

Appendix 12.2 – Assessment Methodology

The methodology used in this assessment has been based upon the recommendations in Guidelines for Landscape and Visual Impact Assessment 3rd Edition published by The Landscape Institute and the Institute of Environmental Management & Assessment in April 2013 (GLVIA3).

Landscape Effects Assessment

Establishing the landscape baseline

Baseline studies for assessing the landscape effects included a mix of desk study and field work to identify and record the character of the landscape and the elements, features and aesthetic and perceptual factors which contribute to it.

The elements that make up the landscape in the study area were recorded, including:

- physical influences - geology, soils, landform, drainage and water bodies;
- land cover, including different types of vegetation and patterns and types of tree cover;
- the influence of human activity, such as, land use and management, the character of settlements and buildings, the pattern and type of fields and enclosure; and
- the aesthetic and perceptual aspects of the landscape, e.g.: its scale, complexity, openness, tranquillity, wildness.

The overall character of the landscape in the study area was considered, including the particular combinations of elements and aesthetic and perceptual aspects that make each distinctive, usually by identification as key characteristics of the landscape. Evidence about change in the landscape was considered, including the condition of the different landscape types and/or areas, and their constituent parts and evidence of current pressures causing change in the landscape.

Landscape value

The European Landscape Convention promotes taking account of all landscapes, including ordinary or undesignated landscapes. The relative value attached to the landscape was considered at the baseline stage to inform the judgments about the effects likely to occur, whether to areas of landscape as a whole or to individual elements, features and aesthetic or perceptual dimensions, at the community, local, national or international levels.

Landscape designation is a starting point in understanding landscape value, but value may also be attached to undesignated landscapes. Special Qualities, reasons for designation, relevant policies in management plans or designation-specific policies in development plans, were consulted in assessing the relative value of the landscape within designated areas.

Areas of landscape whose character is judged to be intact and in good condition, and where scenic quality, wildness or tranquillity, and natural or cultural heritage features make a particular contribution to the landscape, or where there are important associations, are likely to be highly valued. For “ordinary, everyday landscapes”, the

judgement was based upon the degree to which they are representative of typical character, the intactness of the landscape and the condition of its elements, scenic quality, sense of place, aesthetic and perceptual qualities.

In Wales, the evaluation of the five aspects of the landscape described in LANDMAP was used, in conjunction with the criteria in Table A12.2-1 below, where appropriate.

When determining the landscape value, the following elements were considered, in addition to consideration of values associated with designations:

- The importance of the landscape, or the perceived value of the landscape to users or consultees, as indicated by, for example, international, national or local designations;
- The importance of elements or components of the landscape in the landscape character of the area or in their contribution to the landscape setting of other areas;
- Intrinsic aesthetic characteristics, scenic quality or sense of place, including providing landscape setting to other places;
- Cultural associations in the arts or in guides to the area, or popular use of the area for recreation, where experience of the landscape is important;
- The presence and scale of detractors in the landscape and the degree to which they are susceptible to improvement or upgrading; and
- Conservation interests: The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right.

The following table indicates the criteria used to determine the Landscape value:

Table A 12.2-1 Criteria to determine landscape value

Value	Criteria
High Value	Landscapes subject to international or national designations, and non-designated landscapes where the following considerations apply: Areas of landscape whose character is judged to be intact and in good condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features make a particular contribution to the landscape; There are important cultural and artistic associations; They are representative of typical character of the area or have a character or elements that are valued for their rarity; Particular components may be identified as important contributors to the landscape character; The landscape is valued for recreational activities where experience of the landscape is important.
Medium Value	Landscapes subject to local designations, and non-designated landscapes where the following considerations apply: Areas of landscape whose character is judged to be intact with few detractors;

Value	Criteria
	Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features make a contribution to the landscape; There are cultural and artistic associations; They are representative of typical character of the area or have a character or elements that are identified for their rarity; Particular components may be identified as contributors to the landscape character; The landscape is a setting for recreational activities where experience of the landscape forms part of the experience.
Low Value	Areas of non-designated landscapes whose character is in poor condition; Scenic quality, wildness or tranquillity, and/or natural or cultural heritage features are not key characteristics of the landscape; Cultural and artistic associations are absent; They are not representative of typical character of the area, but are also not valued for rarity; Particular components may be identified as contributors to the landscape character; There is little scope for recreational activities where experience of the landscape is important.

Where the value identified falls between the three levels of high, medium and low, an intermediate level of value is assigned to provide the assessor with two further levels, e.g., "low-medium or medium-high". The basis for the value assigned to the landscape receptor is linked back to evidence from the baseline study.

The landscape baseline report aims to:

- describe, map and illustrate the character of the landscape of both the wider study area and the site and its immediate surroundings;
- identify and describe the individual elements and aesthetic and perceptual aspects of the landscape, particularly those that are key characteristics contributing to its distinctive character;
- indicate the condition of the landscape, including the condition of landscape elements or features;
- project forward drivers and trends in change and how they may affect the landscape over time, in the absence of the proposal; and
- evaluate the landscape and, where appropriate, its components, aesthetic and perceptual aspects, particularly the key characteristics.

Assessing the Landscape Effects

The baseline information about the landscape was combined with understanding of the details of the proposal to identify and describe the landscape effects. The landscape receptors were identified, that is, the components or aspects of the landscape likely to be affected, such as, overall character or key characteristics, individual elements or features, or specific aesthetic or perceptual aspects.

Interactions between the landscape receptors and the components or characteristics of the development at its different stages were considered: construction and operation, and the different types of effect: direct and indirect, secondary, cumulative, short, medium and long- term, permanent and temporary, adverse and beneficial.

Landscape effects considered included:

- change in and/or partial or complete loss of elements, features or aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
- addition of new elements or features that will influence the character and distinctiveness of the landscape; and
- combined effects of these changes on overall character.

The landscape effects were categorised as adverse, beneficial, or negligible in their consequences for the landscape, judged from the degree to which the proposal fits with existing character and the contribution the development makes to the landscape in its own right, even if in contrast to existing character.

The assessment of the landscape effects was based on assessment of the sensitivity of the landscape receptors and the magnitude of the change in the landscape arising from the proposal.

Sensitivity of the landscape receptors

The sensitivity of landscape receptors combines judgments of their susceptibility to the type of change arising from the development proposal and the value attached to the landscape.

Susceptibility to change means the ability of the landscape receptor 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.

The value attached to the landscape receptors was established in the baseline study.

The sensitivity of landscape receptors to change is categorised as high, moderate or lesser, in accordance with the criteria set out below to determine the susceptibility and value of the landscape receptor.

When determining the landscape susceptibility, the following elements were considered:

- The ability of the landscape receptor to accommodate the proposed development without undue consequences for the maintenance of the landscape character and/or the achievement of landscape planning policies and strategies;

- The degree to which the changes arising from the development would alter the overall character, quality/condition of a particular landscape type or area;
- The degree to which the changes arising from the development would alter individual elements or features or aesthetic and perceptual aspects important to the landscape character; and
- Existing landscape studies may identify the sensitivity of the landscape type or area or its characteristics to the general type of development that is proposed.

The following table indicates the criteria used to determine the landscape susceptibility:

Table A 12.2-2 Criteria for landscape susceptibility

Susceptibility	Criteria
High Susceptibility	The changes arising from the type of development would alter the overall character, quality/condition of a particular landscape type or area. The changes arising from the type of development would alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character. The type of development would compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would alter or remove elements or features or aesthetic and perceptual aspects important to the landscape character or add new elements that would reinforce the key characteristics of the landscape character.
Low Susceptibility	The changes arising from the type of development would not alter the overall character, quality/condition of a particular landscape type or area. The type of development would not compromise the achievement of landscape planning policies and strategies for the landscape. The changes arising from the type of development would not alter or remove individual elements or features or aesthetic and perceptual aspects important to, or add new elements incongruous to, the landscape character.

Where the susceptibility identified falls between high and low, an intermediate level of susceptibility is assigned, e.g., “moderate”. The basis for the scale of susceptibility assigned to the landscape receptor is linked back to evidence from the baseline study.

Table A 12.2-3 illustrates indicative criteria for assessing landscape sensitivity combining

Category	Indicative criteria
High sensitivity	A highly valued landscape e.g., of national or international importance, whose character or key characteristics are very susceptible to change;

Category	Indicative criteria
	Aspects of the landscape character are highly valued as “key characteristics” and, often identified as susceptible to change in national or local character assessments; The landscape character is highly valued as intact and in good condition and particularly vulnerable to disturbance; A highly valued landscape with no or limited potential for substitution or replacement.
Moderate sensitivity	A landscape of local importance or value, whose character or key characteristics are susceptible to change; Other characteristics of the landscape character also valued in national or local character assessments and susceptible to change; The landscape character is valued for moderate condition and not particularly vulnerable to disturbance; A moderately valued landscape with some potential for substitution or replacement.
Lesser sensitivity	No or little evidence of value or importance attached to the landscape area, its features or characteristics; Few features, characteristics or qualities susceptible to disturbance or particularly susceptible to improvement or upgrading Good potential for substitution or replacement

Where the sensitivity based on the combination of the judgement of susceptibility and value falls between high, moderate and lesser, an intermediate level of sensitivity is assigned, e.g., “lesser-moderate or moderate-high”. The basis for the sensitivity assigned to the landscape receptor is linked back to evidence from the baseline study and analysis of the nature of the potential effects on the receptor as a result of the proposed development.

Magnitude of Landscape Change

Effects on landscape receptors are assessed in terms of size or scale, the geographical extent of the area influenced, and its duration and reversibility.

Table A 12.2-4 Considerations for assessing magnitude of landscape change

Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of Large, Medium, Small, Negligible or None, based upon: The extent of existing landscape elements that will be lost (or added), the proportion of the total extent that this represents and the contribution of that element to the character of the landscape; The degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or additions of new ones;

Consideration	Indicative criteria
	Whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.
Geographical area over which the landscape would be changed	Categorised on a scale of: Small: at site level, within the development site itself or at the level of the immediate setting of the site; Medium: at the scale of the landscape type or character area within which the proposal lies; Large: where the development influences several landscape types or character areas.
The duration of the changes	The durations of changes due to the development are categorised as: Short term: zero to five years; Medium term: five to ten years; Long term: ten to twenty-five years; Permanent: more than twenty-five.
Reversibility	The prospect and the practicality of the effect being reversed within twenty-five years.

Indicative criteria used to determine the magnitude of change is as follows:

Table A 12.2-5 Indicative criteria for assessing magnitude of landscape change

Magnitude of Change	Landscape Change
Great change	Major size or scale of change, affecting the landscape type or character of the area within which the proposal lies or extending over the wider area; likely to be longer term or permanently, with low prospect of reversibility
Medium change	Intermediate size or scale of change, affecting part of the landscape type or character of the area within which the proposal lies, or larger scale of change at the level of the site or immediate context; likely to continue into the medium term, with good prospect of reversibility
Small change	A minor proportion of the extent of the character type or area is affected or smaller scale of change over a larger extent; the changes occur at the level of the site or immediate context, and likely to be short term and reversible.
Negligible/no change	No apparent change to landscape characteristics

While GLVIA3 includes the duration of the change in the consideration of the magnitude of change, in some cases a major size or scale of change of shorter duration may be considered a "great change".

Significance of landscape effects

Final conclusions about the degree of effect, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes combined, based upon the following indicative considerations and criteria:

Table A 12.2-6 Indicative criteria for assessing landscape effects

Landscape effect	Indicative criteria
Major	Highly sensitive landscape completely degraded or greatly changed, with little or no scope for mitigation; Great improvement, sufficient to upgrade overall landscape character. Irreversible adverse or beneficial effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes.
Moderate	Medium change to moderately sensitive landscape or its character; lesser change to higher sensitivity landscape or greater change to less sensitive landscape.
Minor	Small or limited adverse change to the existing landscape or its character; greater change to less sensitive landscape;

Landscape effect	Indicative criteria
	Considerable scope for mitigation; Small improvement to the existing landscape. Reversible adverse or beneficial effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value.
Negligible	No perceptible change to the existing landscape or its character; The change is difficult to discern.

Intermediate conditions may be described, such as Moderate-Major, where the criteria for Moderate may be exceeded but not qualify as Major. Where magnitude of change is "None", the effect would correspondingly be "None".

Effects may be adverse or beneficial. In some instances, the effect may be offset by other considerations, for example, through the mitigation or landscape proposals, and the resulting effect may be neither beneficial nor adverse.

The criteria for significance of landscape effects are based upon the following considerations:

- Major loss or irreversible negative effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance.
- Reversible negative effects of short duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value, are likely to be of least significance and may be judged not significant.
- Where assessments of significance place landscape effects between these extremes, judgments are made about whether they are significant.
- Where landscape effects are judged to be significant and adverse, proposals for preventing/avoiding, reducing or offsetting or compensating for them are set out (referred to as mitigation).

The significant landscape effects remaining after mitigation are summarised as the final step in the process.

Visual Effects Assessment

Establishing the visual baseline

Baseline studies for visual effects establish:

- the area in which the development may be visible;
- the different groups of people who may experience views of the development;
- the location where they will be affected;

- the nature of the views at those points; and
- the different groups of people who may be affected by the changes in views or visual amenity.

The potential areas where the site and development proposal are likely to be visible were mapped. Landscape components affecting visibility, like buildings, walls, fences, trees, hedgerows, woodland and banks, were identified through field surveys and mapped where relevant.

The people within the area who may be affected by the changes in views and visual amenity – the visual receptors – were identified, for example:

- people living in the area;
- people passing through on roads and the local lanes;
- people visiting promoted landscapes or attractions; and
- people engaged in recreation of different types, including users of public rights of way, bridleways and access land.

Where relevant, views that form part of the experience and enjoyment of the landscape were noted, for example, from promoted paths, tourist or scenic routes and associated viewpoints.

The proposed viewpoints selected were discussed with the local authority, and informed by the visual assessment, field surveys, and by desk-based research on various issues, for example, access and recreation, valued landscapes, tourist attractions and destinations, popular vantage points, and relative distribution of population. Viewpoints were selected to represent the experience of different types of visual receptors.

The details of viewpoint locations were mapped and catalogued, sufficient to allow someone else to return to the location and record the same view. Photography was carried out in accordance with the Landscape Institute, Advice Note 06/19 Visual Representation of Development Proposals (2019).

The baseline report aims to describe, map and illustrate:

- the type of people (visual receptors) likely to be affected, making clear the activities they are likely to be involved in when enjoying the view;
- details of the viewpoints and of the visual receptors likely to be affected at each;
- the nature, composition and characteristics of the existing view, noting any particular horizontal or vertical emphasis, and any key foci; existing views have been illustrated in annotated photographs identifying important components of the view.
- elements, such as landform, buildings or vegetation, which may interrupt, filter or otherwise influence the views;
- whether or how the view may be affected by seasonal or weather variation.

Assessing the Visual Effects

Predicting and describing visual effects

The baseline information about the visual receptors was combined with understanding of the details of the proposal to identify and describe the visual effects, considering:

- changes in views and visual amenity arising from elements of the development;
- the distance of the viewpoint from the development and whether the viewer would focus on the development due to its scale and proximity or whether the development would be only a small or minor element in a panoramic view;
- whether the view is stationary or transient or one of a sequence of views;
- the nature of the changes: changes in the skyline, creation of a new visual focus in the view, introduction of new elements, changes in visual simplicity or complexity, alteration of visual scale or the degree of visual enclosure; and
- seasonal differences in effects, arising from the varying degree of screening and/or filtering of views by vegetation in summer and winter.

Categorising the visual effects as adverse or beneficial (or neutral) in their consequences for views and visual amenity was based on judgments about whether the changes affect the quality of the visual experience, and the nature of the existing views and the nature of the changes to the views.

The visual effects were assessed, based on assessment of the nature of the visual receptors and their sensitivity, and the nature of the effect on views and visual amenity, that is, the magnitude of visual change.

Sensitivity of the visual receptors

The people or groups of people likely to be affected at a specific viewpoint – the visual receptors – are assessed in terms of their susceptibility to change in views and visual amenity and the value attached to particular view locations and views.

The susceptibility of visual receptors to changes in views and visual amenity 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 is focused on the views or the visual amenity they experience at particular locations. The context of the location also contributes to susceptibility, for example, people viewing from residential properties or from a valued landscape are likely to be more susceptible to change than people viewing from an industrial context. Table A12.2-7 illustrates indicative criteria used to determine visual receptor susceptibility:

Table A 12.2-7 Indicative criteria to determine visual receptor susceptibility

Susceptibility	Criteria
High Susceptibility	Residents at home with direct, open, uninterrupted views. People engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views.

Susceptibility	Criteria
	Visitors to designated landscapes, heritage assets, or other attractions, where views of the surroundings are an important contributor to the experience. Communities where views contribute to the landscape setting enjoyed by residents in the area.
Moderate Susceptibility	Residents at home with oblique, filtered, interrupted views. People engaged in outdoor sports and recreation, whose attention or interest is likely to be focused on the activity/sport rather than the view, for example, users of down hill mountain bike trails. Visitors to the landscape where the surroundings contribute to the experience.
Low Susceptibility	People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape. People at their place of work whose attention may be focused on their work or activity not on their surroundings and where the setting is not important to the quality of working life. Travellers on road, rail or other transport routes, except along recognised scenic routes, where awareness of views is likely to be high.

Where the susceptibility identified falls between the three levels of high, moderate and low, an intermediate level of susceptibility is assigned to provide the assessor with two further levels, e.g., "low-moderate or moderate-high". The basis for the scale of susceptibility assigned to the visual receptor is linked back to evidence from the baseline study and analysis of the nature of the potential effects on the receptor as a result of the proposed development.

Judgments were made about the value attached to the views identified, taking account of recognition, for example, in relation to heritage assets, or through planning designations, appearance in guidebooks or on tourist maps, promotion of particular locations or provision of facilities provided for their enjoyment, such as parking places, sign boards and interpretive material, or references to them in literature or art.

The sensitivity of visual receptors to change is categorised as high, moderate or lesser, in accordance with the criteria set out below.

Table A 12.2-8 Indicative criteria for visual sensitivity

Category	Indicative criteria
High sensitivity	Viewers in residential or community properties. Views experienced by many viewers. Daily, prolonged or sustained views available over a long period, or where the view of the landscape is an important attractant. A view from a landscape, recreation facility or route valued nationally or internationally for its visual amenity.

Category	Indicative criteria
Moderate sensitivity	Viewers in residential or community properties with partial or largely screened views of the site. Frequent open views available. Viewers are pursuing activities such as sports or outdoor work, where the landscape is not the principal reason for being there or the focus of attention is only partly on the view. A view from other valued landscapes, or a regionally important recreation facility or route.
Lesser sensitivity	A view of low importance or value, or where the viewer's attention is not focused their surroundings. A view from a landscape of moderate or less importance, or a locally important recreation facility. Occasional open views or glimpsed views available; passing views available to travellers in vehicles. A view available to few viewers.

Where the sensitivity is based on the combination of the judgement of susceptibility and value falls between the three levels of high, moderate and lesser, an intermediate level of sensitivity is assigned to provide the assessor with two further levels, e.g., "lesser-moderate or moderate-high". The basis for the sensitivity assigned to the visual receptor is linked back to evidence from the baseline study and analysis of the nature of the potential effects on the receptor as a result of the proposed development.

Magnitude of visual change

The visual effects identified are evaluated in terms of size or scale, the geographical extent of the area influenced, duration and reversibility.

Table A 12.2-9 Considerations for assessing magnitude of visual change

Consideration	Indicative criteria
Size or scale of change	Categorised on a scale of major, moderate, minor or none, based upon: The degree of the loss or addition of features in the view; The extent of changes in the composition of the view, including the proportion of the view occupied by the proposed development; The degree of contrast or integration of the changes with the existing or remaining landscape elements and characteristics; The nature of the view of the proposed development, whether full, partial or glimpsed, or the relative amount of time over which it will be experienced.

Consideration	Indicative criteria
Geographical area over which the changes would be experienced	The geographic extent reflects: The extent of the area over which the changes would be visible; The angle of view in relation to the main activity of the receptor; The distance of the viewpoint from the proposed development.
The duration of the changes	Categorised as: Short term: zero to five years; Medium term: five to ten years; Long term: ten to twenty-five years Permanent: more than twenty-five.
Reversibility	The prospect and the practicality of the effect being reversed within twenty-five years, or within a generation

Indicative criteria used to determine the magnitude of change is as follows:

Table A 12.2-10 Indicative criteria for assessing magnitude of visual change

Magnitude of Change	Visual Change
Great change	Major size or scale of change, affecting a large proportion of the angle of the view, or affecting views from a wide area; continuing into the longer term or permanently, with low prospect of reversibility.
Medium change	Intermediate size or scale of change, affecting part of the angle of the view, or affecting some views from the wider area, or larger scale of change in views from within the immediate context of the site; continuing into the medium term, with good prospect of reversibility.
Small change	A minor proportion of the angle of view is affected or the contribution of the changed elements or characteristics to the composition of the view is not important; the changes are viewed from longer distances, are short term and reversible.
Negligible/no change	Barely perceptible change or the change is difficult to discern; No change in the view or the changes due to the development are out of view.

Judging the overall significance of visual effects

Final conclusions about the degree of visual effects, whether adverse or beneficial, relate the separate judgements about sensitivity of the receptors and magnitude of the changes, as illustrated in the indicative criteria shown in Table A 12.2-11:

Table A 12.2-11 Indicative criteria for assessing visual effects

Visual effect	Indicative criteria
Major	Great change or visual intrusion experienced by highly sensitive viewers or from highly sensitive public viewpoints; The proposal would cause a great deterioration in the existing view available to highly sensitive viewers; Great improvement in the view, sufficient to upgrade overall visual amenity. Large scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view, especially where affecting people who are particularly sensitive to changes in views and visual amenity or people at recognised and important viewpoints or from recognised scenic routes.
Moderate	Medium change or visual intrusion experienced by moderately sensitive viewers; Smaller change to higher sensitivity viewers or greater change to less sensitive viewers.
Minor	Small or localised visual intrusion in the existing view, especially for less sensitive viewers. Small or localised reduction in visual intrusion, or improvement in the view. Reversible short-term changes, in views available to people for whom the view of the landscape is not the principle focus of interest.
Negligible	Negligible change in the view or the change is difficult to discern even for a highly sensitive viewer.

In addition to these criteria, in some instances the effect may be discernible or greater, but offset by other considerations, for example, through the mitigation or landscape proposals for the development, and the resulting effect is neither beneficial nor adverse.

The following factors inform the judgment about the significance of visual effects:

- Major effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant.
- Major effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant.
- Large scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.
- As for landscape effects, where visual effects are judged to be significant and adverse, proposals for preventing/avoiding, reducing or offsetting or compensating for them are set out (referred to as mitigation).

The significant visual effects remaining after mitigation are summarised as the final step in the process.

