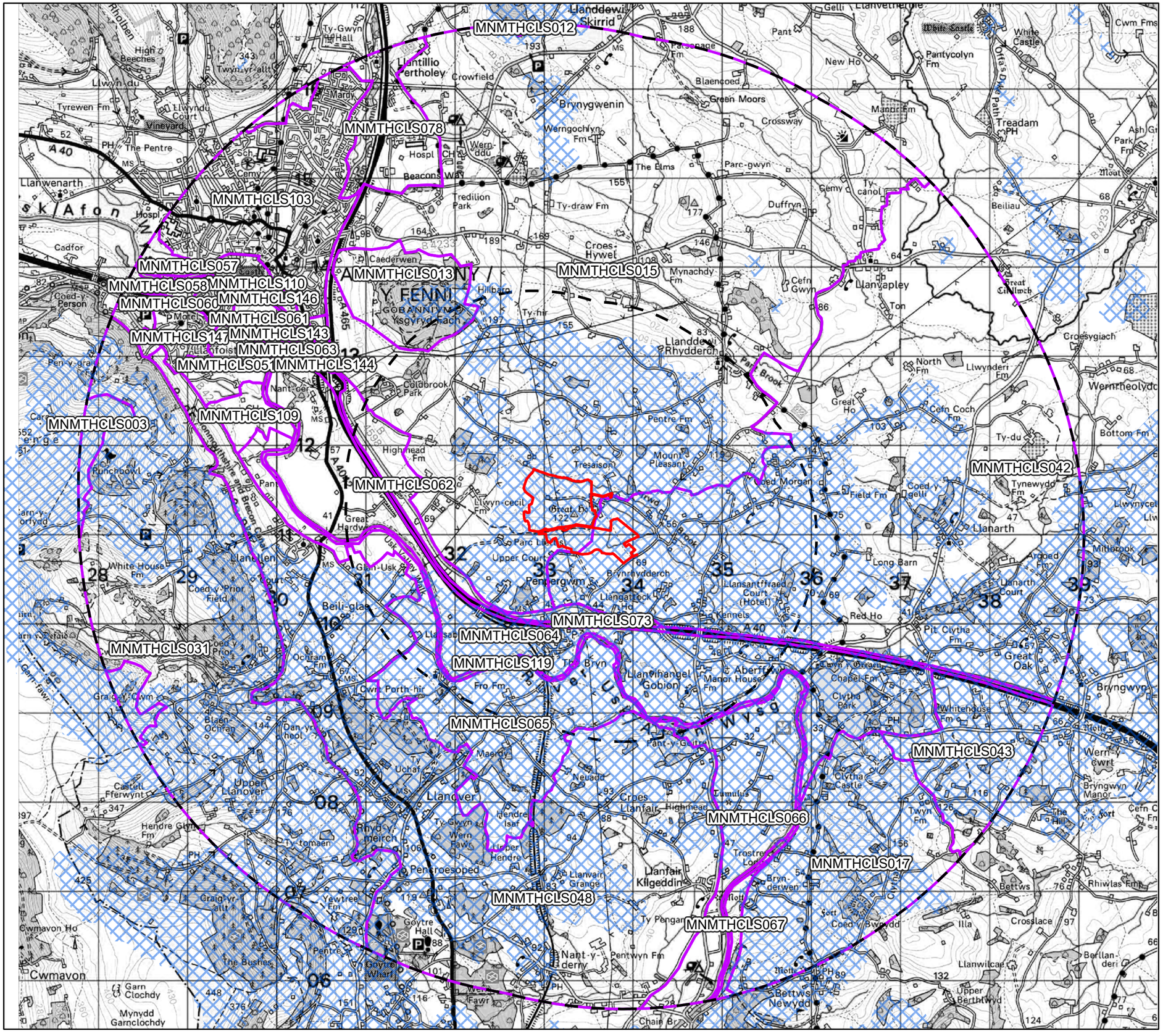
LANDMAP Geological Landscapes

- High
- Moderate
- Zone of Theoretical Visibility

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Date: 13/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:20,000
Drawing No: NEO00667/027I/A

Penpergwym Solar Farm LANDMAP Aspect Areas: Cultural Landscapes Figure 1.5



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Key

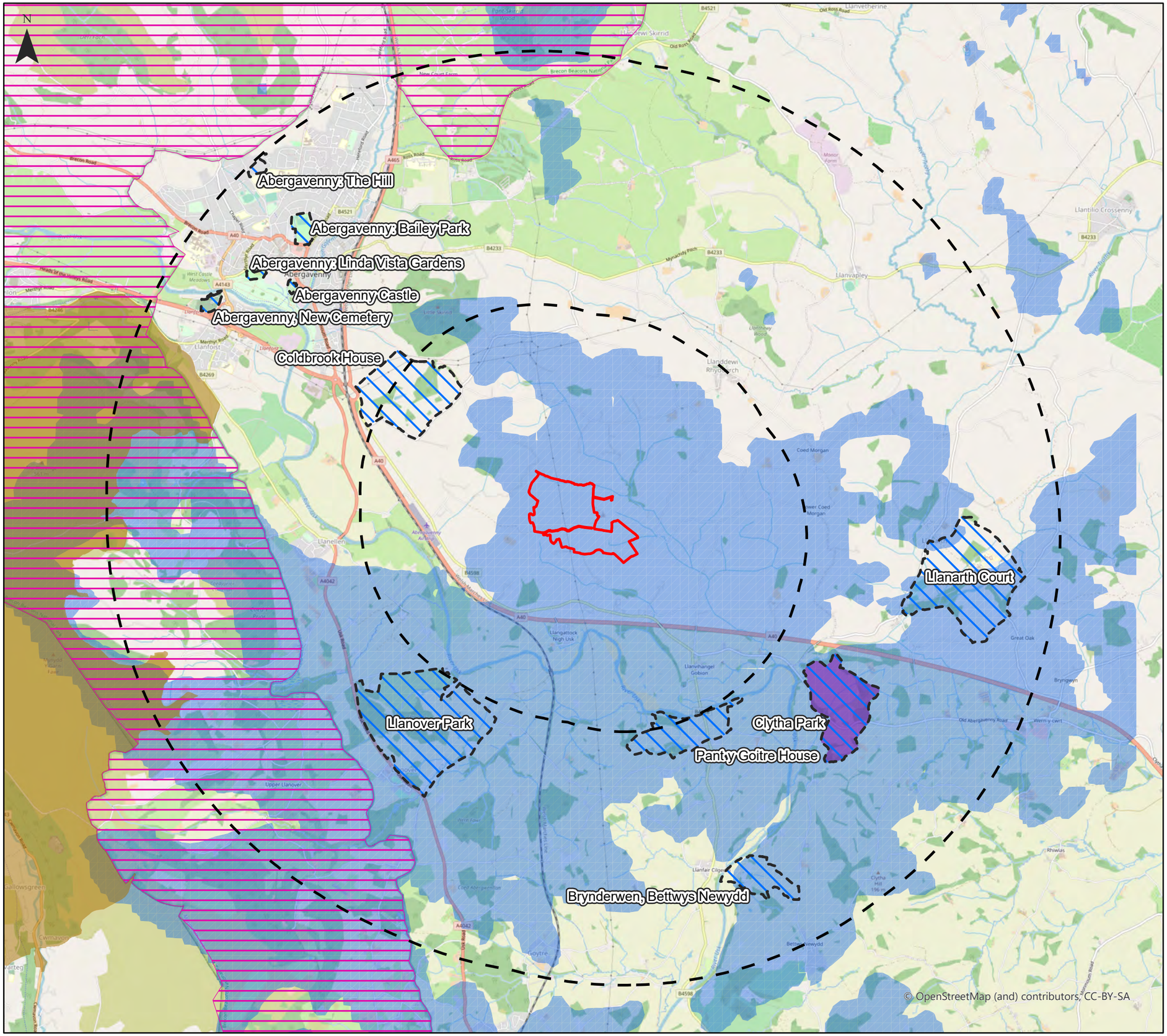
- Development Boundary
- 2km, 5km Study Area
- LANDMAP Cultural Landscapes
- Zone of Theoretical Visibility

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Date: 15/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:42,500
Drawing No: NEO00667/026I/A

neo ENVIRONMENTAL

Penpergwym Solar Farm Landscape Designations with Zone of Theoretical Visibility Figure 1.6



Key

- Development Boundary
- 2km, 5km Study Area
- Country Parks
- Historic Parks & Gardens
- Brecon Beacon National Park
- World Heritage Site
- Zone of Theoretical Visibility

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Date: 12/04/2021
Drawn By: Jamie McGhee
Scale (A3): 1:45,000
Drawing No: NEO00667/028I/A

neo ENVIRONMENTAL

Penpergwm Solar Farm Viewpoint Locations with Zone of Theoretical Visbility Figure 1.7

Key

- Development Boundary
- 2km, 5km Study Area
- Viewpoint Locations
- Zone of Theoretical Visibility

0 1.25 2.5 5 Kilometres

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Date: 21/06/2021
Drawn By: Jamie McGhee
Scale (A3): 1:42,500
Drawing No: NEO00668/029I/B

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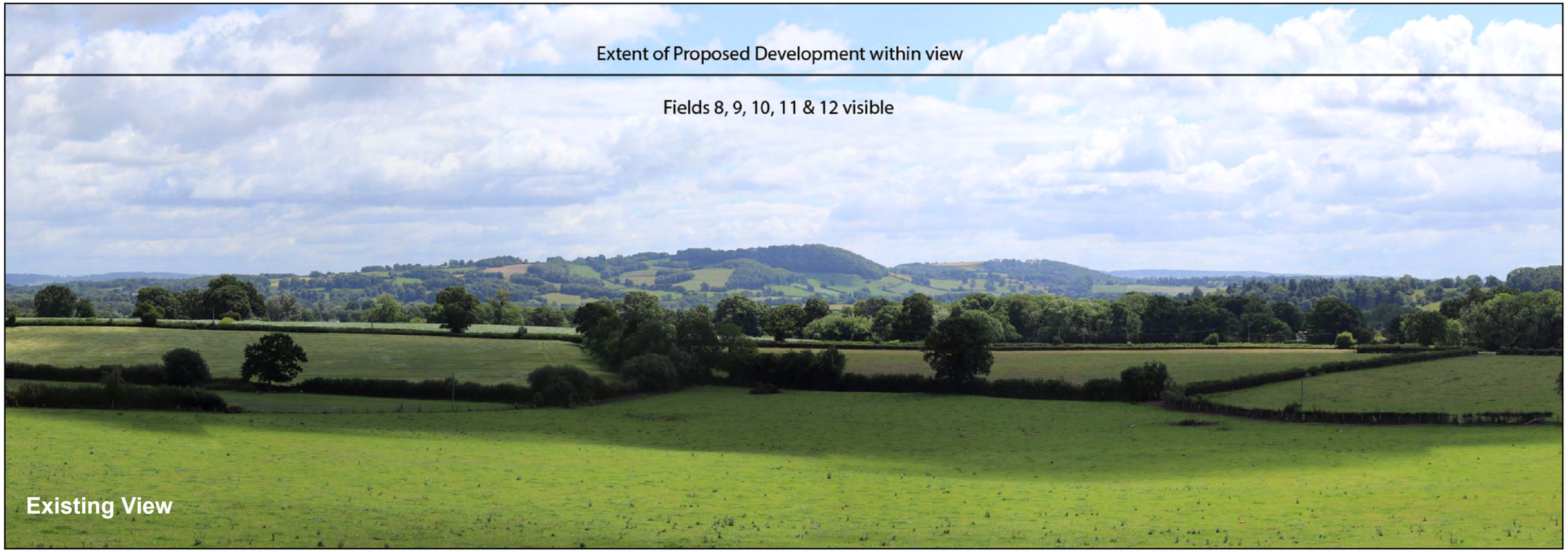


Figure 1.8 Viewpoint 1: PRoW near Great House

OS Reference: E333522 N211075
Eye Level: 90.5m
Direction of View: 140°
Distance to Site: 0.000km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 13.21
Drawn By: Jamie McGhee
Drawing No.: NEO00668/030I/A

Neo Office Address:
Cinnamone House, Crab Lane, Warrington, WA2 0XP

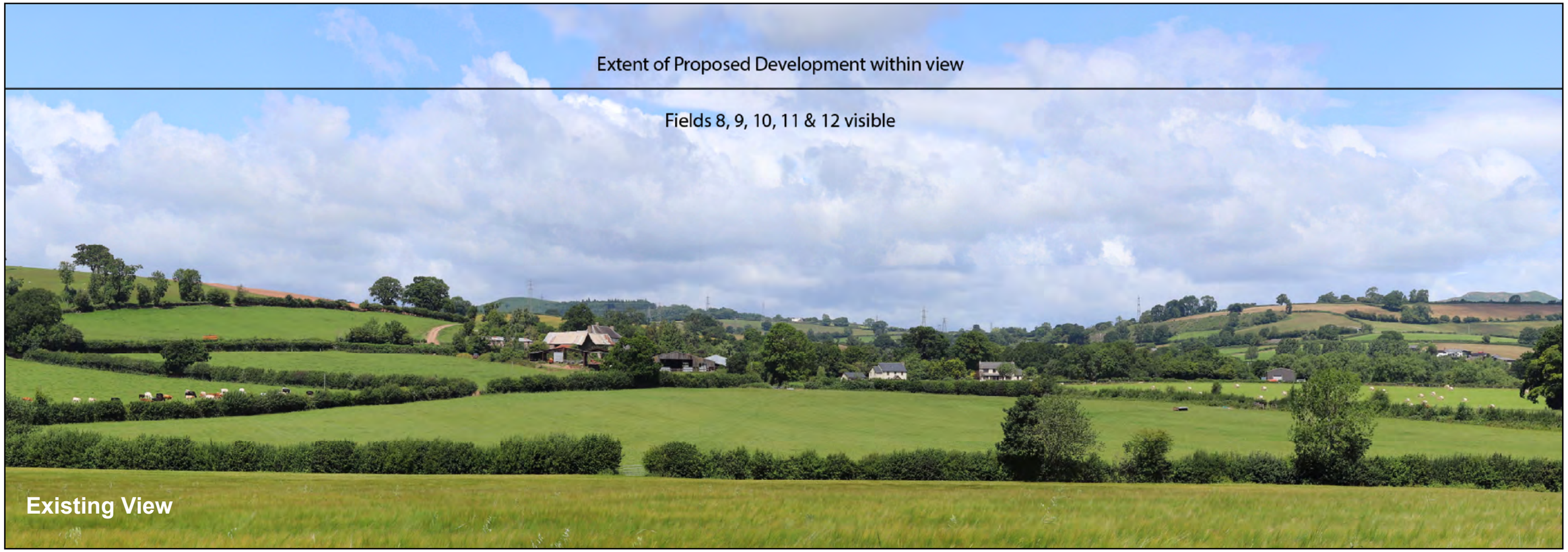


Figure 1.9a Viewpoint 2: Minor Road/PRoW north of Tylers Wood

OS Reference: E333992 N210754
Eye Level: 66.5m
Direction of View: 330°
Distance to Site: 0.010km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 12.26
Drawn By: Jamie McGhee
Drawing No.: NEO00668/031I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.9b
Viewpoint 2: Minor Road/PRoW north of Tylers Wood at Year 0

OS reference:	333992E 210754N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	66.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm	Date and Time:	06/07/2020 12.26

Figure 1.9c
Viewpoint 2: Minor Road/PRoW north of Tylers Wood at Year 5

OS reference:	333992E 210754N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	66.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	330°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	0.010km	Corrected printed image size	820 x 260mm	Date and Time:	06/07/2020 12.26

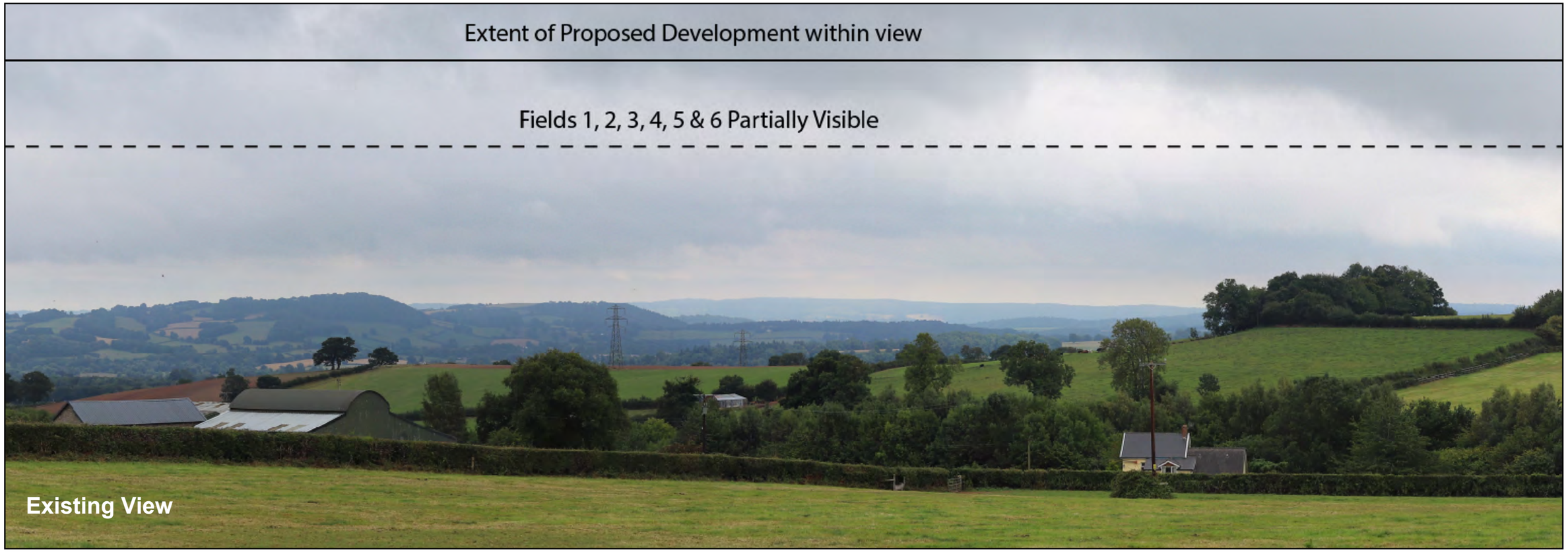


Figure 1.10a Viewpoint 3: South of Ffos Farm

OS Reference: E332734 N212052
Eye Level: 146.5m
Direction of View: 165°
Distance to Site: 0.300km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 12.00
Drawn By: Jamie McGhee
Drawing No.: NEO00668/032I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.10b
Viewpoint 3: South of Ffos Farm at Year 0

OS reference:	332734E 212052N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	146.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	165°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	0.300km	Corrected printed image size	820 x 260mm	Date and Time:	06/07/2020 12.00

Figure 1.10c
Viewpoint 3: South of Ffos Farm at Year 5

OS reference:	332734E 212052N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	146.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	165°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	0.300km	Corrected printed image size	820 x 260mm	Date and Time:	06/07/2020 12.00

Figure 1.11 Viewpoint 4: B4598/Penpergwym Lodge

OS Reference: E333399 N210302
Eye Level: 48.5m
Direction of View: 350°
Distance to Site: 0.500km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 19.15
Drawn By: Jamie McGhee
Drawing No.: NEO00668/033I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.12 Viewpoint 5: Upper Farm

OS Reference: E333596 N212331
Eye Level: 111.5m
Direction of View: 205°
Distance to Site: 0.700km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 14.38
Drawn By: Jamie McGhee
Drawing No.: NEO00668/034I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

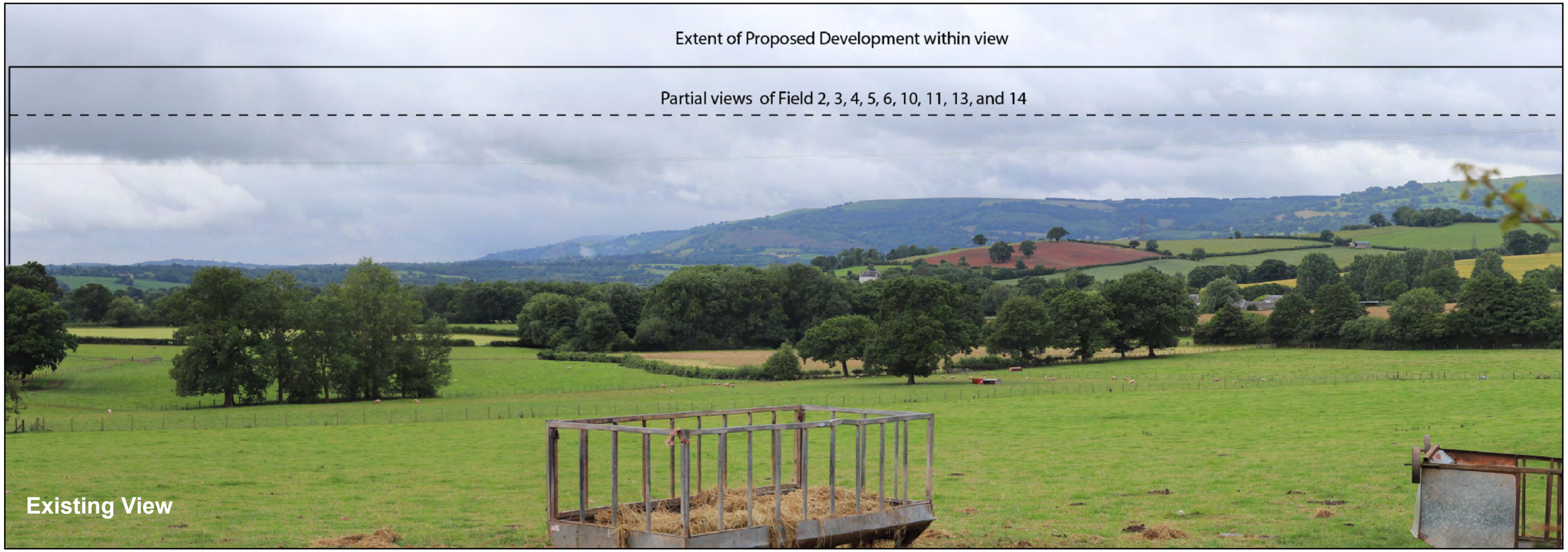


Figure 1.13 Viewpoint 6: Pentre Farm

OS Reference: E334395 N212431
Eye Level: 108.5m
Direction of View: 220°
Distance to Site: 0.900km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 13.48
Drawn By: Jamie McGhee
Drawing No.: NEO00668/035I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.14 Viewpoint 7: Coed Morgan PRoW

OS Reference: E335307 N210846
Eye Level: 59.5m
Direction of View: 280°
Distance to Site: 1.000km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/08/2020 15.11
Drawn By: Jamie McGhee
Drawing No.: NEO00668/036I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

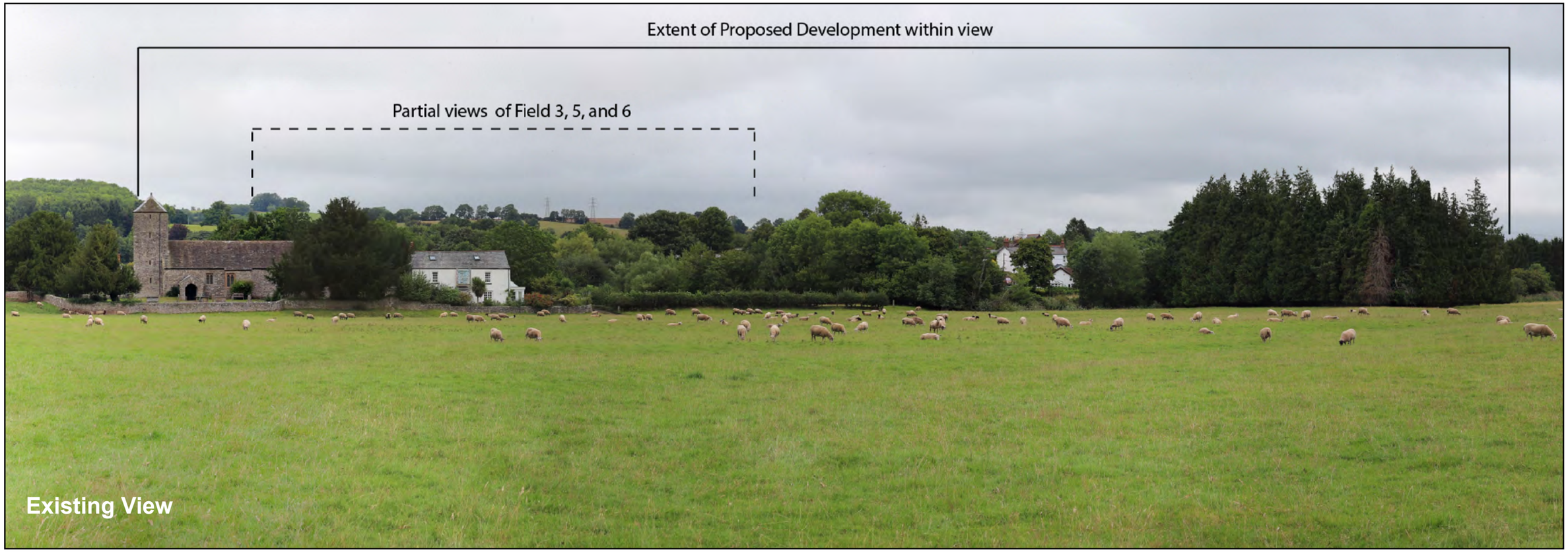


Figure 1.15 Viewpoint 8: Usk Valley Walk

OS Reference: E333053 N209418
Eye Level: 38.5m
Direction of View: 10°
Distance to Site: 1.400km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/08/2020 14.08
Drawn By: Jamie McGhee
Drawing No.: NEO00668/037I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

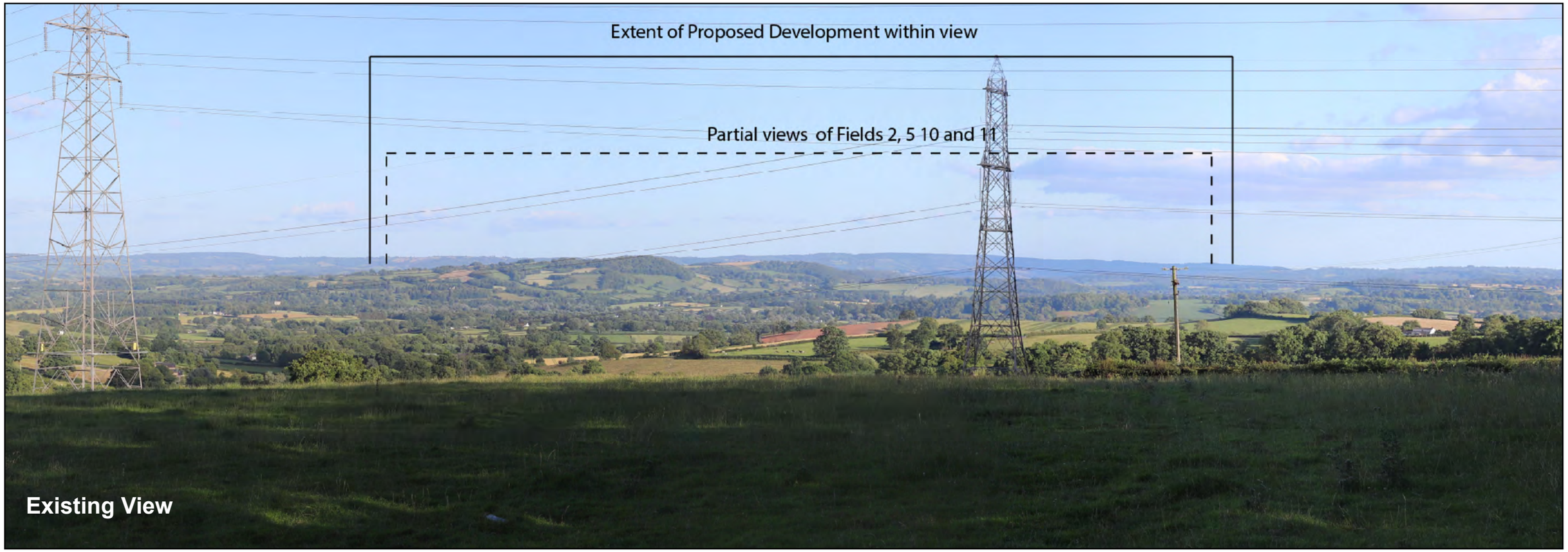
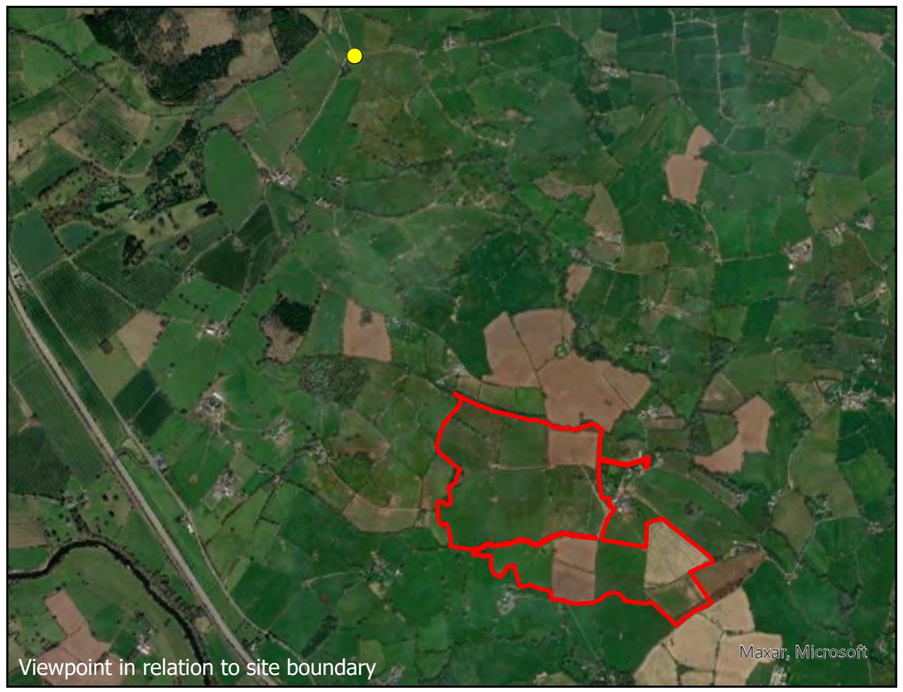


Figure 1.16 Viewpoint 9: PRoW Ysgryd Fach



OS Reference: E332380 N213348
Eye Level: 197.5m
Direction of View: 150°
Distance to Site: 1.700km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 19.27
Drawn By: Jamie McGhee
Drawing No.: NEO00668/039I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

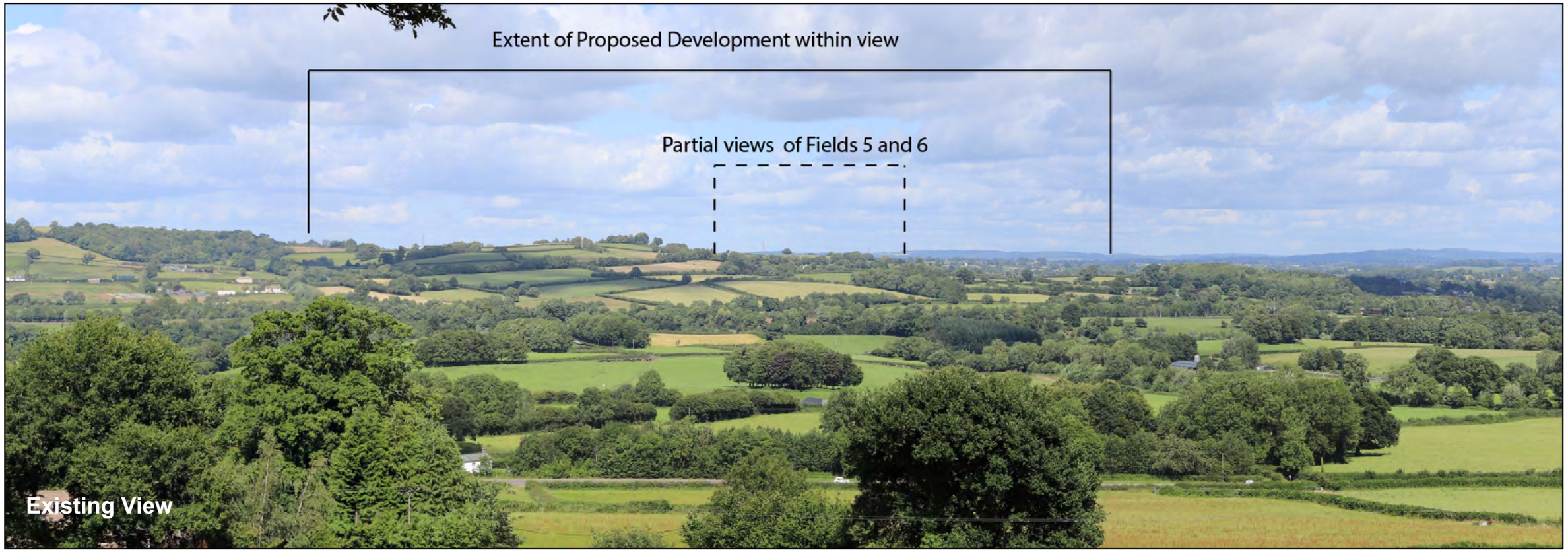


Figure 1.17 Viewpoint 10: Monmouthshire & Brecon Canal/NCN 49 on the edge of Brecon Beacons National Park

OS Reference: E330057 N209785
Eye Level: 117.5m
Direction of View: 70°
Distance to Site: 3.200km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 07/08/2020 10.36
Drawn By: Jamie McGhee
Drawing No.: NEO00668/040I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

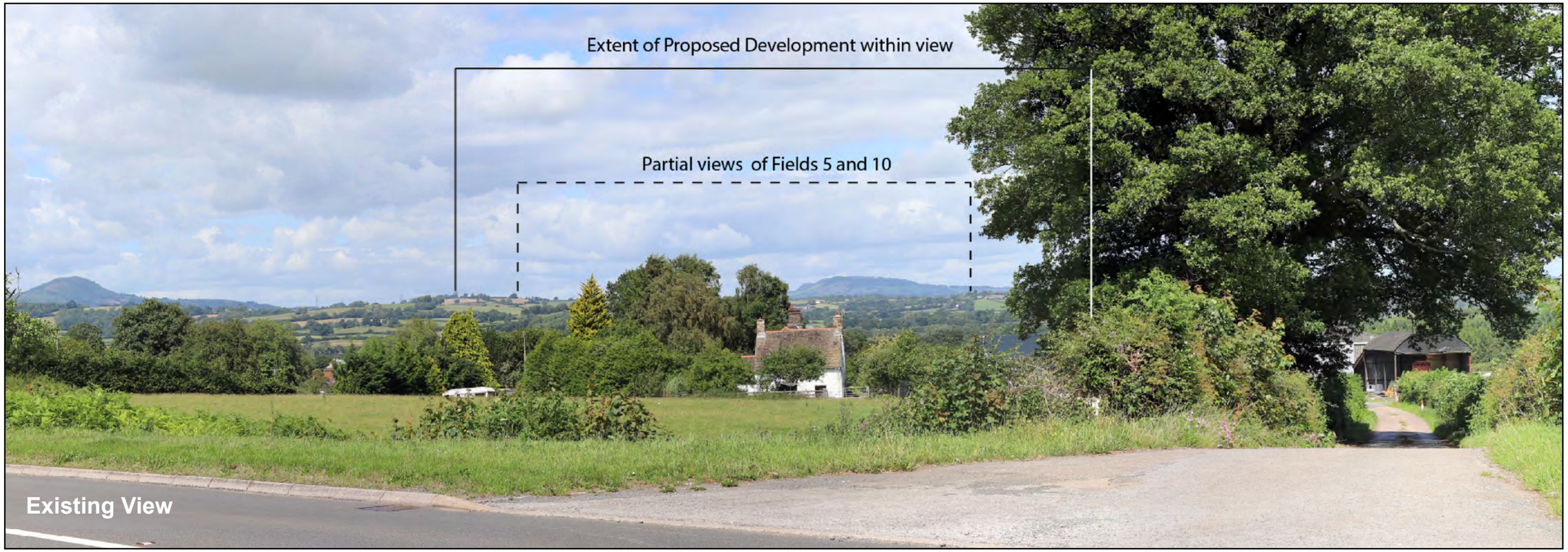


Figure 1.18 Viewpoint 11: A4042 South of Llanover

OS Reference: E331577 N207720
Eye Level: 90.5m
Direction of View: 25°
Distance to Site: 3.500km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 06/07/2020 15.52
Drawn By: Jamie McGhee
Drawing No.: NEO00668/041I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

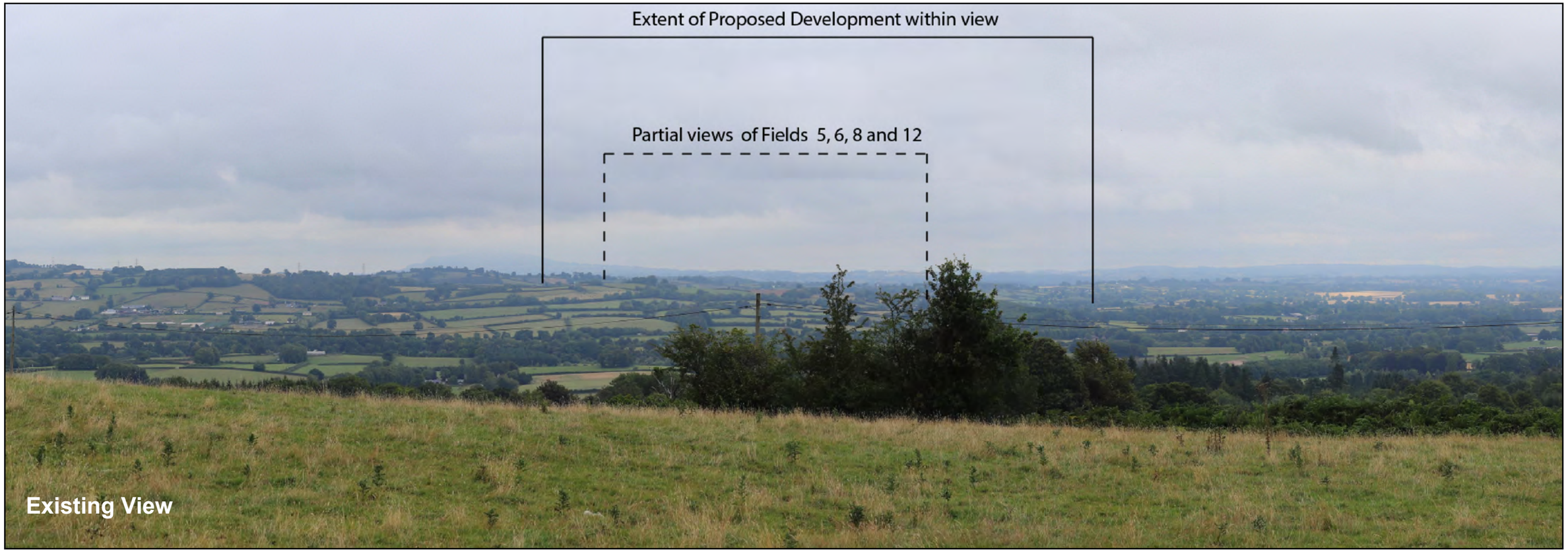


Figure 1.19a Viewpoint 12: PRoW near Upper Llanover within the Brecon Beacons National Park

OS Reference: E330058 N208535
Eye Level: 164.5m
Direction of View: 50°
Distance to Site: 3.900km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 08/07/2020 11.27
Drawn By: Jamie McGhee
Drawing No.: NEO00668/042I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.19b
Viewpoint 12: PRoW near Upper Llanover within the Brecon Beacons National Park

OS reference:	330058E 208535N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	164.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	50°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	3.900km	Corrected printed image size	820 x 260mm	Date and Time:	08/07/2020 11.27

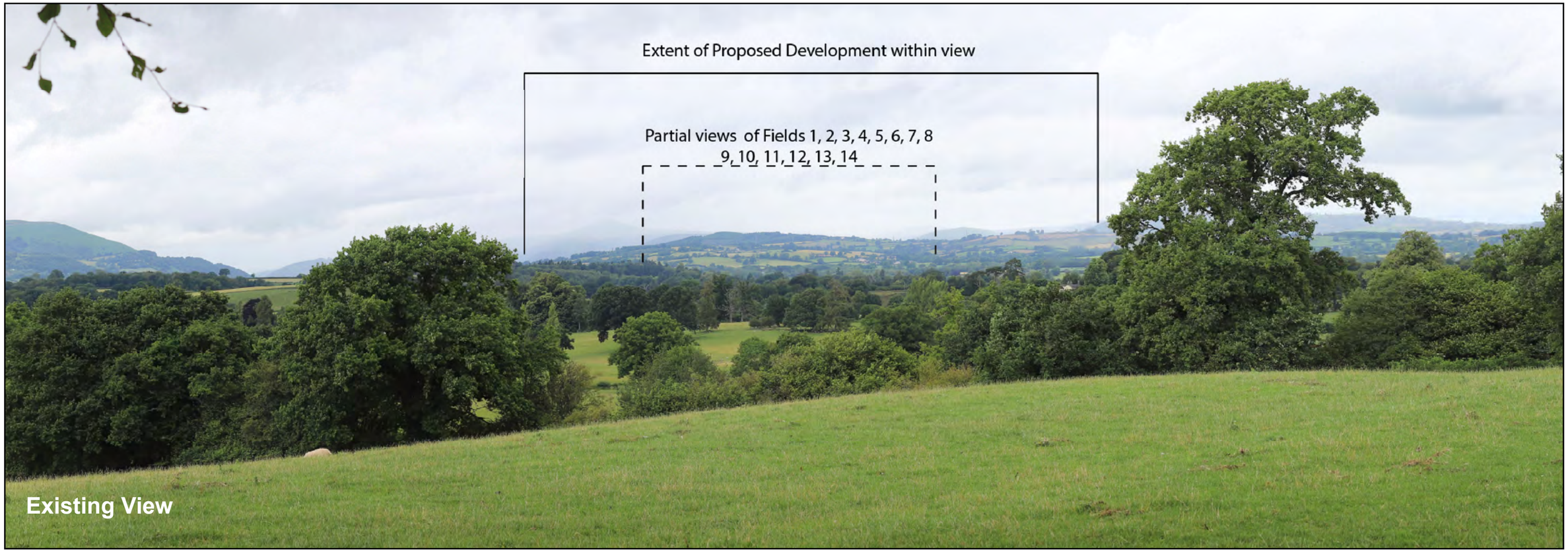


Figure 1.20 Viewpoint 13: NCN42 bettws Newydd

OS Reference: E335954 N206494
Eye Level: 74.5m
Direction of View: 330°
Distance to Site: 4.600km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 08/07/2020 11.38
Drawn By: Jamie McGhee
Drawing No.: NEO00668/043I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

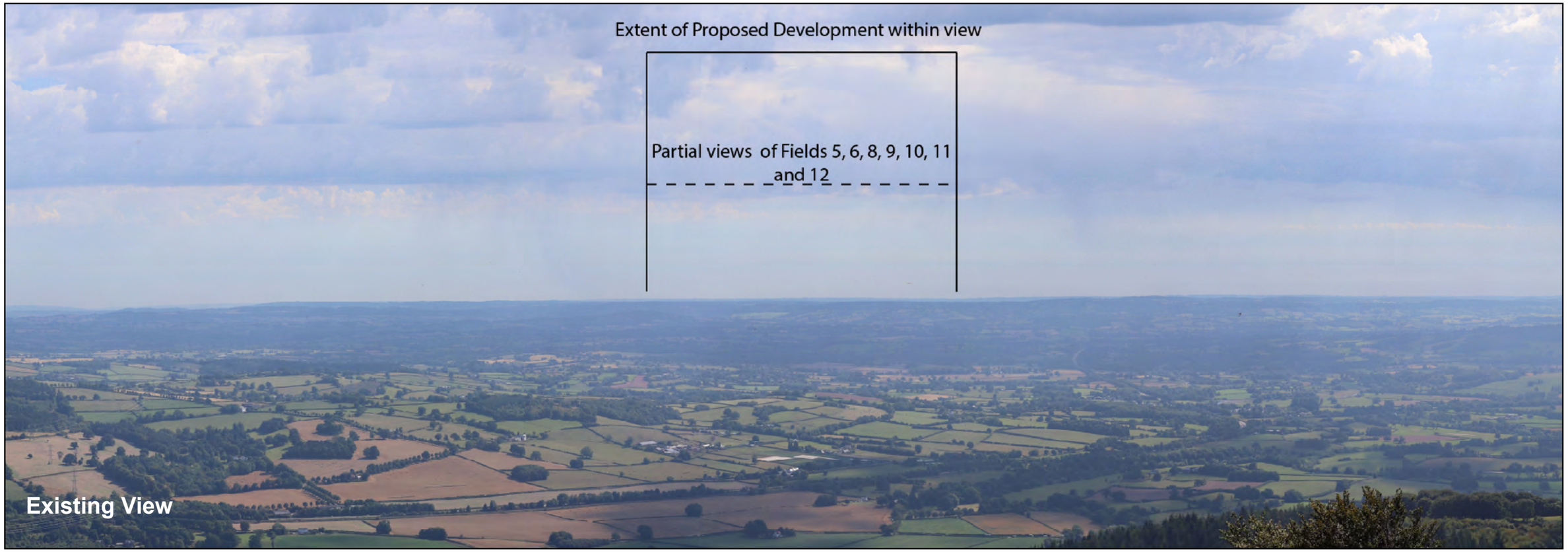
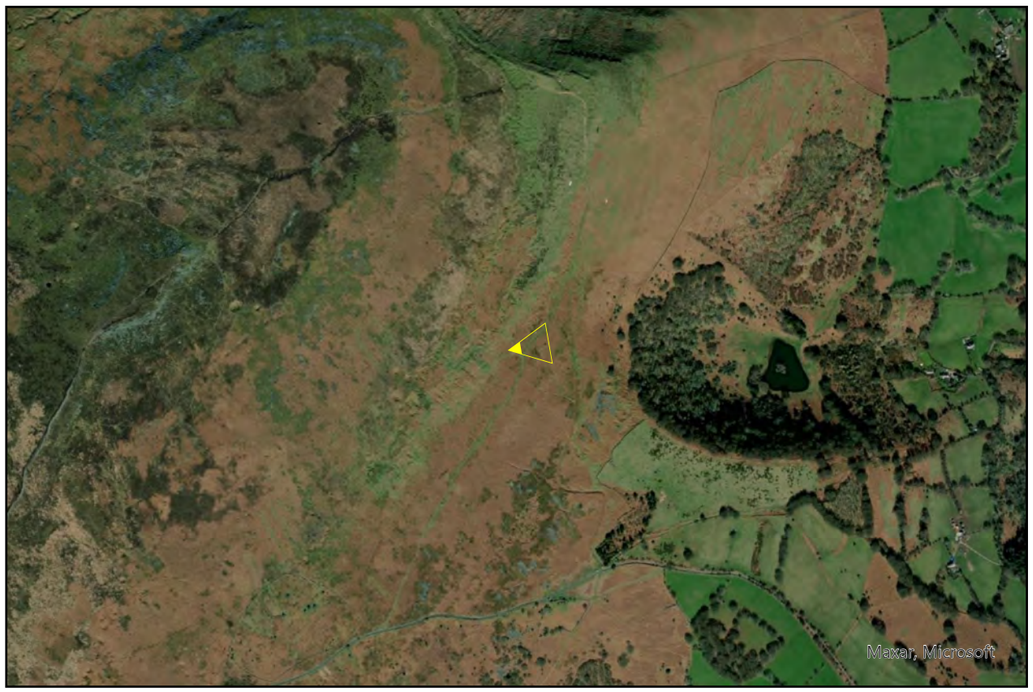


Figure 1.21 Viewpoint 14: Iron Mountain Trail on eastern side of the Blorenge



OS Reference: E327785 N211637
Eye Level: 464.5m
Direction of View: 95°
Distance to Site: 4.900km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 08/07/2020 16.15
Drawn By: Jamie McGhee
Drawing No.: NEO00668/043I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

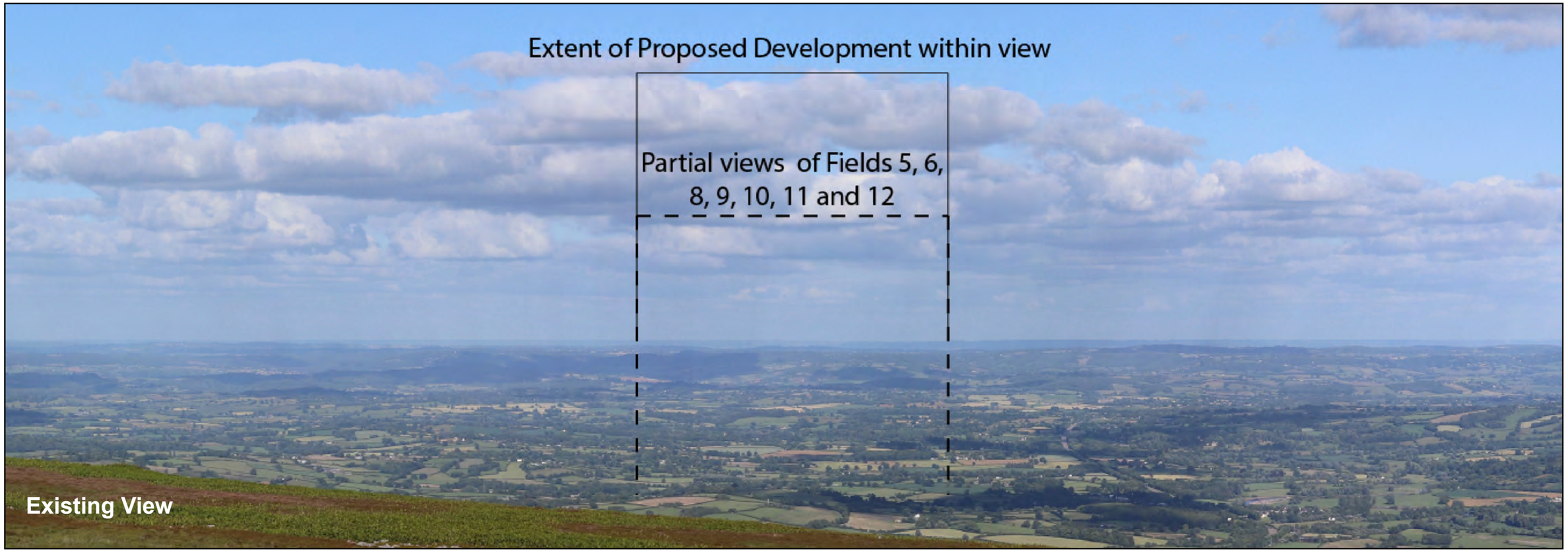


Figure 1.22a Viewpoint 15: The Blorenge

OS Reference: E326983 N211844
Eye Level: 548.5m
Direction of View: 95°
Distance to Site: 5.800km

Horizontal Field of View: 90 Degrees
Vertical Field of View: 18.7 Degrees
Paper Size (A3): 420x270mm

Camera: Canon 6D
Lens: 50mm
Camera Height: 1.5m AGL
View flat at comfortable arm's length

Date: 08/07/2021 15.42
Drawn By: Jamie McGhee
Drawing No.: NEO00668/044I/A

Neo Office Address:
Cinnamon House, Crab Lane, Warrington, WA2 0XP

Figure 1.22b
Viewpoint 15: The Blorenge

OS reference:	326983E 211844N	Horizontal field of view:	90° (planar projection)	Camera:	Canon 6D
Eye Level:	548.5m AOD	Principal Distance:	812.5mm	Lens:	50mm
Direction of view:	95°	Paper Size	841 x 297mm (half A1)	Camera Height:	1.5m
Distance to Site:	5.800km	Corrected printed image size	820 x 260mm	Date and Time:	08/07/2020 15.42

Green infrastructure opportunity area through strengthening of green ecological corridor and habitat creation

Green infrastructure enhancement opportunity surrounding pond area

Green infrastructure enhancement opportunity surrounding pond area

Green infrastructure opportunity area through strengthening of green ecological corridor and habitat creation

Green infrastructure opportunity area through strengthening of green ecological corridor and habitat creation

Little Tresaison Cottage

Little Tresaison

Great House Farm

Ty Carew

Great House

105.4m

73.2m

85.9m

77.8m

72.8m

69.7m

67.4m

Manor Court Farm

The Barn

Tye Orchard

Key

Site Area

GI Assets

Existing Hedgerows & Trees

Pond / Stream

Public Right of Way (PRoW)

Other Route with Public Access (ORPA)

GI Opportunities

Opportunity area for ecological enhancment / green corridor strengthening

DRAFT

Ver.	Date	Comments
B	24/06/2021	Amended planning boundary
A	04/05/2021	Draft for comment

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Warrington Office: T:01925 661 716 E: info@neo-environmental.co.uk

Glasgow Office: T: 0141 773 6262 E: info@neo-environmental.co.uk
Naas Office: T:00353 (0)45 844250 E: info@neo-environmental.ie
Ballymena Office: T:0282 565 0413 E: info@neo-environmental.co.uk

Project:	Penpergwm Solar Farm
Client:	Renewable Connection
Drawing:	GI Assets & Opportunities Plan
Project No.:	NEO00668
Drawing No. :	NEO00668_073_B
Drawn: CJD	**Checked:** NB **Approved:** PN
Scale:	1:2000 @ A1 **Revision:**
Date:	4th May 2021 B

Existing water feature

Existing water feature

Hedgerow infill planting

New hedgerow

New hedgerow

New hedgerow

Hedgerow infill planting

Hedgerow infill planting

Little Tresaison (Cottage)

Little Tresaison

Great House Farm

Ty Carew

Great House

Upper Court Farm

The Barn

The Orchard

Key

Site area

Landscaping Measures

- Existing Hedgerows & Trees to be retained
- Pond / Watercourse
- Existing Public Right of Way
- Existing Other Route with Public Access (ORPA)
- Proposed Pathway
- Proposed Wildflower Meadow
- Proposed Species Rich Grassland
- Proposed Tree Planting
- Hp Proposed Hedgerow Planting
- Viewing platform with interpretative information panel

Ecology Measures

- Bb Proposed Beetle Bank
- Ih Proposed Invertebrate Hotel
- H Proposed Hibernaculum
- Be Proposed Bat & Bird Box

Hydrology Measures

- Filter drain
- Detention basin

Drawn By: Cynthia Jayne Dunwoody
Address: Unit 3 The Courtyard Business Park
Galgorm Castle
Ballymena, Northern Ireland
BT42 1HL

Ver.	Date	Comments
B	24/06/2021	Amended planning boundary
A	04/05/2021	Draft for comment

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Project:	Penpergwm Solar Farm
Client:	Renewable Connection
Drawing:	Green Infrastructure Masterplan
Project No.:	NEO00668
Drawing No. :	NEO00668_074_B
Drawn: CJD	**Checked:** NB **Approved:** PN
Scale:	1:2,000 @ A1 **Revision:**
Date:	04 May 2021 B

Indicative Planting Schedule:

Trees:
All trees root ball, feathered, and 2x age to be planted as shown on plan.

Alnus glutinosa, Alder, 300-350cm	25%
Betula pubescens, Downy Birch, 300-350cm	20%
Salix caprea, Goats Willow, 250-300cm	15%
Salix pentandra, Bay Willow, 250-300cm	25%
Sorbus aucuparia, Rowan, 300-350cm	10%
Prunus avium, Wild Cherry, 250-300cm	5%

Hedgerow Mix:

Planted up behind or through gaps in the site's exterior and interior boundaries. Planted as double staggered rows at 6-8 per metre and spacings of 300-400mm.

Corylus avellana, Hazel, 1 +1 120-150cm BR	10%
Crategus monogyna, Hawthorn, 1+2 120-150cm BR	55%
Ilex aquifolium, Holly 60-90cm C	5%
Prunus padus, Bird Cherry 1+2 120-150cm BR	5%
Prunus spinosa, Blackthorn, 1+2 120-150cm BR	5%
Rosa canina, Dog Rose, 1+0 120-150cm BR	5%
Viburnum opulus, Guelder Rose, 1+1 60-90cm BR	5%
Ullex europaeus, Gorse, 1+1 60-90cm 2L CG	5%
Lonicera periclymenum, Honey Suckle 60-90cm C	5%

Seed Mixes
The final seed mixes will be chosen to best suit the soil and site conditions and to be approved by an ecologist.

Species Rich Grassland Mix:
RE1 Traditional Hay Meadow Mix supplied by Germinal (MG5 Grassland). 1% Conopodium majus will be added.

Wildflower Mix:

Lotus corniculatus Bird's-foot trefoil	8%
Centaurea nigra Black knapweed	5%
Medicago lupulina Black medick	3%
Vicia sativa Common vetch	4%
Galium verum Lady's bedstraw	2%
Lathyrus pratensis Meadow vetchling	3%
Ranunculus acris Meadow buttercup	3%
Malva moschata Musk mallow	2%
Leucanthemum vulgare Ox-eye daisy	8%
Silene dioicia/latifolia Red/white campion	2%
Trifolium repens Red clover	10%
Prunella vulgaris Selfheal	5%
Onobrychis viciifolia Sainfoin	36%
Achillea millefolium Yarrow	6%
Rhinanthus minor Yellow rattle	3%

Outline Landscape Specifications:

Existing Vegetation:

Any necessary works being undertaken within close proximity to the retained tree lined hedgerows should be carried out in accordance with *BS 3998:2010 Tree work Recommendations*, *BS 5837:2012 Trees in Relation to Design Demolition and Construction* and *NJUG 4 Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* and in consultation with an arborist.

Proposed Planting:

Planting to be supplied in accordance with *BS 3936-1:1992 Nursery Stock. specification for trees and shrubs*, *BS 3936-4:2007 Nursery Stock.Specification for forest trees, poplars and willows*, *BS 8545:2014 Trees:from nursery to independence in the landscape*. All landscaping works to be in accordance with *BS4428:1989 "General Landscaping Works."* All planting should be sourced from local provenance certified seed stock where possible with other sources needing to be approved.

Tree Planting:

Trees will be planted into tree pits 2-3 times the width of root spread and to the depth of root spread. The tree pit's sides are to be loosened, base aerated and later backfilled with the existing excavated subsoil and topsoil. All trees to be supported with a suitable tree guard and staked with adjustable tree ties.

Hedgerow Planting:

Hedging planted into a trench measuring a min of 600mm wide and 300mm deep, allowing enough width and depth for the roots. Short lengths of individual whip infilling may be undertaken by slit planting. The existing soil should be improved by digging in well rotten Farm Yard Manure or other soil improver. All hedging will be supported with rabbit guards and canes and 1m wide mulch matting.

Temporary stock proof fencing of 1.2m high should be used to prevent grazing of new hedgerows by livestock if necessary. Any planting being carried out within the ecological constraints buffer area to be hand dug and supervised by the ECOW.

Grassland & Wildflower Planting:

The disturbed areas of grassland will be sown with a mix of tussock grasses, which will be lightly grazed by sheep or maintained by cutting. The areas of wildflower mix will be separated from this grassland by a stock-proof fencing to prevent any possible grazing by animals.

Timing & Aftercare:

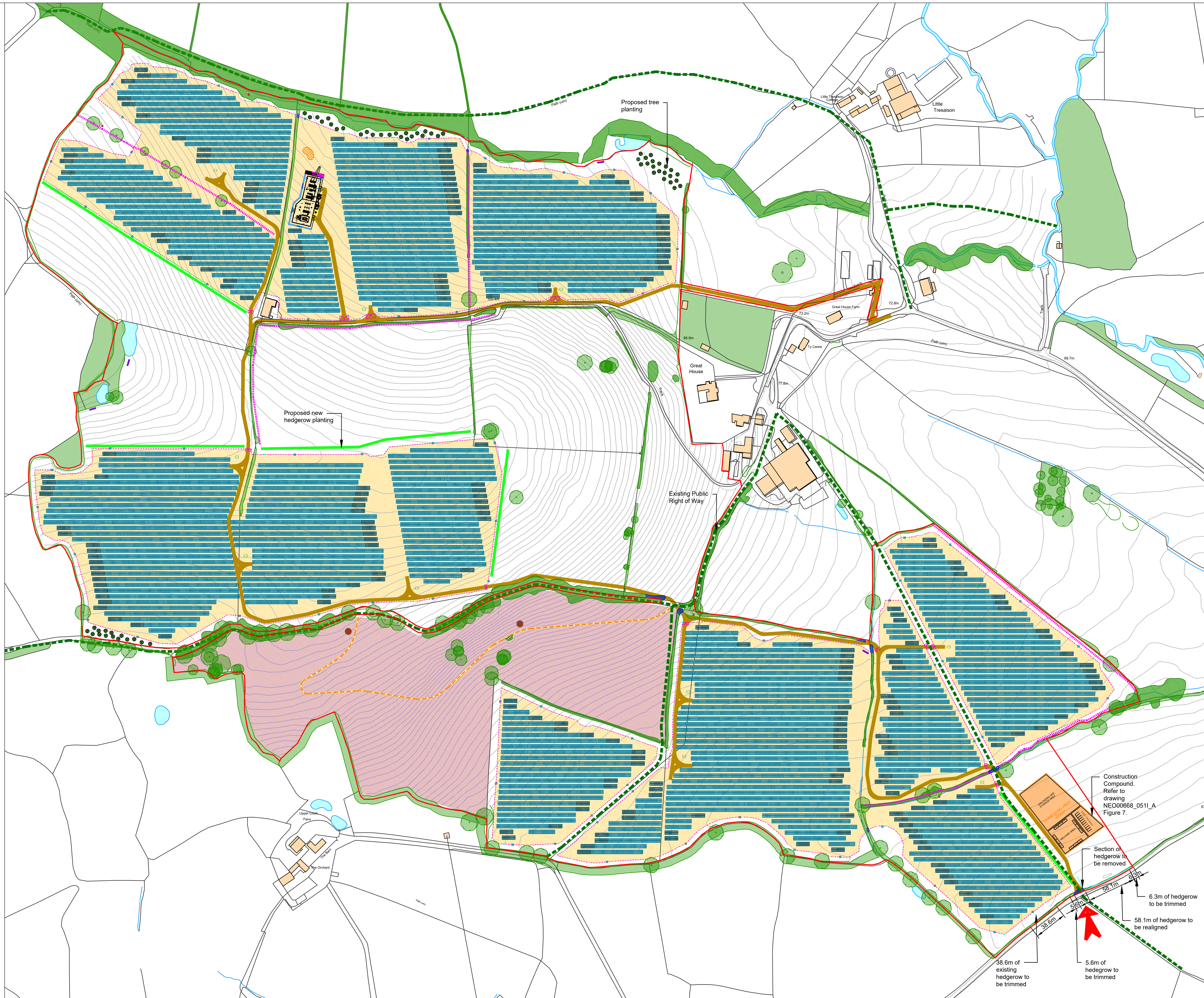
Planting of the hedgerow mix to take place during the months of November to March, preferably before January and at a time when the soil is not frozen or waterlogged. The new plants will be watered at the time of planting and regularly during their first year. All tree and hedgerow species will have a minimum 1m wide radius free of any weeds until 3 years after planting, when they are well established. Weeding will be done using a mulch mat and either by hand or mechanical control as required in order to prevent competition for nutrients from weeds and grasses.

The planting supports and guards will be inspected regularly to ensure they are not impeding the plant's growth and will be adjusted or replaced as required. These will be removed when the planting is established within the initial 3 years.

The new hedgerow planting will be reduced by a third in height immediately after planting hawthorn and blackthorn, with other species lightly pruned and cut later in the first autumn. Pruning will be required in the second year to encourage bushy growth by removing half of the previous year's growth. The plants will be shaped in the third year by trimming both lateral and lead branches. The hedging will be cut on a rotational basis using mechanical methods approximately every 2-3 years and shaped to an 'A' shape. Hedgerows will be maintained at c. 4m. All hedge cutting will be undertaken outside of the nesting bird period (beginning of March to end of August).

The grassland will be managed by light grazing or cutting several times in the first year to reduce competition from annual weeds and allow the grass to become established. Weeds may also need treating through selective scything before setting seed. In the second year and onwards the grassland can be maintained by a light grazing regime through the year or by cutting. Areas of wildflower mix will similarly need controlling of any initial flushes of weeds and persistent weeds. The wildflower mix will be maintained by an annual cut after they have flowered, with the cut growth allowed to sit to release any seeds prior to the cuttings being removed off site.

Any loss of planting which occurs within 5 years of the initial planting as a result of plant failure will be replaced with the same plant species. Final location and number of bird nest boxes and bat boxes to be determined on site by an ecologist.



ESTABLISHMENT & MAINTENANCE SCHEDULE YEAR 0 TO YEAR 5

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	JANUARY					FEBRUARY				MARCH				APRIL				MAY					JUNE				JULY					AUGUST				SEPTEMBER				OCTOBER					NOVEMBER				DECEMBER			
Tree Planting:																																																				
Tree and Shrub establishment inspection																																						■														
Pruning and thinning (outside the bird nesting season)		■																																																■		
Dead tree replacement																																														■						
Fertiliser application															■																																					
Residual herbicide application																																																		■		
Translocated herbicide application																		■								■												■														
Check stakes, ties and tree shelters (removal after 3 years)		■													■											■																								■		
Litter & fallen leaf removal		■						■							■					■				■				■				■						■				■								■		
Inspection and wire tightening		■																								■																								■		
Hedge Planting																																																				
Pruning and thinning		■																																				■														
Re-Firming		■						■							■																																			■		
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Check stakes, ties and tree shelters		■													■							■				■												■												■		
Litter removal		■													■											■												■												■		

ESTABLISHMENT & MAINTENANCE SCHEDULE YEAR 0 TO YEAR 5

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	JANUARY					FEBRUARY				MARCH				APRIL				MAY					JUNE				JULY					AUGUST				SEPTEMBER				OCTOBER					NOVEMBER				DECEMBER			
Grassed Areas :																																																				
Grass cutting (and removal of arisings/clippings off site)																						■		■		■		■		■		■		■		■		■				■										
Weed Control																		■						■						■						■						■								■		
Fertiliser spring application															■																																					
Fertiliser autumn application																																										■										
Litter & fallen leaf removal		■						■							■					■				■				■				■						■				■								■		
Wildflower Grassed Areas :																																																				
Grass cutting **(Year 1: 2 cuts, thereafter 1 cut /yr)** (and removal of arisings/clippings off site)																																										■										

Key

Landscaping Measures
- Indicative Existing Hedgerow & Trees to be retained
- Indicative Existing Vegetation to be Removed
- Existing Public Right of Way
- Proposed Pathway
- Existing Waterbody
- Proposed Tree Planting
- Proposed Native Hedgerow Planting
- Proposed Native Hedgerow Infill Planting
- Proposed Species Rich Grassland Mix
- Proposed Species Rich Grassland and Wildflower Mix
- Proposed Viewing Platform with Interpretative Information

Ecology Measures
Final location and number to be decided on site with consulting ecologist.
- Proposed Hibernaculum & Invertebrate Hotels
- Proposed Bat Boxes
- Proposed Bird Boxes
- Proposed Beetle Bank
- Proposed Badger Gate in security fence every 30m or in line with existing badger trails.

Hydrology Measures
- Proposed Detention Basin

Site Features
- Application Site Boundary
- Solar Array
- New Access Track
- Transformer
- Fencing
- CCTV
- Access Gate

DRAFT

Drawn By: Graham Cameron
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Ver.	Date	Comments
B	24/06/2021	Amended planning boundary
A	07/05/2021	Draft for comment

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Ballymena Office: T:0282 565 0413 E: info@neo-environmental.co.uk

Project: Penpergwm Solar Farm
Client: Renewable Connection
Drawing: GI Management Plan

Project No.: NEO00668
Drawing No. : NEO00668_075_B Figure 1.25
Drawn:GC/CJD **Checked:**NB **Approved:** PN
Scale: 1:2,500 @ A1 **Revision:** B
Date: 7th May 2021

Proposed substation.

Proposed tree planting comprising:
6no. *Alnus glutinosa*
6no. *Betula pubescens*
1no. *Prunus avium*
4no. *Salix caprea*
4no. *Salix pentandra*
3no. *Sorbus aucuparia*

Proposed tree planting comprising:
5no. *Alnus glutinosa*
5no. *Salix caprea*
11no. *Salix pentandra*

Native hedgerow infill planting. Planted in gaps greater than 1m in existing hedgerow

Viewing platform with interpretative information signage.

Proposed bat and bird boxes

Native hedgerow infill planting. Planted in gaps greater than 1m in existing hedgerow

Proposed tree planting comprising:
4no. *Alnus glutinosa*
6no. *Betula pubescens*
2no. *Prunus avium*
3no. *Sorbus aucuparia*

Proposed mown pathway through wildflower meadow

Native hedgerow infill planting. Planted in gaps greater than 1m in existing hedgerow

Path (um)
Track
Little Tresaison
Little Transmission Company
Great House Farm
Ty Carew
Great House
Upper Court Farm
The Barn
The Orchard
Welfare Area
Changing Area
Storage
Office
Welfare
Drying Area
Battery Storage
Substation
72.8m
73.2m
85.9m
77.8m
69.7m
102.4m

Indicative Planting Schedule:

Trees:
All trees root ball, feathered, and 2x age to be planted as shown on plan.

Alnus glutinosa, Alder, 300-350cm	25%
Betula pubescens, Downy Birch, 300-350cm	20%
Salix caprea, Goats Willow, 250-300cm	15%
Salix pentandra, Bay Willow, 250-300cm	25%
Sorbus aucuparia, Rowan, 300-350cm	10%
Prunus avium, Wild Cherry, 250-300cm	5%

Hedgerow Mix:

Planted as double staggered rows at 6-8 per metre and spacings of 300-400mm centres. For any gaps in existing hedgerows wider than 1m, infill hedging planted as per landscape specification. Landscape Architect to determine final quantities of hedging plants.

Corylus avellana, Hazel, 1 +1 120-150cm BR	10%
Crategus monogyna, Hawthorn, 1+2 120-150cm BR	55%
Ilex aquifolium, Holly 60-90cm C	5%
Prunus padus, Bird Cherry 1+2 120-150cm BR	5%
Prunus spinosa, Blackthorn, 1+2 120-150cm BR	5%
Rosa canina, Dog Rose, 1+0 120-150cm BR	5%
Viburnum opulus, Guelder Rose, 1+1 60-90cm BR	5%
Ullex europaeus, Gorse, 1+1 60-90cm 2L CG	5%
Lonicera periclymenum, Honey Suckle 60-90cm C	5%

Seed Mixes
The final seed mixes will be chosen to best suit the soil and site conditions and to be approved by an ecologist.

Species Rich Grassland Mix:
Will be RE1 Traditional Hay Meadow Mix supplied by Germinal (MG5 Grassland). 1% Conopodium majus will be added.

Wildflower Mix Component:	
Lotus corniculatus Bird's-foot trefoil	8%
Centaurea nigra Black knapweed	5%
Medicago lupulina Black medick	3%
Vicia sativa Common vetch	4%
Galium verum Lady's bedstraw	2%
Lathyrus pratensis Meadow vetchling	3%
Ranunculus acris Meadow buttercup	3%
Malva moschata Musk mallow	2%
Leucanthemum vulgare Ox-eye daisy	8%
Silene dioicia/latifolia Red/white campion	2%
Trifolium repens Red clover	10%
Prunella vulgaris Selfheal	5%
Onobrychis viciifolia Sainfoin	36%
Achillea millefolium Yarrow	6%
Rhinanthus minor Yellow rattle	3%

Outline Landscape Specifications:

Existing Vegetation:

Any necessary works being undertaken within close proximity to the retained tree lined hedgerows should be carried out in accordance with *BS 3998:2010 Tree work Recommendations*, *BS 5837:2012 Trees in Relation to Design Demolition and Construction* and *NJUG 4 Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* and in consultation with an arborist.

Proposed Planting:

Planting to be supplied in accordance with *BS 3936-1:1992 Nursery Stock. specification for trees and shrubs*, *BS 3936-4:2007 Nursery Stock.Specification for forest trees, poplars and willows*, *BS 8545:2014 Trees:from nursery to independence in the landscape*. All landscaping works to be in accordance with *BS4428:1989 "General Landscaping Works."* All planting should be sourced from local provenance certified seed stock where possible with other sources needing to be approved.

Tree Planting:

Trees will be planted into tree pits 2-3 times the width of root spread and to the depth of root spread. The tree pit's sides are to be loosened, base aerated and later backfilled with the existing excavated subsoil and topsoil. All trees to be supported with a suitable tree guard and staked with adjustable tree ties.

Hedgerow Planting:

Hedging planted into a trench measuring a min of 600mm wide and 300mm deep, allowing enough width and depth for the roots. Short lengths of individual whip infilling may be undertaken by slit planting. The existing soil should be improved by digging in well rotten Farm Yard Manure or other soil improver. All hedging will be supported with rabbit guards and canes and 1m wide mulch matting.
Temporary stock proof fencing of 1.2m high should be used to prevent grazing of new hedgerows by livestock if necessary. Any planting being carried out within the ecological constraints buffer area to be hand dug and supervised by the ECOW.

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- Proposed Viewing Platform with Interpretative Information

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Final location and number to be decided on site with consulting ecologist.

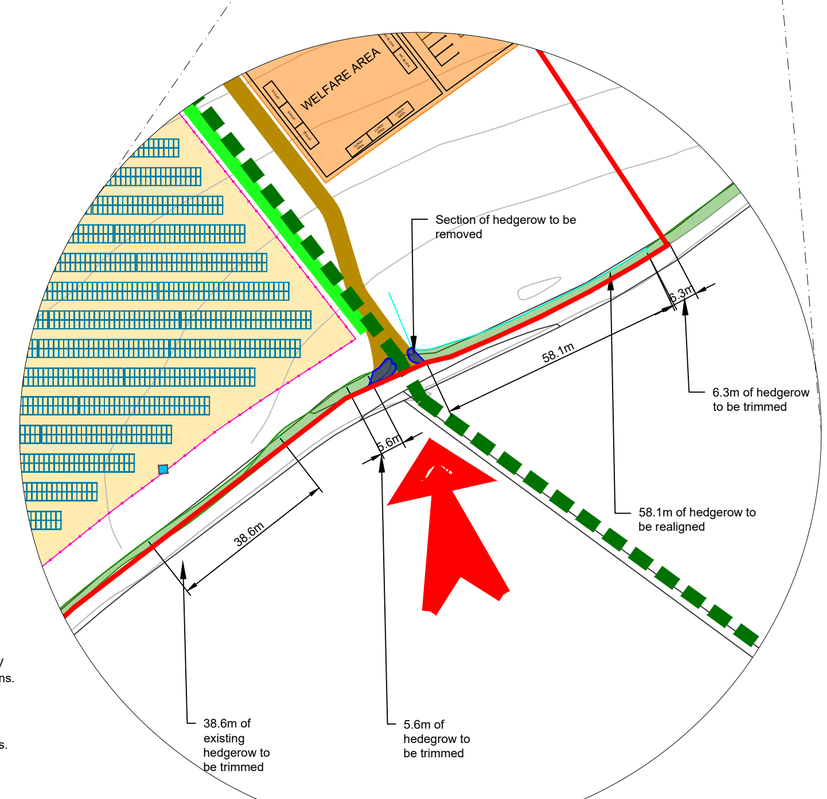
- Proposed Hibernaculum & Invertebrate Hotels
- Proposed Bat Boxes
- Proposed Bird Boxes
- Proposed Beetle Bank
- Proposed Badger Gate in security fence every 30m or in line with existing badger trails.

Hydrology Measures

- Proposed Detention Basin

Site Features

- Application Site Boundary
- Solar Array
  Refer to drawing NEO00668_052I_A Figure 8 'PV Module & Rack Detail' for details and specifications.
- New Access Track
  Refer to drawing NEO00668_050I_A Figure 6 'Access Track Detail' for details and specifications.
- Transformer
  Refer to drawing NEO00668_055I_A Figure 11 'Transformer Station Detail' for details and specifications.
- Fencing
  Refer to drawing NEO00668_053I_A Figure 9 'Security Fencing Detail' for details and specifications.
- CCTV
  Refer to drawing NEO00668_054I_A Figure 10 'CCTV Detail' for details and specifications.
- Access Gate
  Refer to drawing NEO00668_053I_A Figure 9 'Security Fencing Detail' for details and specifications.



ESTABLISHMENT & MAINTENANCE SCHEDULE YEAR 0 TO YEAR 5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
	JANUARY · FEBRUARY · MARCH · APRIL · MAY · JUNE · JULY · AUGUST · SEPTEMBER · OCTOBER · NOVEMBER · DECEMBER
Tree Planting:	
Tree and Shrub establishment inspection	
Pruning and thinning (outside the bird nesting season)	
Dead tree replacement	
Fertiliser application	
Residual herbicide application	
Translocated herbicide application	
Check stakes, ties and tree shelters (removal after 3 years)	
Litter & fallen leaf removal	
Inspection and wire tightening	
Hedge Planting	
Pruning and thinning	
Re-Firming	
Dead tree replacement	
Fertiliser application	
Residual herbicide application	
Translocated herbicide application	
Check stakes, ties and tree shelters	
Litter removal	

ESTABLISHMENT & MAINTENANCE SCHEDULE YEAR 0 TO YEAR 5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
	JANUARY · FEBRUARY · MARCH · APRIL · MAY · JUNE · JULY · AUGUST · SEPTEMBER · OCTOBER · NOVEMBER · DECEMBER
Grassed Areas :	
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Fertiliser spring application	
Fertiliser autumn application	
Litter & fallen leaf removal	
Wildflower Grassed Areas :	
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Ver.	Date	Comments
B	24/06/2021	Updated planning boundary.
A	07/05/2021	Draft for comment

Drawn By: Cynthia Jayne Dunwoody
Address: Unit 3, The Courtyard Business Park, Galgorm Castle Ballymena Northern Ireland, BT42 1HL

Project: Penpergwm Solar Farm
Client: Renewable Connection
Drawing: Landscape Plan

DRAFT

Project No.: NEO00668
Drawing No. : NEO00668_046_B Figure 1.26
Drawn: GC/CJD **Checked:** NB **Approved:** PN
Scale: 1:2500 **Revision:** B
Date: 07 May 2021

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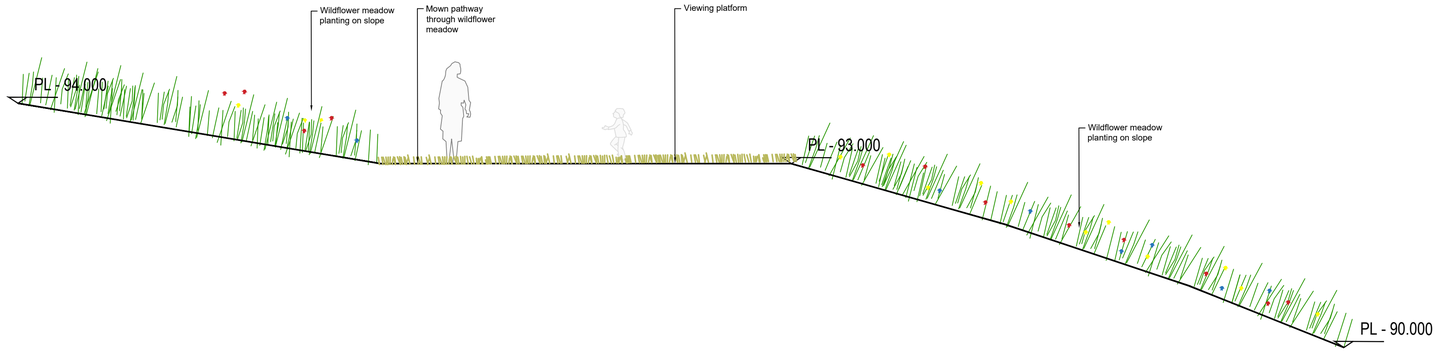
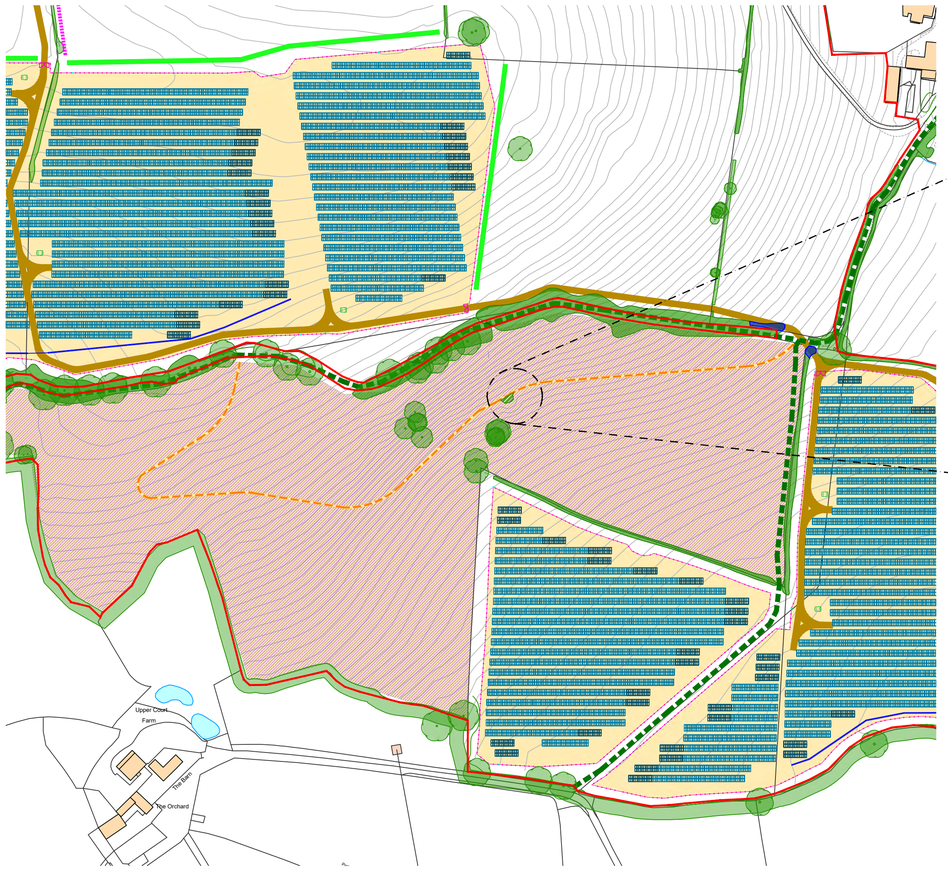
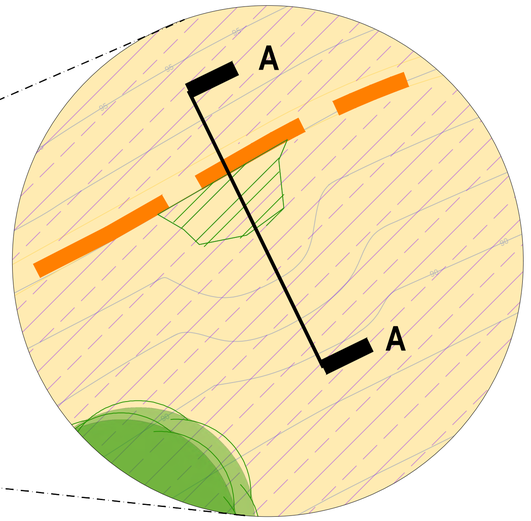


Section A-A
Scale 1:50

Example image of proposed information board on viewing platform



Plan - Wildflower Meadow Area
Scale 1:2000



Key

Landscaping Measures

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- Proposed Viewing Platform with Interpretative Information

Site Features

- Application Site Boundary
- Solar Array
- New Access Track
- Transformer
- Fencing
- CCTV
- Access Gate

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Ver.	Date	Comments
B	24/06/2021	Amended planning boundary
A	06/05/2021	Draft for comment

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Project:	Penpergwm Solar Farm
Client:	Renewable Connection
Drawing:	Viewing Platform Plan & Section
Project No.:	NEO00668
Drawing No. :	NEO00668_085_B Figure 1.27
Drawn: CJD	**Checked:** NB **Approved:** PN
Scale:	As shown @ A1 **Revision:**
Date:	06 May 2021 B

Appendix 1B: Site Photos

APPENDIX 1B – SITE PHOTOS

1: Penpergwm – looking north from the B4598, Field 8 and 12 partially visible in the background of view.

2: The Bryn – looking north from the bridge over the A40, north of The Bryn with partial views of Field 12.

3: Llanvihangel Gobion/B4598 – looking northwest, Application Site screened by vegetation.

4: Llanover Church – looking north from PRoW south east of Llanover Church, Application Site screened by vegetation.

5: Llanover PRoW – looking north from the PRoW between Llover Church and Ty Uchaf, partial view of Field 5, 6 and 12.

6: Looking northwest from southwest corner of Field 11 where Great House Farm buildings are visible in the middle distance to the centre of view. Field 11 offers a good vantage point from west to north being slightly raised. Only the roof of Great House is visible. The majority of fields 8, 9 and 10 closer to Great House were shielded from view by their surrounding hedgerows, offering only views of the roof level of Great House.

Appendix 1C: Methodology

APPENDIX 1C - LVA METHODOLOGY

Introduction

1.1. This appendix sets out the methodology used for the Penpergwm Solar Farm Landscape and Visual Appraisal (LVA). Based on a non-EIA development[1] an LVA has been undertaken following the approach for Landscape and Visual Assessment (LVIA) set out in GLVIA3[2]. For non-EIA development types, the Landscape Institute (LI) GLVIA3 Statement of Clarification[3] states that:

"In carrying out appraisals, the same principles and process as LVIA may be applied but, in so doing, it is not required to establish whether the effects arising are, or are not, significant given that the exercise is not being undertaken for EIA purposes."

1.2. The scope of the LVA methodology reflects the fact that the Development does not require EIA in the following ways:

- This appraisal does not provide judgment on the relative level of 'significance' of landscape and visual effects, given this terms relation to formal EIA; and
- The term 'degree' of landscape or visual effect is used rather than 'significance'.

1.3. LVA methodology is based on the approach set out in in the GLVIA3, along with other best practice, which are taken into consideration when determining professional judgement. Whilst this LVA is not for an Environmental Impact Assessment (EIA) development type, it follows much the same approach. The GLVIA3 guidance states that the level of assessment should be proportional to the scale of the project and the nature of the likely effects.

1.4. Together with the GLVIA3 the following guidance was also taken into consideration:

- Department of the Environment and Local Government. (June 2000) Landscape and Landscape Assessment;
- The Environmental Protection Agency (EPA) (2003) Advice Notes for Preparing Environmental Impact Statements and 2017 Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR);

[1] As confirmed with County Offlay during consultation

[2] Landscape Institute and the Institute of Environmental Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

[3] Landscape Institute Statement of Clarification 1/13, 10th June 2013

- BRE (2013) Planning guidance for the development of large-scale ground mounted solar PV systems;
- SNH (2017) Visual Representation of wind farms, Version 2.2;
- Natural Resources Wales Guidance (January 2021)Note 046 Using LANDMAP in Landscape and Visual Impact Assessments (LVIA)
- Landscape Institute (2019) Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19; and
- Landscape Institute (2019) Technical Guidance Note 06/19 Visual representation of development proposals).

Desk Based & Field Studies

Study Area

1.5. The study area agreed with Monmouthshire Council, extends to a 5km radius from the site boundaries of the Application Site and includes the Blorenge c. 5.8km to the southwest.

Desktop Study

1.6. An initial desktop study was undertaken to help establish the baseline and initial understanding of the landscape resources, potential views and visual amenity within the 5km study area. This was done by reviewing a number of paper and online sources including County Development Plans, Council planning application searches, OSI maps and Google Earth aerial mapping, and the ZTV coverage.

Fieldwork Survey

1.7. Fieldwork was carried out in July and August 2020, and April 2021 to help verify the desktop data and gain a greater understanding of how the Proposed Development would interact with the existing landscape and visual amenity within the study area. The viewpoint photography was undertaken at the same time. Conditions were sunny and overcast.

ZTV

1.8. A 'bare earth' Zone of Theoretical Visibility ("ZTV") (**Figures 1.7 Appendix 1A**), was computer generated based on a combination of the Application Site's detailed topographical survey and OS terrain data of the surrounding area, with the viewer height set at 2m high and the maximum height of the solar arrays set at 3.5m and battery storage points 2.9m above ground level. The ZTV does not account for any elements in the landscape such as trees, hedgerows, walls or buildings that may help screen views, nor account for the influences of the weather

upon any views. It therefore represents a 'worst case scenario'; nonetheless the ZTV is a useful computer-generated tool for determining the potential visibility of the Proposed Development and initial selection of viewpoints for the visual appraisal.

Viewpoints & Photography

1.9. A total of fifteen representative viewpoints were chosen from a range of locations and receptors; each viewpoint is detailed in the LVA (see **Figures 1.7 and b Appendix 1A** for locations). The initial viewpoints were selected during the baseline desktop study and later refined when undertaking the field work.

1.10. The views at each viewpoint were recorded using a Canon 6D Full Frame camera and fixed prime lens with a focal length of 50mm. The location was recorded with a GPS unit, with the direction of view and weather noted. The weather conditions at the time of the viewpoint photography was dry with broken light cloud cover.

Visualisations

1.11. Photomontages have been produced from four of the eight viewpoints as they will potentially experience varying visibility of the Proposed Development (Viewpoints 2, 3, 12 and 15, **Figures 1.9/b/c 1.10a/b/c, 1.19a/b and 1.22a/b)** which help to visualise the Proposed Development within the captured view. Each of these visualisations show the Proposed Development at Year 0 (Figure b) with planting and the growth in planting at Year 5 (Figure c).

1.12. Photomontages have been produced in accordance with current NatureScot visualisation and LI guidance. To create the baseline image, the frames are individually cylindrically projected and then digitally joined to create a fully cylindrically projected image using PTGui software. These are used in the creation of the 90 degree field of view photomontages.

1.13. The photomontages were modelled using Sketchup© and later edited onto the viewpoint image along with the mitigation planting using Adobe Photoshop© graphics software.

1.14. These images should not be viewed directly on a computer screen but printed out at 100% on paper measuring A1 in length (854mm) and ½ A1 in height (297mm) and held at a comfortable arm's length. When printing out please ensure that any page scaling settings is set to none and good quality paper, preferably provided by a professional printer. Each viewpoint has been supplied with six figure grid co-ordinates and bearings to help determine the exact viewpoint spot. These images help to give a representative visual illustration of the Proposed Development's scale when set within the context of the local landscape. It is important to note that the actual view experienced is impossible to replicate fully on paper.

LANDSCAPE, VISUAL AND CUMULATIVE APPRAISAL

Landscape Appraisal

1.15. The landscape appraisal identifies landscape receptors which have the potential to be affected by the Proposed Development and the extent of this interaction throughout all stages of development (construction, operation and decommissioning).

Landscape Sensitivity

1.16. The sensitivity of the landscape receptors is determined by combining judgment of their susceptibility to the particular type of change, or development proposed, and the value attached to the landscape.

Table 1: Landscape Sensitivity

High	A landscape of highly valued characteristics with a high susceptibility of small change resulting from the Proposed Development.
Medium	A landscape of moderately valued characteristics with a moderate level of susceptibility to change from the Proposed Development.
Low	A landscape with low valued landscape characteristics with considerable tolerance to the change from the Proposed Development.
Negligible	A landscape void of any notable value with the lowest susceptibility to change from the Proposed Development.

Landscape Susceptibility

1.17. The susceptibility of a landscape receptor is defined by GLVIA3 (pg.88-89) as:

"The ability of the landscape receptor (whether it be overall character or condition of a particular landscape type or area, or an individual element and/or features, or a particular aesthetic and perceptual aspect) to accommodate the Proposed Development without undue consequences for the maintenance of the baseline situation."

1.18. Key characteristics of the landscape which are likely to have varying degrees of susceptibility to solar farm developments are outlined in the table below, as adapted from Cornwall Council's (2015)[4] *Annex 1: An assessment of the landscape sensitivity to on-shore wind energy & large-scale photovoltaic development in Cornwall*. The underlying criteria used in the above landscape capacity study can be applied to this landscape appraisal.

[4] Cornwall Council (2015) *Cornwall Renewable Energy Supplementary Planning Document Consultation Draft Annex 1: An assessment of the landscape sensitivity to on-shore wind energy & large-scale photovoltaic development in Cornwall*
Available at: https://www.cornwall.gov.uk/media/10355153/Renewable-SPD-2014-Annex-1.pdf

Table 2: Indicative Landscape Characteristics Susceptibility to Solar Farm Developments

Landscape Characteristics	Susceptibility				
	Low	Low-Medium	Medium	Med-High	High
Landform	Lowland, flat, simple	Gently undulating lowland	Gently undulating lowland with some distinct open slopes	Prominent slopes or upland landscape	Steep slope, rugged and highly variable landform
Openness and Enclosure Pattern	Heavily Enclosed fields e.g. by woodland, tree shelterbelts or thick hedgerows	Enclosed lands with some open areas or fragmented lengths of hedgerow or tree belts	More mix of enclosed and open areas	Open lands with limited presence of trees or hedgerows	Open, expansive plateau, limited or no field boundaries
Field Pattern/Scale	Large scale, regular field patterns, modern fields	Majority of lands consisting of large scale modern fields	Mix of both modern large scale and smaller historic field system	Majority of lands consisting of smaller intrinsic historic field system	Small scale, irregular field patterns, intrinsic historic field system
Land cover	Urban, brownfield, arable lands	Arable or brownfield with some permanent pasture or semi-natural cover	Mix of pasture, arable and possibly brownfield or semi-natural	Predominantly permanent pasture with some arable or semi-natural cover	Predominantly semi-natural lands e.g. moorland with some permanent pasture cover
Perceptual qualities	A lot of evidence of human activity such as industrial areas, arable lands or some rural activity such as mixed or pastoral lands.	A highly shaped rural landscape with intensively farmed large scale arable landscape	More mixed farmland or permanent pasture with strong evidence of human activity	Lesser evidence of human activity present e.g. more exposed uplands	Remote or peaceful landscape, limited evidence of human activity or disturbance, more naturalistic landscape

Scenic quality	Lacking any scenic quality or landscape designations e.g. an industrial estate	Has low-medium scenic quality but not within any designations	Has medium scenic quality with possibly within a local or county designation	Has a medium-high scenic quality which may contain part of or next to a national designation or route	High scenic qualities, typically within a nationally designated landscape e.g. National Parks, NHAs

Landscape Value

1.19. The value of the landscape needs to be considered in order to fully assess the potential impact upon it. This can mean "*the landscape as whole, or to individual elements, features and aesthetic or perceptual dimension which contribute to the character of the landscape*." (GLVIA3 pg.80).

1.20. Identifying any existing landscape designations is a useful way of finding any currently recognised value attached to the landscape. It is also necessary to be aware of the value attached to undesignated landscapes that may be of local importance, e.g. community woodland or greenspaces. Where no value is available it is determined by considering the criteria outlined below in Table 3,Table 4: (Box 5.1) and other factors.

Table 3: Criteria for Landscape Value

High	Typically, a national or internationally designation e.g. National Park, National Heritage Area. Has a high quality and very distinctive characteristics of note, with some rarity.
Medium	Typically, a designated landscape of regional/county importance or non-designated but of local importance which may have some conservation, recreational or cultural associations. Common landscape characteristics or features but with some which are distinctive, of reasonable attractiveness and in ordinary to good condition.
Low	Typically, local undesignated landscape which has poorly defined landscape characteristics and features, that are often common and of limited value or interest. May have some limited worthy features. Large presence of detractors adding to its unattractiveness, found in poor condition and in need of improvements.
Negligible	Typically, undesignated landscape, denude of any distinct characteristics or features, derelict, highly unattractive and in need of extensive improvements.

Table 4: Factors Helping to Identify Landscape Value (Box 5.1, GLVIA3)

Factors Helping to Identify Landscape value	
Landscape Quality (Condition)	The degree to which the landscape is representative, intact and condition of individual elements.

Scenic quality	The extent to which the landscape appeals to the senses (primarily to the visual senses).
Rarity	The presence of unusual elements or features in the landscape or the presence of a rare Landscape Character Type.
Representativeness	Whether the landscape contains particular character and/or features or elements which are considered particularly important examples.
Conservation interests	Presence of ecological, historical or cultural interests which can add value to the landscape as well as having value in themselves.
Recreational value	Evidence that the landscape is valued for recreational activity where experience of the landscape is important, such as recognised scenic routes
Perceptual aspects	A landscape may be valued for it perceptual qualities, notably wildness and/or tranquillity.
Associations	Some landscapes are associated with particular people, such as artists or writers, or events in history that contribute to perceptions of the natural beauty of the landscape.

Magnitude of Landscape Effects

1.21. The effects of the Proposed Development upon each of the landscape receptors needs to be determined in terms of its size or scale, geographical extent, duration and reversibility, as outlined by paragraph 5.49 of GLVIA3.

Table 5: Magnitude of Landscape Effects

High (Adverse)	Total loss of, or major alteration to key elements/features/characteristics of the baseline, i.e. pre-development landscape and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.
Medium (Adverse)	Partial loss of, or alteration to key elements/features/characteristics of the baseline, i.e. pre-development landscape and/or introduction of elements that may be prominent, but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape.
Low (Adverse)	Minor loss of, or alteration to key elements/features/characteristics of the baseline, i.e. pre-development landscape and/or introduction of elements that may not necessarily be considered to be uncharacteristic when set within the attributes of the receiving landscape.
Negligible (Adverse)	Very minor loss of or alteration to key elements/features/characteristics of the baseline, i.e. pre-development landscape and/or introduction of elements that are not uncharacteristic with the surrounding landscape approximating the '*no change*' situation.
Low (Beneficial)	Minor improvement, or removal of small elements/features/characteristics that detract from the existing characteristics of the baseline and/or introduction of a new feature which fits into the existing landscape and may slightly enhance the existing character of the landscape.

Medium (Beneficial)	Medium improvement, or removal of small elements/features/characteristics that detract from the existing characteristics of the baseline and/or introduction of a new feature which fits into the existing landscape and may moderately enhance the existing character of the landscape.
High (Beneficial)	Major improvement, or removal of small elements/features/characteristics that detract from the existing characteristics of the baseline and/or introduction of a new feature which fits into the existing landscape and may substantially enhance the existing character of the landscape.

Visual Appraisal

1.22. The visual appraisal considers how the Proposed Development and loss, or addition of landscape elements will bring about changes to the content and character of people's (visual receptors) existing views and visual amenity, throughout all stages of the development.

Visual Sensitivity

1.23. The sensitivity of each visual receptor (person or group of people) is assessed in terms of susceptibility to change in views and visual amenity and also the value attached to particular views.

Susceptibility to Change

1.24. Visual receptors generally have differing responses to views and visual amenity, depending upon the context and their purpose for being in a particular place. The susceptibility to change in views is regarded to be a function of:

- The occupation or activity of people experiencing the view at particular locations; and
- The extent to which their attention or interest may be focused on the views and visual amenity at particular locations.

1.25. The table below identifies a number of indicative receptors typical of those found within the study zone.

Table 6: Susceptibility of Receptors to Change in their Views or Visual Amenity

High	• Residents with views from their dwellings or gardens. • Nationally recognised trails where views of the landscape forms an importance part of their experience. • Road users along routes noted for their valued views of the landscape e.g. scenic routes. • Visitors to important landscape features of physical, historical or cultural interest.
Medium	• People along local paths or roads where views of the landscape are not the focus of the activity e.g. dog walking. • Outdoor workers where the view forms an important setting to their activity. • Road users where views of the surroundings are secondary to the main purpose of travel e.g. rural minor road.

Low	• People at their place of work whose attention is likely to be focused on their work or activity e.g. office or factory. • People engaged in active outdoor sports or recreation and less likely to focus on the view e.g. on playing fields. • Main road routes and rail users likely to be travelling through at speed where the view is incidental to the purpose of travel.

Value Attached to Particular Views

1.26. Judgments are made on the value attached to views experienced, which take the following into consideration:

- Recognised value to a particular view, e.g. heritage assets or through planning designations e.g. protected views and scenic routes;
- Inclusion in guidebooks or on tourist maps, provision of facilities provided for enjoyment by visitors or references to the view in literature or art; and
- The relative number of people who are likely to experience the view.

Magnitude of Visual Effects

1.27. The magnitude of visual effects of a Proposed Development upon the views of receptors and their amenity is determined in terms of the size or scale, geographical extent, duration and reversibility (as outlined by paragraph 6.38 of GLVIA3).

Table 7: Magnitude of Visual Effect

High (Adverse)	A considerable deterioration in the existing view due to the introduction of the development's new features which would have a high contrast, very prominent and/or open impact on the view. The development would heavily occupy the views of the receptors.
Medium (Adverse)	A noticeable deterioration in the existing view where there would be a partial loss of, or alteration to the existing view as a result of the prominence of the development or extent of view it occupied.
Low (Adverse)	A barely perceptible deterioration in the existing view and limited views of the development. A minor loss of, or alteration to the existing views. The development would not be prominent and only occupies a small proportion of the view.
Negligible (Adverse)	No discernible deterioration or improvement in the existing view. Very minor loss of, or alteration to the existing view. Hard to clearly distinguish the development within the view.

Low (Beneficial)	A barely perceptible improvement in the existing view and limited views of the development. A minor addition of elements, or screening or removal of elements which already detract from the existing view.
Medium (Beneficial)	A noticeable improvement in the existing view, due to the addition of new elements, or the screening or removal of elements which already detract from the existing view.
High (Beneficial)	A considerable improvement in the existing view due to the introduction of the development's new features, the removal or screening of elements which already are detrimental upon the existing views.

Degree of Landscape and Visual Effects

1.28. A professional judgement is made by the landscape architect on the degree of effects a Proposed Development will have on those previously identified landscape and visual receptors which have the potential to be affected by the development. This is done by combining the level of sensitivity with the level of magnitude of change to provide the effects for each receptor using the matrix table below. These effects are graded as Major, Major/Moderate, Moderate, Moderate/Minor, Minor or No Change, either direct or indirect effects and can be characterised as adverse or beneficial.

1.29. This matrix approach, while helpful, is not a prescriptive tool, as at times the table may not provide a clear correlated value which is where professional judgment plays an important role in determining the overall degree of effect.

Table 8: Degree of landscape and visual effects

Sensitivity (Susceptibility & Value)	Magnitude of Change				
	High	Medium	Low	Negligible	None
High	Major	Major/ Moderate	Moderate	Moderate/ Minor	No Change
Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor	No Change
Low	Moderate	Moderate/ Minor	Minor	Minor/No Change	No Change
Negligible	Moderate/ Minor	Minor	Minor/ No Change	No Change	No Change
None	No Change	No Change	No Change	No Change	No Change

Table 9: Landscape and visual effects Criteria

Degree of Effect	Landscape Character	Visual Amenity
Major Adverse	Large scale changes in the landscape with a complete change to the character and permanent degradation of the landscape.	Large scale change where the development would dominate views
Moderate Adverse	The development would have a noticeable change to the landscape where it would appear to be out of place.	The development would have a noticeable change to views
Minor Adverse	The development would be slightly at odds with the landscape.	The development would cause little damage to views
No Change	The development would have no noticeable change to the landscape	The development would be barely noticeable.
Minor Beneficial	The development would have some improvements on the landscape character and site elements.	The development would result in a slight improvement to views
Moderate Beneficial	The development would have notable improvements on the landscape character and quality	The development would have a notable improvement to views
Major Beneficial	The development would result in significant improvements on the landscape character and quality	The development would result in significant improvements to views

Cumulative Effects

1.30. The cumulative appraisal follows the same approach as the GLVIA outlined above. It considers the potential effects of additional Proposed Development interacting with the effects of other similar types of development across the 5km baseline study area, this is not just restricted to an appraisal of other solar farm development in the area. Cumulative effects are defined by the GLVIA3 paragraph 7.2 as:

"Result from additional changes to the landscape or visual amenity caused by the Proposed Development in conjunction with other developments (associated with or separate to it), actions that occurred in the past, present or are likely to occur in the foreseeable future."

Cumulative Data

1.31. A cumulative search was made on the Monmouthshire Council web portal on the 14th April 2021 for:

- Any existing developments already present in the landscape;
- Any consented developments which have not yet been constructed; and
- Any pending development applications currently lodged within the planning processes.

1.32. The addition of the Proposed Development to the baseline of existing operational, under construction and consented developments is considered in the appraisal.

Residential Visual Amenity

1.33. The Landscape Institute published Residential Visual Amenity Assessment (RVAA) Guidance[5] in 2019. The RVAA guidance introduces an approach to considering a potential 'Residential Visual Amenity Threshold', beyond which effects may be of *"such nature and/or magnitude that it potentially affects 'Living Conditions' or residential Amenity*" (Para. 2.1, Page 5).

1.34. The LVA identified a number of properties with potential for partly screened views of parts of the overall Proposed Development. Effects on residential visual amenity identified in the LVA are not considered to reach a threshold by which an RVAA would be required therefore a full RVAA has not been undertaken.

[5] Landscape Institute 2019 Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19

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