## 11.2 Landscape and Visual Impact Assessment Methodology

# 1 LVIA Assessment Methodology and Significance Criteria

## 1.1 Purpose and Structure

1.1.1 This appendix has been produced to support **Chapter 11: Landscape and Visual**. It describes the methods used to determine the baseline conditions, the sensitivity of the receptors and the predicted magnitude of change and sets out the approach to judging the level and significance of likely landscape and visual effects.

1.1.2 Landscape assessment deals with the assessment of effects on the landscape as a resource (landscape receptors), whilst assessment of visual effects considers the changes to specific views and on the general visual amenity experienced by people (visual receptors).

1.1.3 Landscape and visual effects are inter-related. The visual effect can be assessed independently of the effect on the landscape in which it is seen. However, the effect on the landscape cannot be assessed without considering the visual effect of the proposed development.

1.1.4 The assessment of effects is undertaken as part of the iterative design process and informs changes to both the proposed development and the evolution of mitigation measures to help avoid or reduce adverse effects wherever possible.

# 2 Guidance Specific to Landscape and Visual Assessment

2.1.1 The approach and methodology used in the preparation of this landscape and visual impact assessment (LVIA) is based on guidance provided in the Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3)1.

2.1.2 GLVIA3 is the established best practice guidance for landscape and visual impact assessment.

2.1.3 The assessment of landscape effects is described by the Landscape Institute in GLVIA3 as follows:

'An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner.' GLVIA3 Page 70, para. 5.1 and 5.2.

2.1.4 The assessment of 'visual effects', as defined in paragraph 2.21 of the GLVIA3, means impacts or changes to '*specific views and the general visual amenity experienced by people'*.

2.1.5 In accordance with GLVIA3, the assessment focuses on public views experienced by those groups of people who are likely to be most sensitive to change due to the proposed development. These include:

- Local communities (where views contribute to the landscape setting enjoyed by residents in the area);
- People using recreational routes including public rights of way, scenic routes and cycle routes; and
- People visiting recreational features and attractions (some of which may have historic or cultural heritage importance).

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

# 3 Approach to the Landscape and Visual Assessment

3.1.1 The landscape and visual assessment follows a standard approach:

- Identify a study area, which includes the site of the proposed development (the site) and the wider landscape around it which the proposed development may influence in a significant manner (the wider landscape). The identification of the study area may be informed by production of a Zone of Theoretical Visibility (ZTV) plan, to show the areas from where the proposed development will theoretically be visible;

- Establish baseline conditions against which the changes resulting from the proposed development are assessed. This includes consideration of the future baseline, which is the way the site is likely to evolve due to natural changes irrespective of the proposed development (albeit this will not form the basis of the assessment). It also includes an identification of the landscape and visual receptors, and a judgement on the value of the landscape and the view. The baseline is established through desk study and field work;

- Determine the sensitivity of the landscape and visual receptors to likely change arising from the proposed development through consideration of the value of the landscape or the view and the susceptibility of landscape and visual receptors to change arising from the proposed development;

- Assess each identified effect on landscape and visual receptors in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility. This assessment informs judgements regarding the magnitude of change;

- Determine the overall significance of landscape and visual effects by adopting an 'overall profile' approach, whereby all the judgements against the individual criteria are arranged in a table to provide an overall profile of each identified effect. The distribution of assessments for each criterion is reviewed in order to make an informed professional judgment of the overall significance of each effect; and

- Categorise the nature of each landscape or visual effect as beneficial, adverse or neutral. GLVIA3 sets out the criteria which should be used in reaching a professional judgement on the nature of the effects.

3.1.2 For each landscape and visual receptor, a narrative description, which explains the rationale for the conclusion reached regarding the significance of the effects is provided in the main text. The significance of the effect is assessed as **major**, **moderate**, **minor** or **negligible**.

# 4 Baseline Data Gathering

4.1.1 The landscape and visual baseline descriptions form the basis for the identification and description of the landscape and visual changes that may result from the proposed development.

4.1.2 Information is gathered from a wide range of sources including:

- OS maps and aerial photography;
- Local Development Plans and planning policy;
- Feedback from Council officers;
- Existing landscape character assessments at a national, regional and local level;
- Management plans; and
- Site visits.

4.1.3 Where existing information is used, this is verified on site to ensure that the information is accurate and appropriate for the purposes of the landscape and visual assessment.

## Landscape Baseline

4.1.4 The landscape baseline describes the landscape within and surrounding the site – 'its constituent elements and features, 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, para. 3.15.

4.1.5 The baseline describes the landscape as it appears now, together with any changes, which would arise without the proposed development. It typically includes a description of its overall character as well as its component landscape elements and features.

4.1.6 Landscape receptors are identified and may include, but are not restricted to:

- Landscape character areas;
- Designated landscapes; and
- Individual elements or features.

4.1.7 The baseline includes a description of the value of the site and the wider landscape, which is unrelated to the nature of the proposed development. Technical Guidance Note (TGN) 02-21[2] published by the Landscape Institute defines 'landscape value' as '*the relative value or importance attached to different landscapes by society on account of their landscape qualities'*. TGN 02-21 Page 3.

4.1.8 An area of landscape may be valued for many reasons - for example its condition, scenic beauty, tranquillity or remoteness, its recreation opportunities, nature conservation or its historic and cultural associations. Development will not necessarily be incompatible with the valued qualities of a landscape as this will depend on the nature of the proposal and the characteristics of the landscape.

2 Landscape Institute (2021), Technical Guidance Note 02_21 Assessing Landscape Value Outside of National Designations

4.1.9 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 describes value as *'…. the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons. 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 and individual elements of the landscape – such as trees, buildings or hedgerows – may also have value.'* GLVA3 Page 80, para. 5.19

4.1.10 **Table 1** explains what is meant by landscapes of international/ national, regional/ local, community and limited importance.

**Table 1: Typical Importance of Landscape Receptors**

| Category | Description |
|---|---|
| **International/ National** | Landscapes which are internationally or nationally designated for their landscape value including National Parks, Areas of Outstanding Natural Beauty (AONB), National Scenic Areas (NSA). |
| **Regional/ Local** | Regionally or locally designated landscapes including Special Landscape Areas (SLA). |
| **Community Importance** | Everyday landscapes, which may be valued by the local community but have little or no wider recognition of their value. |
| **Limited** | Despoiled or degraded landscape with little or no evidence of being valued by a community. |

4.1.11 The value of a designated landscape is often explained in the citation, but where this isn't available, value can be assessed through the application of a criteria-based comparative landscape approach supported by published documentation such as tourist leaflets, art and literature. The value of locally valued landscapes and views can also be informed by consultation feedback from people with local knowledge. This is in line with the latest guidance from Natural England (2019)3 and the European Landscape Convention (2006)4, which promote an 'all-landscapes approach', founded on the recognition of value in all landscapes.

4.1.12 Criteria which are typically taken into consideration when making a judgment on the comparative value of a landscape include:

- Landscape character and quality;
- Importance in terms of designations;
- Scenic quality;
- Conservation interests;
- Recreational value;

3 Natural England (2019), An approach to landscape sensitivity assessment – to inform spatial planning and land management

4 The UK is a signatory to the European Landscape Convention (signed 2006), a convention of the Council of Europe. The status of this convention has not been affected by Brexit.

- Perceptual aspects; and
- Associations.

4.1.13 Indicators are used to categorise the value to the landscape as **very high**, **high**, **medium** or **low** as shown in **Table 2**.

**Table 2: Indicative Criteria for Assessing the Relative Value of the Landscape**

| Category | Indicators |
|---|---|
| **Very High** | Landscape of very high scenic quality, with all or most of the scenic/ special qualities evident, including its flora, fauna, geological and geographical elements and features.<br>Typically, internationally or nationally designated e.g., National Park or National Scenic Area.<br>Very good condition/ very well-managed and intact.<br>Historic interest of designated national or international importance, which contributes significantly to landscape character.<br>Mainly characterised by natural components that are rare and distinctive.<br>Very high recreational value which contributes significantly to recreational/ visitor experience.<br>Rich and valued cultural associations.<br>Unique sense of place.<br>No detracting features. |
| **High** | Landscape of high scenic quality, with considerable evidence of the scenic/ special qualities, including its flora, fauna, geological and geographical elements and features.<br>Typically designated at a regional level e.g., SLA.<br>Good condition/ well-managed and largely intact.<br>Many natural components.<br>Historic interest which contributes to landscape character.<br>Recreational value which contributes to recreational/ visitor experience.<br>Valued cultural associations.<br>Strong sense of place.<br>Occasional detracting features. |
| Medium | A rural landscape with some evidence of scenic/ special qualities, albeit with a degree of erosion due to the presence of infrastructure and/ or inappropriate built development.<br>May be valued by the local community but with little or no wider recognition of its value.<br>Average condition with some intactness but scope to improve management for land use.<br>Limited historic interest. |

| Table 2: Indicative Criteria for Assessing the Relative Value of the Landscape | |
|---|---|
| **Category** | **Indicators** |
| | Some natural components.<br>Limited recreational value and few visitors.<br>No or very few recorded cultural associations.<br>Some features worthy of conservation.<br>Some prominent detracting features. |
| Low | Landscape with greater presence of infrastructure and and/ or inappropriate built development which impacts on the scenic/ special qualities of the landscape or one of low scenic quality or with many of the scenic/ special qualities eroded.<br>Little or no evidence of being valued by a community.<br>Lack of management has resulted in degradation and poor condition.<br>Limited to no historic interest.<br>Limited to no recreational value.<br>No recorded cultural associations.<br>Frequent dominant detracting features.<br>Disturbed or derelict land requiring treatment. |

## Visual Baseline

4.1.14 The visual baseline establishes the general area from which the proposed development 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 the views and the visual amenity at those points'. GLVIA3 Page 32, para. 3.15.

4.1.15 The assessment is informed by site surveys from a series of publicly accessible locations or viewpoints, the selection of which can be informed by the preparation of a viewshed plan or ZTV, together with a study of Google Earth Pro. Viewpoints are agreed in advance with the appropriate Planning Authority and can be representative, specific or illustrative:

- 'Representative viewpoints, selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example, certain points may be chosen to represent the views of users of particular public footpaths and bridleways;
- Specific viewpoints, chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations; and
- Illustrative viewpoints, chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations.' GLVIA3 Page 109, para. 6.19.

4.1.16 It should be emphasised that it is the people who would be experiencing the view from the viewpoint that are the receptor, not the viewpoint itself. The location affords the view to the

recipient, and whilst the location cannot change, the opinion of the viewer can vary as people will generally have different responses to a change in view depending on their location, the activity they are engaged in and other factors, including the weather and the time of day/ year.

4.1.17 The visual baseline provides information on the:

- Type, relative numbers and susceptibility to changes in the views of people (visual receptors) likely to be affected;
- Location, nature and characteristics of the existing views, including elements and features which influence the view; and
- Value attached to view.

4.1.18 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…' GLIVA3 Page114, para. 6.37.*

4.1.19 It also depends on the character and quality of the particular view experienced, which is identified for each viewpoint through desktop and field survey and described in the baseline description for each viewpoint.

4.1.20 Viewpoint analysis involves visiting and taking a photographic record at each viewpoint location. To ensure optimal visibility, viewpoint photographs are taken, wherever possible, in fine weather.

4.1.21 Indicators are used to categorise the value of the view as **very high**, **high**, **medium** or **low** as shown in **Table 3**.

**Table 3: Indicative Criteria for Assessing the Value of the View**

| Category | Indicators |
|---|---|
| **Very High** | Iconic view of national or international importance, or a view which is associated with a nationally or internationally designated landscape or heritage asset, the cultural associations of which are widely recognised in art, literature or other media. |
| **High** | Highly scenic view associated with a landscape or heritage asset of national or regional importance, the cultural associations of which are regularly recognised in art, literature or other media.<br>The value of such views may have been identified as part of the consultation process and through site visits. Elements or features within the view are likely to be in good condition, with few detracting features. |
| **Medium** | Although the view may be valuable to the local community, the location has no formal planning status, is in an area of ordinary landscape value, or reasonably good landscape value but with some detracting elements or features.<br>Locally valued views may have been identified as part of the consultation process and through site visits<br>People are unlikely to visit the viewpoint to experience the view. |

| Table 3: Indicative Criteria for Assessing the Value of the View | |
|---|---|
| **Category** | **Indicators** |
| **Low** | View is within an area of very low landscape quality (e.g., industrial estate/ busy main road) that has very few positive characteristics and many or dominant detracting features. |

# 5 Establishing Landscape and Visual Sensitivity

## Establishing Landscape Sensitivity

5.1.1 The first step in assessing the significance of the landscape effects is to determine the sensitivity of landscape receptors (on the site and in the wider landscape) to the proposed development.

5.1.2 In accordance with GLVIA Page 158, Glossary, landscape sensitivity is assessed in terms of the value of the landscape receptor and its susceptibility to change arising from the proposed development. As discussed in the previous section, the value attached to the landscape receptors is determined as part of the baseline and is unrelated to the nature of a development proposed.

5.1.3 The susceptibility of the landscape to change is the ability of the 'landscape receptor (whether it be the overall character or quality/ condition of a particular landscape 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, para. 5.40.

5.1.4 Susceptibility varies depending on the character of the landscape and the nature of the development being proposed. It this therefore tailored to the particular project. Determining the susceptibility of the landscape receptor involves:

- Identifying the key components of the landscape that are likely to be affected by the proposed development; and
- Identifying the various aspects of the proposed development, at all stages in its lifecycle, that are likely to influence those key components.

5.1.5 The susceptibility of designated landscapes is influenced by the nature of the special qualities and purposes of designation and/ or the valued elements, qualities or characteristics, indicating the degree to which these may be unduly affected by the proposed development.

5.1.6 Indicators are used to categorise the susceptibility of the landscape within the site and the wider area as **very high**, **high**, **medium** or **low** as shown in **Table 4**.

**Table 4: Indicative Criteria for Assessing Landscape Receptor Susceptibility**

| Category | Indicators |
|---|---|
| **Very High** | The landscape receptor is very highly susceptible in that it is unable to accommodate the proposed development without undue negative consequences for the baseline situation. Attributes that make up the character of the landscape offer almost no opportunities for accommodating the change without its key characteristics and landscape elements being fundamentally altered or permanently lost, leading to a different landscape character. The proposed development does not accord with planning policies and strategies and also conflicts with the special qualities or purpose of any designation. |
| **High** | The landscape receptor is highly susceptible in that it is more or less unable to accommodate the proposed development without undue negative consequences for the baseline situation. Attributes that make up the character of the landscape offer limited opportunities for accommodating the change without its key characteristics being fundamentally altered, leading to a different landscape character. The proposed development does not accord with |

| Table 4: Indicative Criteria for Assessing Landscape Receptor Susceptibility | |
|---|---|
| **Category** | **Indicators** |
| | planning policies and strategies and conflicts with the special qualities or purpose of any designation. |
| **Medium** | The landscape receptor has some ability to accommodate the proposed development without undue negative consequences for the baseline situation. Attributes that make up the character of the landscape offer some opportunities for accommodating the change without key characteristics being fundamentally altered. There would be some consequences for the achievement of landscape planning policies and strategies. |
| **Low** | The landscape receptor is more able to accommodate the proposed development without undue negative consequences for the baseline situation. Attributes that make up the character of the landscape are more resilient to being changed by the type of development proposed. Only individual elements and/ or features, or a particular aesthetic and perceptual aspect may be affected. The proposed development accords with planning policies and strategies and does not conflict with the special qualities or purpose of any designation. |

## Establishing Visual Sensitivity

5.1.7 The first step in assessing the significance of visual effects is to determine the sensitivity of the visual receptors to the proposed development.

5.1.8 Visual receptors are people and their sensitivity 'is 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, para. 6.31.

5.1.9 As discussed in the previous section, the value attached to a particular view is identified as part of the baseline, while the susceptibility of the visual receptor to the proposed change is a function of:

- *'the occupation or activity of people experiencing the view at a particular location; and*
- *the extent to which their attention or interest may therefore be focused on the view and the visual amenity they experience at particular locations'. GLVIA3 Page 113, para. 6.33.*

5.1.10 Those visual receptors most likely to be more susceptible to change include:

- Residents at home;
- Communities where the view contributes to the landscape setting;
- People engaged in outdoor recreation whose interest is likely to be focused on the landscape; and
- Visitors to identified viewing places or heritage assets where the surrounding landscape makes an important contribution to the experience.

5.1.11 The susceptibility of visual receptors is always determined based on site specific conditions, e.g., a driver within an urban area is typically considered of low susceptibility, but if the road is part of a scenic route through the countryside, the driver's susceptibility is increased.

5.1.12 Views will often be experienced by different receptor types at the same location. For instance, changes to a view, which is on a footpath adjacent to a road and residential properties, will be experienced differently by residents and users of the footpath and road. Each type of receptor will potentially have a different susceptibility to change. In such locations, the overall sensitivity of the receptor is assessed as those with the highest susceptibility, which in this example, is the residential receptor as their attention is more likely to be focused on the view.

5.1.13 Indicators are used to categorise the susceptibility of the landscape within the site and the wider area as **very high**, **high**, **medium** or **low** as shown in **Table 5**.

5.1.14 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.' GLVIA3 Page 114, para. 6.35.

**Table 5: Indicators of Visual Receptor Susceptibility**

| Category | Indicators |
|---|---|
| **Very High** | People visiting locations purely to experience the view and where there is typically a prolonged viewing opportunity. Examples include:<br>▪ Communities where the views are widely recognised as being of the outstanding scenic quality (typically within or to a nationally designated landscape);<br>▪ People engaged in outdoor recreation where the views are of the highest scenic quality (including views from nationally designated or regionally promoted trails and panoramic viewpoints – often marked on OS plans and providing interpretation facilities); and<br>▪ Visitors to heritage assets or other tourist and visitor attractions where the views are of the highest scenic quality and make an important contribution to the experience. |
| **High** | People whose attention or interest is likely to be focused on the view and where there is typically a prolonged viewing opportunity. Examples include:<br>▪ Communities where views contribute to the landscape setting enjoyed by residents;<br>▪ People engaged in outdoor recreation (including public rights of way) whose interest and enjoyment is likely to be focused on the landscape;<br>▪ Visitors to heritage assets where views of the surrounding landscape make an important contribution to the experience; and<br>▪ People travelling on recognised scenic and tourist routes, where attention is focused on the quality of the surrounding landscape. |
| **Medium** | People whose attention or interest may partially be on the appreciation of their surroundings. Examples include:<br>▪ People travelling on local roads who may have some interest in their surroundings, but where the view is not exceptional and is experienced transiently;<br>▪ People at their place of work whose attention is on their surroundings and where the setting is important to their quality of working life; and |

| Table 5: Indicators of Visual Receptor Susceptibility | |
|---|---|
| **Category** | **Indicators** |
| | ▪ People taking part in outdoor sport or recreation which involves some appreciation of the view. |
| Low | People whose attention or focus is on other activities, not on their surroundings. Examples include:<br>▪ travellers on major road or rail routes, which are not scenic or tourist routes and where the view is typically experienced at speed;<br>▪ people at their place of work whose attention is not on their surroundings and where setting is not important to their quality of working life; and<br>▪ people taking part in outdoor sport or recreation which involves little or no appreciation of the view. |

# 6 Predicting the Magnitude of Change

## Magnitude of Landscape Change

6.1.1 GLVIA3 sets out the criteria which should be used in reaching a professional judgement on the magnitude of landscape change. These include but are not necessarily restricted to:

- *'the degree to which the proposal fits with the existing landscape character; and*
- *the contribution to the landscape that the development may make in its own right, even if it is in contrast to the existing character'. GLVIA3 Page 88, para. 5.37.*

6.1.2 The direction of change for each landscape effect is categorised as **beneficial**, **adverse** or **neutral** as follows:

- Beneficial change - the development, or part of it, would appear in keeping with existing landscape character and/ or would make a positive visual and/ or physical contribution to key landscape characteristics. Removal of uncharacteristic or unsightly features would also be a beneficial change;
- Adverse change - the development, or part of it, would be perceived as an uncharacteristic or intrusive component in the context of existing landscape character and would have a negative visual and/ or physical effect on key landscape characteristics; and
- Neutral change - this situation may arise if a characteristic element or feature of the landscape or view is replaced with a different element or feature of similar quality. Therefore, it is possible for there to be a major magnitude of change but with a neutral effect overall as the new element or feature, although different in character and appearance, is of equal quality to that currently experienced in the landscape.

6.1.3 Each landscape effect is also assessed in terms of its 'size or scale, the geographical extent of the area influenced, and its duration and reversibility'. GLVIA3 Page 90, para. 5.48.

### Size and Scale of Effect

6.1.4 For landscape elements/ features this depends on the extent of existing landscape elements/ features that would be lost or changed, the proportion of the total extent that this represents, and the contribution of that element to the character of the landscape.

6.1.5 In terms of landscape character, this reflects the degree to which the character of the landscape would change as a result of removal or addition of landscape components, and how such change would affect its key characteristics. The size/ scale of effect is described as **high**, **medium** or **low**.

### Geographical Extent of Effect

6.1.6 The geographical extent over which the landscape effect would arise is described as **large** (widespread >2.5km), **medium** (more immediate surroundings <2.5km) or **small** (site and immediate setting).

### Duration

6.1.7 Paragraph 5.51 of GLVIA3 states that duration *'can usually be simply judged on a scale such as short term, medium term or long term*'. For the purposes of the assessment, duration is typically determined in relation to the phases of the proposed development, which for this project are as follows:

- **Short-term effects** are those that occur during construction, and may extend into the early part of the operational phase, e.g., construction activities, generally lasting less than two years;
- **Medium-term effects** are those that occur during the early stages of the operational phase, generally lasting two years to five years; and
- **Long-term effects** (>5 years) are those which occur throughout the operational phase.

**Reversibility of Effect**

6.1.8 In accordance with the principles contained within GLVIA3, reversibility is reported as **reversible**, **potentially reversible** or **irreversible** (i.e., permanent change), and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e., at the end of construction or at the end of the operational lifespan of the proposed development).

6.1.9 **Table 6** lists the factors which indicate higher or lower indicators of magnitude in terms of the above.

**Table 6: Indicative Criteria for Assessing Likely Magnitude of Landscape Change**

| Category | Indicators |
|---|---|
| **Higher** | Large-scale removal or addition of landscape features or removal of localised but unusual or distinctive landscape features and/ or addition of new conspicuous features and elements, which may alter the character of the landscape. Physical loss of landscape features that are not replaceable or are replaceable only in the long term. The duration of this effect may be permanent and irreversible. |
|  | Medium-scale removal or addition of landscape features and/ or addition of new noticeable features and elements, which would be clearly visible but would not alter the overall character of the landscape. Physical loss of landscape features that are replaceable in the medium term. The duration of this effect may be semi-permanent but reversible. |
| | Small-scale removal or addition of landscape features and/ or addition of new discrete features and elements which would be perceptible but would not alter the overall character of the landscape. The duration of this effect may be temporary and reversible. |
| **Lower** | Very small-scale removal or addition of landscape features and the proposed development would be barely perceptible in landscape character terms. |

## Magnitude of Visual Change

6.1.10 GLVIA3 (para. 6.27) sets out the criteria which should be considered in reaching a professional judgement on the magnitude of visual change. These include but are not necessarily restricted to:

- The nature of the view (full, partial or glimpsed);
- The proportion of the development visible (full, most, small, part or none);
- The distance of the viewpoint from the proposed development;
- Whether the view is stationary or transient;

- The nature of the change; and
- Seasonal differences.

6.1.11 The direction of change for each visual effect is categorised as **beneficial**, **adverse** or **neutral** as follows:

- Beneficial change - the development, or part of it, would be perceived as a positive addition in the context of the existing view;
- Adverse change - the development, or part of it, would be perceived as an intrusive or detracting component in the context of the existing view; and
- Neutral - this situation may arise if a characteristic element or feature of the landscape or view is replaced with a different element or feature of similar quality. Therefore, it is possible for there to be a major magnitude of change but with a neutral effect overall as the new element or feature, although different in character and appearance, is of equal quality to that currently experienced.

6.1.12 As for landscape effects, each of the visual effects is also assessed in terms of '*its size or scale, the geographical extent of the area influenced, and its duration and reversibility*'. GLVIA3 Page 115, para. 6.38.

**Size and Scale of Effect**

6.1.13 The size and scale of a visual change is assessed as **high**, **medium** or **low** depending on:

- The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed development and the distance of the viewpoint from the proposed development;
- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
- The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpsed.

**Geographic Extent of Effect**

6.1.14 The geographical extent over which the visual effect arising from the proposed development would arise, is described as **extensive** (will be seen from multiple locations across a wide area, or is seen continuously along a route), **limited** (will be seen from several locations across a relatively wide area, or is seen at regular intervals along a route) or **restricted** (contained view – will be seen from only a few locations, or is seen only intermittently along a route).

**Duration**

6.1.15 Paragraph 5.51 of GLVIA3 states that '*duration can usually be simply judged on a scale such as short term, medium term or long term'*. For the purposes of the assessment, duration is often determined in relation to the phases of the proposed development, as follows:

- **Short-term effects** are those that occur during construction, and may extend into the early part of the operational phase, e.g., construction activities, generally lasting less than two years;

- **Medium-term effects** are those that occur during the early stages of the operational phase, generally lasting two years to five years; and
- **Long-term effects** (>5 years) are those which occur throughout the operational phase.

6.1.16 The duration of the view can also be described as temporary, intermittent or continuous e.g., transient (views which are normally experienced when in motion) and seasonal (views which would be subject to seasonal leaf cover).

**Reversibility of Effect**

6.1.17 In accordance with the principles contained within GLVIA3, reversibility is reported as **reversible**, **potentially reversible** or **irreversible** (i.e., permanent), and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e., at the end of construction or at the end of the operational lifespan of the proposed development).

6.1.18 Other considerations, which influence the magnitude of likely change include the level of activity in a scene, presence of noise or lighting, traffic movement, peoples' likely preferences and expectations, quality of the existing view, nature of the scene (open and directionless, or visually contained by enclosing features) and any other elements that affect human perception.

6.1.19 **Table 7** lists the factors which indicate higher or lower indicators of magnitude in terms of the above.

**Table 7: Indicative Criteria for Assessing Likely Magnitude of Visual Change**

| Category | Indicators |
|---|---|
| **Higher** | The proposed development would be a prominent feature and result in a substantial change to the character and quality of the existing view and how it is perceived.<br><br>Typically, this would be where the proposed development would be seen in proximity with a large proportion of the view affected by little screening, filtering or backgrounding.<br><br>The proposed development would affect the focus of the view and potentially be seen by a high number of people. The duration of its effect is likely to be long-term, permanent and non-reversible. |
|  | The proposed development would be 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.<br><br>Typically, this would be where the proposed development would be seen in views where a moderate proportion of the view is affected, although there may be some screening or backgrounding.<br><br>The proposed development would be well-defined and clearly visible to many people. The duration of its effect is likely to be medium to long-term, semi-permanent and potentially reversible. |
| | The proposed development would form a small part of the view and result in a slight change to the character and quality of the existing view and how it is perceived.<br><br>Typically, this would be where the proposed development would be seen in distant views, would only affect a small proportion of the view due to a high |

| Table 7: Indicative Criteria for Assessing Likely Magnitude of Visual Change | |
|---|---|
| **Category** | **Indicators** |
| | degree of screening or filtering or would result in a small degree of change from the existing view due, for example due to backgrounding.<br><br>The proposed development would be visible but be indistinct and/ or partially obscured. It would be seen only briefly and by few people. |
| **Lower** | The proposed development would be almost indiscernible and likely to be visible only under certain weather or lighting conditions. It would have no consequences for the character and quality of the existing view and how it is perceived.<br><br>Typically, this would be where the proposed development would form a very small part of a long-distance panoramic view or is obscured almost entirely from view. |

# 7 Judging Levels of Landscape and Visual Effect and Significance

7.1.1 The final step in the assessment is to identify the likely significant landscape and visual effects that may arise. This is assessed by considering all the criteria which comprise the sensitivity (i.e., the value of the landscape or view, and susceptibility of the landscape or visual receptor) and the magnitude of the change (i.e., the size, geographical extent and duration of the effect and its reversibility).

7.1.2 Gillespies' method does not use matrices to determine the significance of the effect but instead adopts the 'overall profile' approach whereby, '*all the judgements against the individual criteria can be arranged in a table to provide an overall profile of each identified effect'*. GLVIA3 Page 92, para 5.55.

7.1.3 This determination requires the application of professional judgement and experience to take on board the many different variables which are given different weight according to site-specific and location-specific considerations in every instance.

7.1.4 **Table 8** provides an example of a tabulated profile.

**Table 8: Extract of a Tabulated Profile for Determining the Significance and Direction of Landscape or Visual Effect**

| Value | Susceptibility | Size/ Scale | Geographical Extent | Duration | Reversibility | Level of Effect | Direction of Effect |
|---|---|---|---|---|---|---|---|
| Very High | Very High | Medium | Large | Long-Term | Potentially | Moderate | Adverse |

7.1.5 For each landscape and visual receptor, a narrative description explaining the rationale for the conclusion reached regarding the degree of effect and its significance, is provided in the main text.

7.1.6 The significance of effect is assessed as **major**, **moderate**, **minor** or **negligible**. Moderate and major effects are typically considered significant. Where 'no effect' is anticipated this is also stated.

7.1.7 Each of the categories covers a broad range of effects and represents a continuum or sliding scale. Because the categories cover effects across a relatively wide range, judgements are sometimes made about whether effects are at the higher or lower end of a category with explanations of why these conclusions have been reached.

7.1.8 The scale applied to the significance of effects varies depending on the location, the landscape and the type of development. However, the extremes of significance can be defined for landscape as:

- *'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; and*
- *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 the landscape of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant'. GLVIA3 Page 92, para. 5.56.*

7.1.9 Where landscape effects are assessed as being between these extremes, a judgment is made as to whether they are significant, and an explanation provided.

7.1.10 The scale applied to visual effects varies depending on the location, the visual receptors and nature of the proposed development, but generally:

- *'effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;*
- *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 components into the view are more likely to be significant than small changes or changes involving features already present in the view'. GLVIA3 Page 116, para. 6.44.*

7.1.11 Where assessments of significance place visual effects between these extremes, a judgment is made as to whether they are significant, and an explanation provided.

7.1.12 The final step in the assessment process is the identification of the direction of the effect - adverse, beneficial or neutral. This is determined in relation to the degree to which the proposed development fits with the existing landscape/ view and the contribution to the landscape/ view that the proposed development will make, even if it contrasts with the existing character.

7.1.13 Neutral effects are those which overall are neither adverse nor beneficial. This situation may arise if a characteristic element or feature of the landscape or view is replaced with a different but equally characteristic element. Therefore, it is possible for there to be a major effect but a neutral direction of change as the new element or feature, although different in nature and appearance, is of equal quality and in keeping with the existing landscape character and visual amenity.

7.1.14 Depending on the nature of the proposals the assessment may consider the effects at year 1 and in subsequent years, in this case year 15 when the planting will have become established to a typical height of 7 – 10m.

# 8 Mitigation Measures and Residual Effects

8.1.1 Where landscape or visual effects are judged to be moderate or major adverse, proposals made for preventing/ avoiding, reducing, or offsetting or compensating for them (referred to as mitigation) are described. If the design has been developed iteratively with the assessment process, then mitigation measures may not be necessary as all potentially significant adverse effects, which can be avoided or reduced, could have been designed out.

8.1.2 The most effective mitigation measures are ones which are integral to the scheme. A distinction is therefore made between measures designed as an intrinsic part of the scheme (primary or embedded measures) and those which are intended to specifically counteract any residual negative effects of the proposed development (secondary measures).

8.1.3 Significant residual landscape and visual effects remaining after proposed mitigation are summarised as the final step in the assessment process.

# 9 Technical Methodologies

## Zone of Theoretical Visibility

9.1.1 ZTVs are prepared to identify areas from where the proposed development will potentially be seen. Based on the maximum vertical development limits and (in this case) extending to approximately 5km, these represents the maximum theoretical potential visibility, i.e., the realistic 'worst case' scenario. The site survey confirmed the findings of the ZTVs.

9.1.2 The ZTVs are based on a bare earth Digital Terrain Model (DTM) and are a useful tool to assist in determining the extent of the study area and identifying the key visual receptors and viewpoints. It should be noted, however, that there will be areas shown within the ZTV which may have views of the proposed development obscured by features such as buildings or vegetation that are not captured by the DTM data.

## General Site Photography

9.1.3 For each of the agreed viewpoints, high resolution GPS located photographs were taken in accordance with TGN 06/19. The resulting images were merged using specialist software to create panoramic views and presented as annotated photographs within the Viewpoint Assessment at **Appendix 11.4**.

## Accurate Visual Representations

9.1.4 For a selection of the viewpoints, a series of 'Type 3' accurate visual representations (AVRs) were produced in accordance with TGN 06/19. Three levels of AVR were produced - AVR Level 1, 2 and 3, the selection of which depended on the individual viewpoint and was agreed with the LLTTNP Landscape Officer.

9.1.5 The purpose of these AVRs was to show the massing and general appearance of the Development within a 3D context. Further technical detail on the approach to preparing the AVRs is provided in **Appendix 11.5**.

# 10 Cumulative Effects Assessment

10.1.1 Cumulative visual impact assessment focusses on the additional cumulative change which may result from the introduction of the proposed development, when considered alongside other cumulative schemes in the vicinity. The objective of the assessment is to identify whether impacts from several developments, which individually might be insignificant, could cumulatively result in a significant effect upon visual receptors.

10.1.2 Cumulative assessment excludes existing operational developments, or schemes currently under construction, which are due to be completed prior to the commencement of the proposed development, as these are accounted for in the baseline and future baseline conditions which are established as part of the main LVIA.

10.1.3 The approach to assessing the level of importance and potential significance of cumulative visual effects uses the same principles as the approach to the LVIA set out in the methodology above.