

Appendix 4.1

Landscape and Visual Impact Assessment Methodology

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Assessment Methodology

1.1 The Landscape and visual impact assessment considers the potential effects of the development upon:

- Individual landscape or townscape features and elements;
- Landscape and townscape character; and
- Visual amenity and the people who view the landscape.

Distinction between Landscape and Visual Effects

1.2 In accordance with the '*Guidelines for Landscape and Visual Impact Assessment Third Edition*' 2013 by the Landscape Institute and Institute of Environmental Management and Assessment, landscape and visual effects have been assessed separately, although the procedure for assessing each of these is closely linked. A clear distinction has been drawn between landscape and visual effects as described below:

- Landscape effects relate to the effects of the project on the physical and other characteristics of the landscape and its resulting character and quality.
- Visual effects relate to the effects on views experienced by visual receptors (e.g. residents, footpath users, tourists etc.) and on the visual amenity experienced by those people.

Duration of Landscape and Visual Effects

1.3 The appraisal assesses the short term effects of the construction phase and the permanent effects relating to the projects operational phase.

1.4 Consideration has been given to the likely seasonal variations in the visibility of the development in a context including deciduous vegetation.

1.5 Consideration has been given to changes in the level of effects likely to take place as new planting, proposed as part of the project, and existing planting matures.

Landscape and Visual Assessment Process

1.6 The assessment of the landscape effects of the project has followed a recognised process set out below:

- Identify the baseline landscape resource (e.g. individual elements and character) and its value;
- Identify forces for change in the landscape of the surrounding area;

- Evaluate the sensitivity of the landscape resource and its susceptibility to change as a result of the type of development proposed;
- Identify potential landscape effects of the project through review of initial plans;
- Develop measures to avoid, reduce and ameliorate adverse effects and to maximise the positive benefits of the project;
- Identify scale or magnitude of likely impact of the project;
- Assess the level of effects of the project on the landscape, taking into account the designed in mitigation measures proposed; and
- Report the findings of the assessment.

1.7 The assessment of visual effects follows a similar recognised process set out below:

- Identify potential visual receptors of the project (i.e. people who will have views of the development);
- Select an appropriate number of representative or sensitive viewpoints to be illustrated through photography and to reflect the full range of different views towards the project;
- Describe the nature of the baseline views towards the project for each representative viewpoint;
- Identify forces for change in the visual amenity of the surrounding area;
- Evaluate the sensitivity of the visual receptors and their susceptibility to change as a result of the project represented by the viewpoints;
- Identify potential visual effects of the project through review of initial plans;
- Develop measures to avoid, reduce and ameliorate adverse effects and to maximise the positive benefits of the project;
- Identify the scale or magnitude of the likely impact of the project;
- Assess the level of effects on the view from representative viewpoints, taking into account the visual context of the development and the measures proposed;
- Assess the level of effects on overall visual amenity; and
- Report the findings of the assessment.

1.8 The assessment of representative viewpoints has been supplemented by scheduling of specific visual receptors to determine those likely to be experience the greatest visual effects.

Assessment Criteria

- 1.9 The purpose of the assessment is to evaluate the magnitude of change to landscape and visual resources to enable the likely key effects of the project to be identified.
- 1.10 Published guidance states that the level of effects is ascertained by professional judgement based on consideration of the intrinsic sensitivity of the baseline landscape or visual receptor, the receptors susceptibility to the development and the magnitude of change as a result of the project.

Sensitivity of Receptor

- 1.11 The sensitivity of a landscape to change varies according to the nature of the existing resource and the nature of the proposed change. Considerations of value, integrity and capacity are all relevant when assessing sensitivity. For the purpose of this assessment, these terms are defined as follows:
 - Value: the relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons. Landscapes can be recognised through national, regional or local designation. Views tend not to be designated, but value can be recognised through a named location shown on a map, or through the creation of a parking lay-by or location of a bench to appreciate a view;
 - Integrity: the degree to which the value has been retained, the condition and integrity of the landscape or the view; and
 - Capacity: the ability of a landscape or view to accommodate the proposed change while retaining the essential characteristics which define it.
- 1.12 Sensitivity is not readily graded in bands. However, in order to provide both consistency and transparency to the assessment process, Table 1 defines the criteria which have guided the judgement as to the sensitivity of the receptor and the susceptibility to change.

Table 1: Sensitivity of Receptor

	Landscape Receptor	Visual Receptor
Low	Landscape value is low, with no designations; landscape integrity is low, with a poor condition and a degraded character with the presence of detractors such as dereliction; and the landscape has the capacity to potentially accommodate significant change.	May include people at their place of work, or engaged in similar activities, whose attention may be focussed on their work or activity and who may therefore be potentially less susceptible to changes in view. Occupiers of vehicles whose attention may be focused on the road.

	Landscape Receptor	Visual Receptor
Medium	Landscape value is recognised or designated locally; the landscape is relatively intact, with a distinctive character and few detractors; and is reasonably tolerant of change.	Viewers' attention may be focused on landscape, such as people engaged in outdoor sport or recreation. e.g. horse riding or golf. Occupiers of vehicles in scenic areas or on recognised tourist routes.
High	<p>Landscape value recognised by national designation. Sense of tranquillity or remoteness specifically noted in Landscape Character Assessment. High sensitivity to disturbance specifically noted in Landscape Character Assessment.</p> <p>The qualities for which the landscape is valued are in a good condition, with a clearly apparent distinctive character and absence of detractors. This distinctive character is susceptible to relatively small changes.</p>	<p>Large number or high sensitivity of viewers assumed. Viewers' attention very likely to be focused on landscape.</p> <p>E.g. Residents experiencing views from dwellings; users of strategic recreational footpaths and cycleways; people experiencing views from important landscape features of physical, cultural or historic interest, beauty spots and picnic areas.</p>

Magnitude of Change

- 1.13 The magnitude of change affecting landscape or visual receptors depends on the nature, scale and duration of the particular change within the landscape, the location of it and the overall effect on a particular view. This may be very small if the development is at some distance. In a landscape, the magnitude of change will depend on the loss or change in any important feature or characteristic or a change in backdrop to, or outlook from, a landscape that affects its character. The angle of view, duration of view, distance from the development, degree of contrast with the existing characteristics of the view, prominence of the development and the extent of visibility can all influence the magnitude of the change in view. In addition, the general visibility and combination of effects of elevation and topography on openness and degree of obstruction by trees and buildings affect the magnitude of change.

Table2: Magnitude of Change

	Landscape Impacts	Visual Impacts
Negligible	The effect of change on the perception of the landscape, the physical features or the character is barely discernible or there is no change.	There is either no view or the character of the view will not be altered by the proposed development. The proposed development is at such a distance as to be barely perceptible, and may only be visible in clear conditions. May go unnoticed.
Small	Changes to the physical landscape, its character and the perception of the landscape are slight. Long distance to affected landscape with views toward the character area/type the key characteristic.	Visible, but not prominent. Minor component and no marked effect on view.
Medium	The proposed development forms a visible and recognisable feature in the landscape. Proposed development is within or adjacent to affected character area/type. Scale of development fits with existing features.	Prominent. Has an important, but not defining influence on view; is a key element in the view.
Large	Where there are substantial changes affecting the character of the landscape, or important elements through loss of existing features. Proposed development within or close to affected landscape. Scale, mass and form of development out of character with existing elements.	Dominant. Has a defining influence on view.

1.14 The following considerations are relevant when evaluating the magnitude of visual change:

- Distance: the distance between the receptor and the development. Generally, the greater the distance, the lower the magnitude of change;

- Extent: the extent of the proposal which is visible;
- Proportion: the arc of view occupied by the development in proportion to the overall field of view. A panoramic view, where the development takes up a small part of it, will generally be of lower magnitude than a narrow, focussed view, even if the arc of view occupied by the proposal is similar;
- Duration: the duration of the effect. An effect experienced in a single location over an extended period of time is likely to result in a higher magnitude of change than an effect which is of a short duration, such as a view from a road;
- Orientation: the angle of the view in relation to the main receptor orientation, where there is a dominant direction to the vista; and,
- Context: the elements, which in combination provide the setting and context to the proposal.

Level of Effect

1.15 The level of the landscape and visual effects are assessed through consideration of the sensitivity or susceptibility of the receptor and the magnitude of change. The following table outlines the broad approach adopted to assess the level of effect, together with professional judgement. This may lead some effects falling between two categories.

Table 3 – Level of Effect

Landscape and Visual Sensitivity or Susceptibility	Magnitude Of Change			
	Large	Medium	Small	Negligible
High	Substantial	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible

1.16 The effect of relevant aspects of the project on the landscape has been described and evaluated against the following criteria, defined as:

- Substantial adverse: Where the proposed changes cannot be mitigated; would be completely uncharacteristic and would substantially damage the integrity of a valued and important landscape.
- Major adverse: Where the proposed changes cannot be fully mitigated; would be uncharacteristic and would damage a valued aspect of the landscape.
- Moderate adverse: Where some elements of the proposed changes would be out of scale or uncharacteristic of an area.

- Minor adverse: Where the proposed changes would be at slight variance with the character of an area.
- Negligible adverse: Where the proposed changes would be barely discernible within the landscape.
- Neutral: Where the proposals would be in keeping with the character of the area and/or would maintain the existing quality or where on balance the proposals would maintain quality (e.g. where on balance the adverse effects of the proposals are off set by beneficial effects).
- Negligible beneficial: Where the proposed changes would be barely discernible within the landscape but would be preferable to the baseline.
- Minor beneficial: Where the proposed changes would reflect the existing character and would slightly improve the character and quality of the landscape.
- Moderate beneficial: Where the proposed changes would not only fit in well with the existing character of the surrounding landscape, but would improve the quality of the resource through the removal of detracting features.
- Major beneficial: Where the proposed changes would substantially improve character and quality through the removal of large scale damage and dereliction and provision of far reaching enhancements.

1.17 The effect of relevant aspects of the project on views has been described and evaluated as follows:

- Substantial adverse: Where the proposed changes would form the dominant feature, or would be completely uncharacteristic and substantially change the scene in highly valued views.
- Major adverse: Where the proposed changes would form a major part of the view, or would be uncharacteristic, and would alter valued views.
- Moderate adverse: Where the proposed changes to views would be out of scale or uncharacteristic with the existing view.
- Minor adverse: Where the proposed changes to views would be at slight variance with the existing view.
- Negligible adverse: Where the proposed changes would be barely discernible within the existing view.
- Neutral: Where the project would be imperceptible or would be in keeping with and would maintain the existing views or, where on balance, the proposals would maintain the quality of the views (which may include adverse effects of the proposals which are off set by beneficial effects for the same receptor).

- Negligible beneficial: Where the proposed changes would be barely discernible within the existing view but would be preferable to the baseline.
 - Minor beneficial: Where the proposed changes to the existing view would be in keeping with and would improve the quality of the existing view.
 - Moderate beneficial: Where the proposed changes to the existing view would not only be in keeping with, but would greatly improve the quality of the scene through the removal of visually detracting features.
 - Major beneficial: Where the proposed changes to existing views would substantially improve the character and quality through the removal of large scale damage and dereliction and provision of far reaching enhancements.
- 1.18 The level of effects is described as substantial, major, moderate, minor or negligible. Where negligible adverse and beneficial effects occur within the same view or same landscape, the effect can be described as neutral on balance. The level of effects varies according to individual circumstances and the baseline situation, for example the presence of landscape designations and/or visual detractors.
- 1.19 A conclusion regarding the significance of each effect on a landscape or visual receptor needs to combine separate judgements about the sensitivity of receptors and magnitude of change as a result of the proposed development. The GLVIA (2013) states at paragraph 5.55 that a sequential approach can be taken to assessment of significance; *“susceptibility to change and value can be combined into an assessment of sensitivity for each receptor, and size/scale, geographical extent and duration and reversibility can be combined into an assessment of magnitude for each effect. Magnitude and sensitivity can then be combined to assess overall significance”*.
- 1.20 In the assessment those levels of effect indicated as being of ‘substantial’ or ‘major’ may be regarded as significant effects. An accumulation of individual ‘moderate’ effects, for instance experienced during a journey, may also be regarded as significant.