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Appendix 6.A Detailed Landscape and Visual Appraisal Methodology

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1.1 Introduction

- 1.1.1 This appendix sets out the approach followed in relation to assessing the likely landscape and visual effects arising from the construction, operation and decommissioning phases of the Visual Impact Provision (VIP) Snowdonia Project (here on referred to as 'the Proposed Project').
- 1.1.2 The approach and methodology used by Gillespies in the preparation of this Landscape and Visual Appraisal (LVA) is primarily based on guidance provided in the Landscape Institute and Institute of Environmental Management & Assessment: Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3).

1.2 Scope of Appraisal

- 1.2.1 In accordance with GLVIA3, the LVA has identified and described:
 - 'Effects on the landscape as a resource (landscape effects); and
 - Effects on views and visual amenity as experienced by people (visual effects).
- 1.2.2 The main objectives of the appraisal are:
 - To describe, classify and evaluate the existing landscape and visual resource likely to be affected by the different components of the Proposed Project within the LVA Study Area during the construction, operational and decommissioning phases;
 - To identify visual receptors with views of the Proposed Project; and
 - To assess the magnitude of the effect on the landscape character and visual amenity, taking into account the measures proposed to mitigate any of the effects evaluated.
- 1.2.3 The LVA has considered the likely adverse and beneficial effects including direct, or indirect effects for both the temporary (typically construction) and long-term (typically operational) effects on both landscape character and visual amenity.

Definitions

1.2.4 For the purposes of the LVA:

- Landscape effects means impacts or effects on 'the landscape as a resource in its own right' (GLVIA3, page 21, paragraph 2.21). It includes direct effects upon the fabric of the landscape (such as the addition, removal or alteration of structures, woodlands, trees or hedgerows), which may alter the character and perceived quality of the area, or more general effects on landscape character and designated areas of landscape arising from the introduction of new man-made features. In landscapes designated or valued for their scenic or landscape quality such as Snowdonia National Park, such changes can affect the purpose of the designation or perceived value of the landscape.
- Visual effects means impacts or effects on 'specific views and on the general visual amenity experienced by people' (GLVIA3, page 21, paragraph 2.21). These relate to specific changes in the composition of views and the effects of those changes on visual receptors and wider visual amenity. In accordance with GLVIA3, the appraisal will focus on public views experienced by those groups of people who are likely to be most sensitive to the effects of the Proposed Project. This includes local communities where views contribute to the landscape setting enjoyed by residents in the area, road users and people using recreational routes, features and attractions.
- Cumulative effects are the effects of the Proposed Project adding to the effects of other similar proposed developments. There are two main types of cumulative effect. Intraproject cumulative effects are those effects which arise from different environmental factors affecting a single receptor (for example a community may be affected by impacts on visual amenity and also air quality). Inter-project cumulative effects arise



from the additional effects caused by the Proposed Project interacting with the effects of other similar developments in the locality.

1.3 Data Sources

1.3.1 A predominantly desk-based review of data sources including relevant legislation and planning policy relating to electricity transmission and the landscape has been undertaken. The following data sources have informed the production of this appraisal and it's figures:

Welsh National Planning Advice and Polices

- Welsh Government (2018). Planning Policy Wales Edition 10; and
- Welsh Government (2014). Technical Advice Note (TAN 12) Design, 2016.

Local Planning Policy and Guidance

- Isle of Anglesey County Council and Gwynedd Council (2017). Anglesey and Gwynedd Joint Local Development Plan (2011 – 2026);
- Gwynedd Council (2012); Anglesey and Gwynedd Joint Local Development Plan Background Paper, Gwynedd Landscape Strategy Update (2012);
- Gwynedd Council and Anglesey County Council (2012). Joint Local Development Plan Background Paper, Review of Special Landscape Areas in Gwynedd and Anglesey;
- Isle of Anglesey County Council and Gwynedd Council (2014). Joint Local Development Plan Background Paper, Wind Turbines and Pylons: Guidance on the Application of Separation Distances (2014);
- Isle of Anglesey County Council and Gwynedd Council (2014). Joint Local Development Plan Background Paper, Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Study (2014);
- Gwynedd Council (2009). Supplementary Design Guidance: Landscape Character (2009)
- Snowdonia National Park Authority (2011). Eryri Local Development Plan (2007 2022);
- Snowdonia National Park Authority (2011). Supplementary Planning Guidance 2 General Development Considerations (September 2011);
- Snowdonia National Park Authority (2014). Supplementary Planning Guidance 7 Landscapes and Seascapes of Eryri (July 2014);
- Snowdonia National Park Authority (October 2016). Supplementary Planning Guidance 13, Landscape Sensitivity and Capacity Assessment;
- Snowdonia National Park Authority (2016). Supplementary Planning Guidance 14, Obtrusive Lighting (Light Pollution), Draft Version (May 2016);
- Snowdonia National Park Authority (2017) Eryri Local Development Plan, Deposit Version, (2016 – 2031);
- Snowdonia National Park Authority (2017). Eryri Local Development Plan Review, Background Paper 8, Landscape (November 2017);
- Snowdonia National Park Authority. Snowdonia National Park Management Plan 2010 – 2015; and
- Snowdonia National Park Authority (2018). Cynllun Eryri Snowdonia National Park Partnership Plan (Consultation Document 2018);



Other Data Sources

- Aerial photography;
- Site visits undertaken between Winter/Spring 2017 and Spring 2018;
- Visual Impact Provision: Snowdonia Overhead Line Scoping Report (2018)¹;
- Visual Impact Provision: Snowdonia National Park Options Appraisal Study (National Grid plc, 2015)²;
- Visual Impact Provision: Landscape and Visual Impact Assessment of Existing Electricity Transmission Infrastructure in Nationally Protected Landscapes in England and Wales Technical Report (2014)³;
- OS mapping (1:25,000);
- Datasets sourced from data.gov.uk website (including National Forest Inventory, Open Access Land and Registered Common Land);
- Datasets sourced from Ile.gov.wales website which is a Geo Portal for Wales (including Ancient Woodland); and
- National Cycle Network GIS data sourced from Sustrans
- 1.3.2 In addition the following guidance has been taken into consideration:
 - Hinton, C. and Holford, W. (1959). The Holford Rules Guideline for the Routeing of New High Voltage Overhead Transmission Lines;
 - National Grid Company plc (2003). The Horlock Rules Guidelines on the Siting and Design of National Grid Substations;
 - Landscape Institute (2011). Photography and Photomontage in Landscape and Visual Impact Assessment: Advice Note 01/11⁴;
 - National Grid (2012). Our Approach to the Design and Routeing of New Electricity Transmission Lines;
 - Natural England (2014). An Approach to Landscape Character Assessment;



¹ National Grid (2018) 'Visual Impact Provision: Snowdonia National Park, Overhead Line 4ZC Screening & Scoping Report October 2018'

² Gillespies, (2015), 'Visual Impact Provision: Snowdonia National Park Options Appraisal Study', National Grid.

³ Swanwick, C., Gillespies and Land Use Consultants, (2014), 'Visual Impact Provision: Landscape and Visual Impact Assessment of Existing Electricity Transmission Infrastructure in Nationally Protected Landscapes in England and Wales Technical Report', National Grid.

⁴ Note: As per footnote 4 it is acknowledge that TGN 06/19 Visual Representation of development proposals was published on 17 September 2019 in support of GLVIA3. This replaced LI Advice Note 01/11, 'Advice on Photography and Photomontage' and Technical Guidance Note 02/17, 'Visual Representation of Development Proposals' as supplementary guidance to GLVIA3. At the point of publication of 06/19, 02/17 and 01/11 were withdrawn. They remain available for reference. It is the LI's view that the new guidance 06/19 should apply to new commissions undertaken from 17 Sep 2019 onwards, but a reasonable grace period will apply, and reasonable judgements should be made by practitioners over implications of the changeover.

- Natural Resources Wales (2017). LANDMAP Guidance Note 1: LANDMAP and Special Landscape Areas;
- Natural Resources Wales (2016). LANDMAP Methodology: Visual and Sensory;
- Natural Resources Wales (2013). LANDMAP Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines;
- Natural Resources Wales (2016). LANDMAP Guidance Note 4: LANDMAP and the Cultural Landscape;
- Natural Resources Wales (2016). LANDMAP Methodology: Historic Landscape
- Scottish Natural Heritage (2017). Visual Representation of Windfarms, Guidance, Version 2.2, 2017.

1.4 Study Area

- 1.4.1 The LVA focuses on those areas which are likely to experience the greatest effects. This report does not form part of a formal Environmental Impact Assessment (EIA). The LVA Study Area includes the Search Area for Permanent and Temporary Works of the Proposed Project and the wider landscape around it, which the Proposed Project may influence.
- 1.4.2 Previous field assessment work and studies have determined that generally there are circumstances when a steel lattice 400 kV pylon approximately 50 m high can be discerned at distances up to 10 km. However, in most instances it is likely to be barely perceptible beyond 3 km. As an indication, at 3 km distance, when viewed at arm's length, a 50 m tall pylon would appear to be approximately 1 cm high in the landscape).
- 1.4.3 Based on these observations and knowledge of the local landscape derived from site visits, the Study Area for the LVA (the 'LVA Study Area') is defined as a 3 km and 5 km distance around the Area of Search for Permanent and Temporary Works (as described in Chapter 3). The 3 km and 5 km study area are illustrated in Figure 6.1. Although the widest extent of the LVA Study Area is based on 5 km the focus of the appraisal is within 3 km of the Proposed Project. This is considered to encompass the area which would be most likely to be affected by the proposed Sealing End Compound (SEC) and Tunnel Head Houses (THHs) and where the removal of the existing section of OHL (the VIP Subsection) would be most notable; due to the fact that the existing pylons to be removed and replacement pylon/ proposed new tension pylon are the tallest and therefore potentially the most widely visible components of the Proposed Project. The 5 km Study Area has been monitored throughout the preparation of the LVA. No sensitive receptors beyond 5km have been identified as being likely to be noticeably affected by the Proposed Project during site visits.

1.5 Zones of Theoretical Visibility

- 1.5.1 To support the appraisal, Zone of Theoretical Visibility (ZTV) maps have been produced for the pylons to be removed, for the new Tension Pylon and for the proposed Tunnel Head Houses. The ZTVs have been generated using Ordnance Survey (OS) Digital Terrain Models up to 10 km from the operational development to demonstrate that the 5 km Study Area is appropriate and to help identify any particularly sensitive visual receptors which may lie at or beyond 5 km.
- 1.5.2 ZTV analysis was performed using Quantum geographic information system (GIS) assuming an observer height of approximately 1.5 m (to represent the eye-level of a standing person). The ZTVs provide a 'worst case' or 'bare ground' scenario of potential visibility. They are based upon 50 m terrain data which represents the topography of the land; but they do not take into account potential screening provided by localised changes in landform, vegetation or buildings. They do not take into account the effects of distance on visibility.
- 1.5.3 Figure 6.3 illustrates the bare earth/ worst case in terms of areas of the landscape from which the proposed Western Tunnel Head House may be visible. The location and elevation values



of the West Tunnel Head House and compound were based on design freeze drawings PDD-33494-ARC-206 Rev P01 and PDD-33494-ARC-221 Rev P01. Three absolute Z values for height were used – 3 m AOD for base height, 6.9 m AOD for the eves of the roof and 9.09 m AOD for the pitch of the roof.

- 1.5.4 Figure 6.4 illustrates the bare earth/ worst case in terms of areas of the landscape from which the proposed Eastern Tunnel Head House may be visible. The location and elevation values of the East Tunnel Head House and compound were based on design freeze drawings PDD-33494-ARC-106 Rev P01 and PDD-33494-ARC-121 Rev P01. Three absolute Z values for height were used 6 m AOD for base height of the compound, 12.8 m AOD for the lower part of the roof and 18.7 m AOD for the highest pitch of the roof.
- 1.5.5 Figure 6.5 illustrates comparative ZTVs that show areas from which the proposed Tension Pylon may be visible in relation to the existing pylon that it would replace. The location and height of the proposed new Tension Pylon 4ZC027R was based on information provided by the engineers and the location and height of existing pylon 4ZC027 was provided by National Grid.
- 1.5.6 Figure 6.6 illustrates the bare earth/ worst case in terms of areas of the landscape from which multiple existing pylons of the VIP Subsection are currently visible. The locations and heights of the existing pylons to be removed are based on a 3D AutoCAD model provided by National Grid. Results of the analysis of the existing pylons to be removed has been mapped in different shades overlaid on an OS base map.

1.6 Viewpoints

- 1.6.1 Viewpoints have been selected to be representative of views in the area. Where possible the viewpoints have been selected in places where they represent a number of different receptor groups (e.g. on the edge of a settlement; at a tourist attraction or recreation area and picnic site, on a promoted footpath, or from an area of Open Access Land). The location of these viewpoints has been discussed with Snowdonia National Park Planning Authority (SNPPA), Gwynedd Council and Natural Resources Wales (NRW). A series of photographs were taken at each viewpoint location, with a minimum 50% overlap between frames to reduce barrel distortion. These photographs were then stitched together using PTGui software to produce single panoramic images.
- 1.6.2 The viewpoints are presented in Appendix 6.C together with a brief explanation as to why they have been chosen, which groups of receptors are represented, baseline descriptions and appraisals of magnitude of effect as a result of the Proposed Project.

Viewpoint Photography and Wireline Production Methodology

- 1.6.3 All photographs were taken in generally good visibility using a Canon EOS 6D camera with a Canon EF 50mm f/1.8 fixed focal lens. On arriving at each predetermined viewpoint location, a tripod was set up to position the camera lens at an assumed eyed level height of 1.5 m. The camera was levelled on the horizontal and vertical axes. GPS coordinates of the tripod location were taken together with a photograph of the tripod in situ, to verify each viewpoint location. The time and date that the photographs were taken were also recorded.
- 1.6.4 Viewpoint photography and wireline production has been undertaken in accordance with GLVIA3 as well as guidance contained in the Landscape Institute Advice Note 01/11⁵

⁵ Note: As per footnote 4 it is acknowledge that TGN 06/19 Visual Representation of development proposals was published on 17 September 2019 in support of GLVIA3. This replaced LI Advice Note 01/11, 'Advice on Photography and Photomontage' (withdrawn) and Technical Guidance Note 02/17, 'Visual Representation of Development Proposals' (withdrawn) as supplementary guidance to GLVIA3. At the point of publication of 06/19, 02/17 and 01/11 were withdrawn. They remain available for reference. It is the LI's view that the new guidance



(Photography and Photomontage in Landscape and Visual Impact Assessment) (Landscape Institute, 2011). Wireline production has also responded to guidance provided in Scottish Natural Heritage's (SNH's) 2014 document, 'Visual Representations of Windfarms: Good Practice Guidance Version 2.1' (SNH), 2014, which the LI Advice Note 01/11 strongly advises members to follow where applicable in preference to any other guidance or methodology. It is important to note that this guidance has been written for wind farms which are different in nature to the Proposed Project; hence deviations from the recommendations have sometimes been necessary to accurately represent the effects of the Proposed Project.

1.7 Existing Environment

1.7.1 In order to undertake a LVA it is essential to establish the baseline landscape context, character and visual amenity of the Study Area of which the Proposed Project is appraised against. This forms the basis for the identification and description of the changes that may result from the Proposed Project. This is done through a combination of desk top study and site visits.

Landscape Baseline

- 1.7.2 The **landscape baseline** describes the wider landscape 'its constituent elements, its character and the way this varies spatially, its geographic extent, its history (which may require its own specialist study), its condition, the way the landscape is experienced, and the value attached to it'. GLVIA3 Page 32, paragraph 3.15.
- 1.7.3 The landscape baseline was established through desk study and field work. It includes a consideration of the key characteristics of the wider landscape with reference to published landscape character assessments at a national, regional and local level where available. Elements and features within the site and the wider landscape are identified. The description of the existing landscape is structured under the following headings:
 - Landscape Context;
 - Designated landscapes; and
 - Landscape Character.
- 1.7.4 Judgements have been made with regards to the **value** of the landscape. 'This means the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons. Considering value at the baseline stage will inform later judgements about the significance of effects...... A review of existing landscape designations is usually the starting point in understanding landscape value, but the value attached to undesignated landscapes also needs to be carefully considered.' GLVIA3 Page 80, paragraph 5.19.
- 1.7.5 The relative value attached to landscape receptors is complex. Nationally and internationally designated landscapes are generally accorded the highest value. The absence of a formal landscape designation however, does not necessarily imply that a landscape is of lower value. GLVIA3 advises that existing landscape designations be used to form a judgement on landscape value, but that undesignated landscapes can also be of value. Other landscape features, both designated and undesignated were also taken into account in this appraisal because they add to the character and value of the landscape or are evidence that the landscape is valued for recreational activity where experience of the landscape is important.

06/19 should apply to new commissions undertaken from 17 Sep 2019 onwards, but a reasonable grace period will apply, and reasonable judgements should be made by practitioners over implications of the changeover.



Landscape qualities described in various designation documentation and Landscape Character Assessments were considered as part of this.

1.7.6 Table 1.1 below illustrates the factors taken into consideration when making judgements on landscape value in relation to landscape character. Overall landscape value is described on a high, medium and low scale.

Table 1.1: Landscape Value

Valua Indiantara	Judgement on Landscape Value			
Value Indicators	Lower	Higher		
Landscape Quality	The landscape has relatively low landscape	The landscape has relatively high landscape quality.		
	quality. Presence of landscape elements of poor condition/ detractive elements.	Intact landscape with characteristic natural and man-made elements, which are in good condition		
Scenic Quality	The area of landscape under consideration has relatively low scenic quality.	The area of landscape under consideration has relatively high scenic quality.		
	Presence of significant incongruous or detractive elements.	The presence of distinctive, dramatic or striking landform or patterns of land cover or strong aesthetic qualities which appeal to the senses, such as scale, form, colour and texture.		
		Visual diversity which contributes to the appreciation of the landscape.		
Rarity	Few or no rare elements or features. The landscape represents a typical/ frequent Landscape Character Type.	Presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type.		
Representativeness	Landscapes with no particular character/ feature/ element which are considered important examples.	Landscapes which contain a particular character/ feature/ element which are considered important examples.		
Conservation Interests	Absence of, or very low frequency of, features/ areas valued for wildlife, earth science or archaeological or historical or cultural heritage interest.	High frequency of features/ areas valued for wildlife, earth science or archaeological or historical or cultural heritage interest.		



Value Indicatore	Judgement on Landscape Value			
Value Indicators	Lower	Higher		
Recreation Value	Very little, or no evidence that the landscape is value for recreational activity where experience of the landscape is considered to be important.	activity, in particular where experience of the landscape		
Perceptual Aspects	The area of landscape under consideration has a low relative wildness, remoteness and/or relative tranquillity, with overt manmade structures and/or visual and audible intrusion	tranquillity, including a lack of overt man-made		

Visual Baseline

- 1.7.7 The **visual baseline** establishes the area in which the Proposed Project may be visible 'the different groups of people who may experience views of the development, the places where they will be affected and the nature of views and visual amenity at those points.' GLVIA3 Page 32, paragraph 3.15.
- 1.7.8 As previously described, the area within which the Proposed Project may be theoretically visible has been established using digitally created 'worst case' or 'bare earth' ZTVs. Site knowledge gathered between Winter/ Spring 2017 and Spring 2018 has been used to understand the potential areas from where the Proposed Project would be likely to be screened by intervening landform, vegetation or buildings.
- 1.7.9 The visual baseline provides information on:
 - A general description of visual amenity within the study area;
 - Descriptions of existing visual amenity of people living in the area 'local community/ residential receptors'
 - Descriptions of existing visual amenity of people taking part in recreational activities within the area 'recreational receptors/ recreational users'
 - Descriptions of existing visual amenity of people travelling through the area 'road users'
- 1.7.10 The value of a view depends on:
 - 'recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations;
 - Indicators of the value attached by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment...and references to them in literature or art....' Page 114. Para 6.37.
- 1.7.11 In terms of visual appraisal, promoted views from or toward heritage assets and planning designations were considered to be of higher value. Indicators of value attached to views by visitors, such as public benches on the edge of open access land and interpretative materials were also used to form a judgement on the value of views. A judgement was also made on site about the relative quality of the view.



1.7.12 The **value** attached to views is described on a **high**, **medium and low** scale. The value of views are considered on sliding scale as indicated by Table 1.2 below:

Table 1.2: Value of Views (Adapted from VIP methodology)

Lower Value	\iff	Higher Value
Views which are not formally recognised or promoted, or are not associated with designated historic landscape assets or visitor facilitates, but which are likely to be valued at a local community level.		 Views which are or recognised importance, including: Designated views or scenic routes, advertised with road signs or highlighted on OS maps and/or tourist information Views recognised or protected in relation to the special qualities of the area, or nationally designated historic landscape assets

1.8 Appraisal

1.8.1 The following sections describe the method and approach used in the determination of landscape and visual sensitivity and magnitude of effects.

1.9 Sensitivity

1.9.1 The first step in terms of undertaking the appraisal is to consider the sensitivity of landscape and visual receptors.

Approach to Appraisal of Landscape Sensitivity

- 1.9.2 Landscape sensitivity is derived from 'combining judgements about its susceptibility to change arising from the specific proposals with judgements about the value attached to the receptors.' (GLVIA3 P158 Glossary). The value attached to landscape receptors is determined as part of the baseline but susceptibility to change is considered as part of the appraisal and is defined as 'the ability of the landscape receptor (whether it be the overall character or quality/ condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/ or the achievement of landscape planning policies and strategies.' GLVIA3 Page 88, paragraph 5.40.
- 1.9.3 It is important to note the appraisal of landscape susceptibility is very much project specific. Susceptibility varies depending on the character of the landscape and the nature of the development being proposed. Generally, proposals that fit well with the scale and character of the landscape are less likely to be adverse.
- 1.9.4 Within this appraisal the susceptibility of landscape receptors is defined in relation to the different components of the Proposed Project. Table 1.3 and 1.4 below provide an overview of the indicative criteria used to make the susceptibility judgements. This has been taken into consideration together with information contained within Snowdonia National Park Landscape Sensitivity and Capacity Assessment (Snowdonia National Park Authority,

2016)⁶ and the Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Study (Anglesey and Gwynedd Joint Planning Policy Unit, 2014)⁷.

Table 1.3: Indicative Criteria for Assessing Landscape Susceptibility to a <u>Sealing</u> End Compound (SEC) and or Tunnel Head House (THH)

Factor	Lower Susceptibility to a SEC / THH	\longleftrightarrow	Higher Susceptibility to a SEC / THH
Landform	Rolling enclosed landscape with low visibility.		Prominent and distinctive landform.
			Flat open landscape with high visibility
Land cover	Many trees, woodlands and hedgerows.		Few trees, woodlands and hedgerows.
	Agricultural landscapes characterised by varied landcover pattern incorporating frequent woodland blocks and trees are typically less vulnerable as they offer potential to		Open, simple and uncluttered landscapes where there are few characteristic landscape features are more susceptible to this type of development, particularly where there is sparse tree cover.
	screen this type of development (particularly in combination with undulating landform) although care must be taken not to allow the development to detract from or dominate locally distinctive features.		Landscapes with a very intricate, complex mosaic of characteristic or high frequency/ density of susceptible landscape features such as: trees and woodlands; hedgerows or traditional/ historic field patterns; and designed landscapes with formal patterns are typically also more vulnerable to this type of development as the scale and nature of the development may conflict with the landscape.
Scale	Medium scale landscapes. Where a SEC may be		Intimate or vast scale landscapes.
	accommodated well within the scale of the landscape.		Where a SEC may appear out of scale within the landscape.

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⁶ Snowdonia National Park Authority (October 2016). Supplementary Planning Guidance 13, Landscape Sensitivity and Capacity Assessment

⁷ Isle of Anglesey County Council and Gwynedd Council (2014). Joint Local Development Plan Background Paper, Isle of Anglesey, Gwynedd and Snowdonia National Park Landscape Sensitivity and Capacity Study (2014)

Factor	Lower Susceptibility to a SEC / THH	\longleftrightarrow	Higher Susceptibility to a SEC / THH
Human Influence	The landscape includes overt man-made structures or land use and this type of development would be relatively unobtrusive. Presence of road and rail infrastructure.		Landscapes with little overt modern man-made influence. The landscape is largely unsettled and does not include overt man-made structures or land use and this type of development may form a substantial intrusion.
Perceptual aspects and tranquillity	Active or busy landscapes.		Relatively wild/ remote or tranquil landscapes.

Table 1.4: Indicative Criteria for Assessing Landscape Susceptibility to an <u>OHL</u> (in relation to assessing Equipment Specific to Section 37 Consent and the Removal of Existing Infrastructure (VIP Subsection))

Factor	Lower Susceptibility to OHL	\iff	Higher Susceptibility to OHL
Landform	Flat or gently undulating areas.		Prominent or distinctive landform.
Land cover	Simple uncluttered landcover. Large fields and few important hedgerows. Trees concentrated in woodlands which can be avoided by the development.		Complex, irregular or intimate landscape patterns (e.g. historic field patterns). Small fields with many important hedgerows. High levels of tree cover, in particular high frequency of parkland trees, veteran trees and ancient woodland. Densely dispersed pattern of individual trees.
Scale	Larger scale landscapes.		Smaller scale landscapes.
Skylines	Less prominent skylines.		Prominent skylines. Landscapes which form a distinctive skyline or backdrop.
Prominent Landscape Features	Landscapes with few visual foci such as distinctive landforms or man-made landmarks such as hilltop monuments.		Landscapes with strong visual features and focal points such as distinctive landforms or man-made landmarks such as hilltop monuments.

Factor	Lower Susceptibility to OHL	\longleftrightarrow	Higher Susceptibility to OHL
Human Influence	The landscape includes overt man-made structures (in addition to the existing		Landscapes with little overt modern man-made influence (other than the exiting OHL)
	OHL) or land use and this type of development would be relatively unobtrusive.		The landscape is largely unsettled and does not include overt man-made structures or land use and this type of development may form a substantial intrusion.
Vertical Infrastructure	Other existing vertical features (modern development), in addition to the existing OHL.		Existing landscape unaffected by vertical features (modern development), other than the existing OHL.
Perceptual aspects and tranquillity	Active or busy landscapes.		Relatively wild/ remote or tranquil landscapes.

1.9.5 By combining the professional judgements on value (made in the baseline study) and susceptibility, an overall appraisal of **landscape sensitivity** is described on a three-point scale of **high**, **medium** and **low** for each landscape receptor. High value/ high susceptibility receptors are more likely to be highly sensitive to change, with lower value/ low susceptibility receptors likely to be of lower sensitivity to change.

Approach to Appraisal of Visual Sensitivity

- 1.9.6 Visual receptors are people and their sensitivity 'should be assessed in terms of both their susceptibility to change in views and visual amenity and also the value attached to particular views'. (GLVIA3, Page 113, paragraph 6.31). The value attached to particular views is identified as part of the visual baseline whilst judgements regarding the susceptibility of the visual receptor to the proposed change is made in the appraisal. The susceptibility of a visual receptor to change is 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 therefore be focused on the views and the visual amenity they experience at particular locations.' (GLVIA 3 Page 113, paragraph 6.33)
- 1.9.7 Visual susceptibility is recorded as **high**, **medium** or **low** according to Table 1.5 below.

Table 1.5: Visual Receptor Susceptibility

Susceptibility	Definition
High	Communities where views contribute to the landscape setting enjoyed by people living in the area; recreational users whose attention or interest is likely to be focused on the view (including proposed viewpoints and viewpoints within nationally or regionally designated landscapes); and visitors to heritage assets or other attractions where views of surroundings are an important contribution to the experience. Examples include:
	 Communities where views contribute to the landscape setting People engaged in outdoor recreation whose interest is likely to be focused on the landscape Visitors to identified viewing places or heritage assets where
	the surrounding landscape makes an important contribution to the experience • People travelling on scenic routes
Medium	The view may be experienced by people who are drawn to the view yet do not feel compelled to stop and take it in. Examples include:
Mediam	 People travelling on roads, rail or other transport routes People using incidental footpaths and local rights of way People in the local community
	People whose attention or focus is on other activities, not on their surroundings. Examples include:
Low	 Commuting pedestrians and motorists People engaged in outdoor sport or recreation which does not involve or depend on appreciation of views of the landscape People at their place of work

1.9.8 Paragraph 6.35 of GLVIA3 notes that:

'These divisions are not black and white and in reality there will be gradation in susceptibility to change. Each project needs to consider the nature of the groups of people who will be affected and the extent to which their attention is likely to be focused on views and visual amenity.'

1.9.9 By combining the judgements on value (made in the baseline study) and susceptibility, an overall appraisal of **visual sensitivity** using a three-point scale of **high, medium** and **low** is made for each visual receptor; this is based on professional judgement. High value/ high susceptibility receptors are likely to be highly sensitive to change, with lower value/ low susceptibility receptors likely to be of low sensitivity to change.

1.10 Magnitude of Effect

1.10.1 The next step in the appraisal is to consider magnitude of effect (or change). Magnitude of effect is made up of judgements about the size and scale of effect; the geographical extent of the area effected; and the duration of effect and its reversibility (as set out in GLVIA3 Para 3.26).

Magnitude of Landscape Effects

1.10.2 As explained in paragraphs 5.48 – 5.52 of GLVIA3, the nature or magnitude of landscape change is determined as summarised below:



1.10.3 The size/ scale of an effect is determined by considering the amount of change experienced by a receptor, including the extent or proportion of loss or addition of existing landscape elements, the degree to which aesthetic or perceptual aspects of the landscape may be altered and whether the change affects its key characteristics and overall character, see Table 1.6 below.

Table 1.6: Judging the Size/ Scale of Effect on the Landscape (Adapted from VIP methodology)

Smaller Scale	\iff	Larger Scale
The development would be accommodated satisfactorily within the landscape context (i.e. it fits into the landscape) and would not alter the perception of the landscape. It would not affect the key characteristics of the landscape.		The development would have a strong influence on perception of the landscape and would conflict with or override key characteristics.

1.10.4 The geographical extent is the area over which the effects are experienced. It is not the same as size/ scale as a small-scale change may cover a wider area, or vice-versa, see Table 1.7 below.

Table 1.7: Judging the Geographical Extent of Effect on the Landscape (Adapted from VIP methodology)

Limited Geographical Extent	\Leftrightarrow	Extensive Geographical Extent
The development would be perceived only locally, with limited effect on wider landscape character.		The development would have a widespread influence on the perception of the landscape. Its presence would be perceived across a wide area, potentially affecting perception across one or more landscape character type/ area.

- 1.10.5 Duration and reversibility of landscape effects, which in accordance with GLVIA3, is a separate, but linked consideration. For the purpose of this LVA the duration of effect is described as short term (0-5 years), medium term (5-15 years) or long term (> 15 years). A development may also be considered in terms of whether the effects are reversible.8
- 1.10.6 Within the context of this appraisal, professional judgements on magnitude of landscape change allow a differentiation to be made between whether the change is positive or negative. Table 1.8 defines the indicative criteria used to inform judgements on the magnitude of landscape effect.

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⁸ Reversibility refers to whether the predicted effects are reversible, rather than the development itself. Whilst in theory, all landscape and visual effects are reversible, through complete removal of a development and reinstatement of existing conditions, this isn't always the case, whether related to reinstatement following temporary development or mitigation of effects of permanent development. A notable example is ancient woodland, which is considered irreplaceable in the medium to long term.

Table 1.8: Indicative Criteria for Judging Magnitude of Landscape Effect

Magnitude of Effect	Typical Criteria
	Considerable change to the landscape over a wide area or intensive change over a limited area with dramatic consequences for the elements, character and quality of the baseline landscape.
High	The Proposed Project would form a dominant landscape element and post development the baseline situation would be fundamentally changed, potentially creating a different landscape character. If designated, affecting the reasons for the designation.
Medium	Noticeable change to the landscape over a wide area or conspicuous change over a limited area, with some consequences for the elements, character and quality of the baseline landscape.
	The Proposed Project would form a conspicuous landscape element and post development the baseline situation may be noticeably changed. If designated, unlikely to affect the reasons for the designation.
Low	Slight change to the landscape over a wide area or noticeable change over a limited area, with limited consequences for the elements, character and quality of the baseline landscape. The development would be perceptible but post development, the baseline landscape may exhibit some differences, but would be largely unchanged. If designated, not affecting the reasons for the designation.
Negligible	Almost indiscernible change to the landscape, with very limited or no consequences for elements, character and quality of the baseline landscape. The development would be barely perceptible and post development, the baseline landscape would appear unchanged. If designated, not affecting the reasons for the designation.
No Change	The appraisal also identifies areas where no landscape change is anticipated. In these instances, 'no change' is inserted into the appropriate magnitude of effect column and the resulting effect is identified as 'no effect'.

1.10.7 For some receptors, the appraisal of magnitude in Table 1.8 may need to be adjusted (either up or down) to reflect the duration of the change and whether it is likely to be reversible.

Magnitude of Visual Effects

- 1.10.8 The nature or magnitude of visual effect that is likely to occur is determined as summarised below:
 - The size/ scale of visual effect is determined by considering the amount of change experienced by a receptor, which is influenced by a combination of the following factors as described paragraph 6.39 of GLVIA3:

'The scale of the change in the view with respect to the loss or addition of features in the view and changes in composition, including the proportion of the view occupied by the proposed development;



The degree of contrast or integration of any new features or changes in the landscape with the exiting or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture;

The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.'

• The geographical extent varies with different viewpoints and is likely to reflect the following factors as described paragraph 6.40 of GLVIA3:

'The angle of view in relation to the main activity of the receptor;

The distance of the viewpoint from the proposed development;

The extent of the area over which the changes would be visible'

- Duration and reversibility of visual effects, which in accordance with GLVIA3, is a
 separate, but linked consideration. For the purpose of this LVA the duration of effect is
 described a short term (0-5 years), medium term (5 -15 years) or long term (> 15 years).
 A development may also be considered in terms of whether the effects are reversible.
- 1.10.9 Within the context of this appraisal, professional judgements on magnitude of visual change allow a differentiation to be made between whether the change is positive or negative. Table 1.9 defines the indicative criteria used to inform judgements on the magnitude of visual effect:

Table 1.9: Indicative Criteria for Judging Magnitude of Visual Effect

Magnitude of Effect	Typical Criteria
High	Total loss, introduction or major alteration to key elements/ features/ characteristics of the baseline view which would result in a dramatic change to the character and quality of the existing view and how it is perceived.
	Typically this would be where the Proposed Project would be in very close proximity with a large proportion of the view affected, with no or minimal screening/ filtering or backgrounding of views.
	Positive judgements may include situations where the removal of major elements (such as pylons) gives rise to major alterations in the view.
	Negative judgements may include situations where the introduction of elements in a view are considered to be very uncharacteristic when set within the attributes of the receiving landscape.



Magnitude of Effect	Typical Criteria
Medium	Partial loss, introduction or alteration to one or more key elements/ features/ characteristics of the baseline view which would result in a noticeable change to the character and quality of the existing view and how it is perceived.
	The Proposed Project would form or remove a conspicuous element in the view and result in a noticeable change to the character and quality of the existing view and how it is perceived. Typically this would be where change would be clearly visible and well-defined or where a moderate proportion of the view is affected, although there may be some screening or backgrounding.
	Positive judgements may include situations where the removal of notable elements (such as pylons) gives rise to noticeable alterations in the view.
	Negative judgements may include situations where the introduction of elements in a view are not considered totally uncharacteristic when set within the attributes of the receiving landscape. These may also include situation where the Proposed Project would draw the eye and make other features appear subordinate, but would be of similar scale to other features in the view.
Low	The Proposed Project would be perceptible (in terms of additions or losses of elements from within the view) but would result in an inconspicuous change to the character and quality of the existing view and how it is perceived.
	Typically this would be where a development (either be it the addition or removal of elements) would form a perceptible part of a long distance panoramic view and/ or where a very small proportion of the view may be affected.
Negligible	Almost indiscernible change to the view, with no consequences for the character and quality of the view.
	The Proposed Project would be barely perceptible and post development, the baseline view would appear unchanged.
No Change	The appraisal also identifies areas where no change is anticipated. In these instances, 'no change' is inserted into the appropriate magnitude of effect column and the resulting effect is identified as 'none'.

1.10.10 For some receptors, the appraisal of magnitude in Table 1.9 may need to be adjusted (either up or down) to reflect the duration of the change and whether it is likely to be reversible.

