

LANDSCAPE AND VISUAL IMPACT ASSESSMENT METHODOLOGY

I. INTRODUCTION

- I.1 The landscape and visual impact assessment methodology follows the ‘*Guidelines for Landscape and Visual Impact Assessment: Third Edition*’ The Landscape Institute and Institute of Environmental Management and Assessment 2013 (GLVIA3). The GLVIA3 (paragraphs 2.19 to 2.22) sets out how landscape and visual matters are to be considered.

Effects on landscape as a resource:

‘Landscape results from the interplay of the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create the distinctive character of landscapes in different places.’ Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive’.

Views and visual amenity:

The assessment of visual effects is ‘*assessing the effects on specific views and on the general visual amenity experienced by people.*’

- I.2 **Assessment of effects:** The likely landscape and visual effects are described and for each effect the significance of the landscape effect can be assessed by combining the level of sensitivity of the landscape or visual receptor with the magnitude of the landscape effect. The results of the assessments are set out in summary within Landscape and Visual Impact Tables. A step-by-step approach to identifying the sensitivity, magnitude of change and effect of the development using levels set out in the following tables and a matrix to identify the significance of the effects has been employed.

2. AREA OF STUDY

- 2.1 The landscape and visual impact assessment considers the area from which the ZTV or site surveys show that the site or the development may be visible, unscreened by local topography and by large areas of vegetation or built form. This will be identified as the visual envelope. The landscape study area may extend beyond a small visual envelope where there is evidence that the site is part of a wider landscape character area. Detailed studies will be carried for an area appropriate to the development where tall structures such as wind turbines may have an impact at some distance.

3. METHODOLOGY FOR ASSESSMENT OF LANDSCAPE EFFECTS

- 3.1 **Landscape baseline:** This will involve identifying the **landscape receptors** by:
- Mapping, describing and illustrating the character of the landscape by appropriate means including reference to the relevant landscape character assessments;
 - Identifying landscape-based designations and others (heritage, nature conservation, recreational etc) of relevance to the landscape character that may be impacted by the development;
 - Identifying and describing individual elements and aesthetic and perceptual aspects of the landscape that contribute to character;
 - Indicating the general condition of the landscape;
 - Establishing the relative value of the receiving landscape.
- 3.2 Where appropriate, the LVIA will identify local landscape character areas for assessment. These character areas are as determined by field work and by reference to published Landscape Character Assessments. Criteria for the selection of local landscape character areas within the likely envelope of influence will be by reference to:
- Proximity and influence on the site;
 - Physical connections with the site (for example public rights of ways, rivers and canals, roads, vegetation and vegetation belts);
 - Views of the site (particularly where the view is a key characteristic of the local landscape character area).
- 3.3 **Landscape sensitivity:** This is determined by combining the susceptibility of the landscape receptor to change and the value of the landscape receptor.
- 3.4 **Susceptibility to change:** This refers to the inherent sensitivity of the landscape receptor and ability of the landscape receptor to accommodate a particular change. Landscape receptors include specific site features, the landscape character of the appeal site, the landscape character of the receiving landscape character area (the immediate area and the relevant Landscape Character Area (LCA)), and other LCAs which may be affected indirectly by the proposals as a result of offsite works, transport needs or visual impacts.

Table 1: Landscape susceptibility to change

Category	Criteria
High - exceptional	<ul style="list-style-type: none"> • Special qualities which are wholly incompatible with the development • Strong landscape structure, characteristics, patterns, balanced combination of landform and landcover • Appropriate management is being carried for land use and landcover • Many distinct features worthy of conservation; • Strong sense of place and • No detracting features
High	<ul style="list-style-type: none"> • Special qualities which are potentially incompatible with the development • Generally strong landscape structure, characteristic patterns and balanced combination of landform and landcover • Appropriate management for land use and landcover but potentially scope to improve • Distinct features worthy of conservation • Good sense of place and • Occasional detracting features
Medium-high	<ul style="list-style-type: none"> • Special qualities may be vulnerable to the development • Recognisable landscape structure, characteristics patterns and combinations of landform and landcover are still evident • Scope to improve management for land use and land cover • Some features worthy of conservation • Some sense of place and • Some detracting features
Medium	<ul style="list-style-type: none"> • Special qualities may be able to accommodate the development • Distinguishable landscape structure, characteristic patterns of landform and landcover often masked by land use • Scope to improve management of vegetation • Some features worthy of conservation • Some detracting features
Medium-low	<ul style="list-style-type: none"> • Developments may be appropriate • Weak landscape structure, characteristic patterns of landform and landcover masked by land use • Mixed land use evident • Lack of management and intervention has resulted in degradation and • Frequent detracting features
Low	<ul style="list-style-type: none"> • Developments may be appropriate and unlikely to be harmful • Degraded landscape structure, characteristic patterns and combinations of landform and landcover are masked by land use • Mixed land use dominates • Lack of management/intervention has resulted in degradation; and • Extensive detracting elements

3.5 Landscape value: The value of the landscape is based on the value or importance given to the area by society, statutory bodies, local and national government and the local community. National designations include National Parks and Areas of Outstanding Natural Beauty. Some local authorities will have local landscape designations. GLVIA3 however also concludes that the fact that an area is not in a designated landscape does not mean that it is not valued (para 5.26) and in this case reference should be made to landscape character assessments, local policies and guidance. The GLVIA3 recommends that there should not be over reliance on

designations (para. 5.45). Weight will be given to landscape receptors reported in published documents such as Village Design Statements.

Table 2: Landscape value

Value	Typical criteria	Typical scale	Typical examples
Exceptional	Greatest importance (or quality) and rarity. No or limited potential for substitution	International National	World Heritage site National Park National Landscape
High	High importance (or quality) and rarity. Limited potential for substitution	National Regional Local	National and local landscape designations, listed as valued features and qualities within local landscape character assessments
Medium	Medium importance (or quality) and rarity. Limited potential for substitution	Regional Local	Landscape or a landscape element which contains some qualities or features which are valued
Low	Low importance (or quality) and rarity	Local	Areas identified as having some redeeming features and possibly identified for improvement
Very low	Low importance (or quality) and rarity	Local	Area identified for recovery

3.6 Overall sensitivity of the landscape to proposed development: Sensitivity is a factor of both the value attached to a landscape and its key characteristics and their susceptibility to change. These are combined as follows:

Table 3: Overall landscape sensitivity

	Exceptional value	High value	Medium value	Low value	Very low value
High-exceptional susceptibility to change	VH	H	MH	X	X
High susceptibility to change	H	H	MH	X	X
Medium-high susceptibility to change	H	MH	M	ML	X
Medium susceptibility to change	MH	MH	M	ML	L
Medium-low susceptibility to change	X	MH	M	ML	L
Low susceptibility to change	X	X	ML	L	L

Overall sensitivity: VH – Very high; H – High; MH – Medium-High; M – Medium; ML – Medium-Low; L – Low; X – Excluded

3.7 Magnitude of change to landscape receptors: The following definitions are used to assess the magnitude of change to landscape receptors. In order to determine the impact of the development the magnitude of change arising from the development has been classified as described in Table 4.

3.8 There is no standard methodology for assessing magnitude of change but key to the assessment will be:

- **The size or scale of the development:** this should take into consideration the size and scale of the proposed development and the extent of the loss to existing landscape receptors, the proportion of the

total extent on site that this represents and the contribution of the element to the character of the landscape;

- **The extent of the development:** this considers the geographical area over which the landscape effects may be felt. This is at site level; level of the immediate setting; at the scale of the local landscape character area; and may be on a larger scale affected a number of local landscape areas or a regional landscape area;
- **The permanency of the development:** This may be long term or short term; will depend on whether the development is reversible or changes the status of the site e.g. to previously developed land; and whether for example restoration to baseline conditions is envisaged;
- **The change to the key characteristics of the receiving landscape:** This will take account of changes to the appearance of the site; on landscape features; on key or special qualities characteristic of the landscape; and on the landscape setting of historic and nature conservation assets;
- **The proposed mitigation:** this considers the extent to which the landscape proposals will be able to mitigate the effects of the development by replacing or enhancing landscape features or limiting the effects on the wider landscape.

Table 4: Landscape magnitude of change

Magnitude of change	Typical criteria
High	Total loss of or major alteration to key elements/features/characteristics of the landscape baseline (i.e. pre-development landscape) and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape
Medium-high	Major loss of or alteration to key elements/features/characteristics of the landscape baseline (i.e. pre-development view) and/or introduction of elements considered to be largely uncharacteristic when set within the attributes of the receiving landscape
Medium	Partial loss of or alteration to one or more key elements/features/characteristics of the landscape baseline (i.e. pre-development landscape) and/or introduction of elements that may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape
Low	Minor loss of or alteration to one or more key elements/features/characteristics of the landscape baseline (i.e. pre-development landscape) and/or introduction of elements that may not be characteristic when set within the attributes of the receiving landscape
Beneficial	Enhancement over and above proposals to mitigate the impact of development. Improvement to the status quo for example through positive changes to existing poor landscape and built features or areas.

- 3.9 Significance of landscape effect:** The significance of landscape effect has been determined by cross-referencing the sensitivity of the receptor with the magnitude of change expected as a result of the development.

Table 5: Landscape significance of effect

	High Magnitude of Change	Medium-high Magnitude of Change	Medium Magnitude of Change	Low Magnitude of Change
Very high overall sensitivity	Substantial adverse	Substantial adverse	Major adverse	Major/Moderate adverse
High overall sensitivity	Substantial adverse	Major adverse	Major/Moderate adverse	Moderate adverse
Medium-high overall sensitivity	Major adverse	Major/Moderate adverse	Moderate adverse	Minor adverse
Medium overall sensitivity	Major/Moderate adverse	Moderate adverse	Minor adverse	None
Medium-Low overall sensitivity	Moderate adverse	Minor adverse	None	None
Low overall sensitivity	Minor adverse	None	None	

3.10 Significant effects: For the purposes of the impact assessment, adverse effects between substantial and major/moderate effect (in darker pink) are considered to be significant and to be of key importance in decision making. Moderate adverse effects (in pale pink) should also be taken into account when considering the overall effects of the development in decision making.

3.11 The lower levels of effect: moderate and minor may not be significant in themselves but cumulatively these effects on a wide range of receptors may either together be considered important in decision making; or alternatively considered important in conjunction with significant effects on other receptors.

3.12 Definition of significance categories:

Substantial adverse: The proposed development would be at complete variance with the character of the site and its landscape setting and its landform, scale and pattern; it would permanently damage the integrity of valued characteristics; and would permanently devalue a valued landscape. A 'substantial' adverse landscape impact would only occur where landscapes of a very high sensitivity are affected.

Major adverse: The proposed development would be at complete variance with the character of the site and its landscape setting and its landform, scale and pattern; it would permanently damage the integrity of valued characteristics; and would permanently devalue a landscape.

Major/moderate adverse: The proposed development would result in material changes to the landscape of the site and its landscape setting, to its landform, scale and pattern which cannot be effectively mitigated. The integrity of the site is compromised and the value substantially undermined.

Moderate adverse: The proposed development would be out of scale with the landscape and result in the loss of characteristics of the site and its landscape setting

but this can be mitigated to some degree and aspects of the quality and value of the site retained and enhanced.

Minor adverse: The proposed development would have some effect on some characteristics of the site and its landscape setting but the overall character is sustained and the value of the landscape is not materially harmed or has been mitigated.

Neutral: The proposed development would not materially alter the character of the site and its setting nor detract from the value of that landscape.

4. METHODOLOGY FOR ASSESSMENT OF VISUAL EFFECTS

4.1 On the basis of baseline data and site visits, visual receptors are identified and classified as to their sensitivity to changes in view.

- 4.2 **Visual baseline:** This will involve identifying the visual receptors by:
- Identifying the area in which the development may be visible;
 - Identifying the different groups of people who may experience views of the development;
 - Identifying representative viewpoints where views will be affected and the nature of those views, including where these are within the site area;
 - Identifying any recognized viewpoints (known viewpoints in the landscape);
 - Identifying any views characteristic of the landscape character area;
 - Identifying any illustrative viewpoints (that might identify a particular effect or issue).

Table 6: Visual susceptibility to change

Category	Criteria
High	Residents within main rooms of house and people who are engaged in outdoor recreation including PRoW and prominent trails
Medium	Residents within non main rooms of house. Quite rural roads and rail users
Low	Other motorists and those engaged within sports or work

Table 7: Visual value

Category	Criteria
Very High	Viewers in locations where the view is of principal significance such as from viewpoints within World Heritage Site, National Park and National Landscape
High	Views in areas within national and local landscape designations and valued landscapes
Medium	Views in areas which contains some qualities or features which are valued
Low	Views in areas identified as having some redeeming features and possibly identified for improvement

4.3 Sensitivity of visual receptors: The sensitivity of the visual receptor needs to be established. This is dependent on the value attached to the view and the susceptibility of the visual receptors to change.

Table 8: overall visual sensitivity

	Very high value	High value	Medium value	Low Value
High susceptibility	VH	H	M/H	M
Medium susceptibility	H	M/H	M	M/L
Low susceptibility	M/H	M	ML	L

4.4 Magnitude of change to visual receptors: The following definitions are used to assess the magnitude of change to visual receptors. In order to determine the impact of the development the magnitude of change arising from the development has been classified as described in Table 7.

4.5 There is no standard methodology for assessing magnitude of change but key to the assessment will be:

- **The size or scale of the development:** this should take into consideration the mass and scale of the development visible and the change in the view with respect to loss or addition of features in the view and changes to its composition (including the proportion of the view occupied by the proposed development and the degree of contrast or integration of the proposed development with the existing landscape elements and characteristics) and the nature of the view in terms of duration and degree of visibility;
- **The extent of the development:** this will vary with different viewpoints and is likely to reflect the extent of the development visible in the view and the distance of the viewpoint from the proposed development;
- **The permanency of the development:** This may be long term or short term; will depend on whether the development is reversible or changes the status of the site e.g. to previously developed land; and whether for example restoration to baseline conditions is envisaged;
- **The proposed mitigation:** this considers the extent to which the landscape proposals will be able to mitigate the visual effects of the development by screening or design of the development (for example siting, colour use, location of open space).

Table 9: Visual magnitude of change

Magnitude of change	Typical criteria
High	Total loss of or major alteration to key elements/features/characteristics of the visual baseline (i.e. pre-development landscape) and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the view
Medium-high	Major loss of or alteration to key elements/features/characteristics of the visual baseline (i.e. pre-development view) and/or introduction of elements considered to be largely uncharacteristic when set within the attributes of the view
Medium	Partial loss of or alteration to one or more key elements/features/characteristics of the visual baseline (i.e. pre-development landscape) and/or introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the view
Low	Minor loss of or alteration to one or more key elements/features/characteristics of the visual baseline (i.e. pre-development landscape) and/or introduction of elements that may not characteristic when set within the attributes of the view
Negligible	Imperceptible loss of or alteration to one or more key elements/features/characteristics of the visual baseline (i.e. pre-development landscape) and/or introduction of elements that are not characteristic with the view – approximating to the no-change situation

4.6 Significance of visual effect: The significance of visual effect has been determined by cross-referencing the sensitivity of the receptor with the magnitude of change expected as a result of the development.

Table 10: Visual significance of effect

	High Magnitude of Change	Medium-high Magnitude of Change	Medium Magnitude of Change	Low Magnitude of Change	Negligible Magnitude of Change
Very high Sensitivity	Substantial adverse	Major adverse	Major/Moderate adverse	Moderate adverse	Minor adverse
High Sensitivity	Major adverse	Major/Moderate adverse	Moderate adverse	Minor adverse	Neutral
Medium Sensitivity	Major/Moderate adverse	Moderate adverse	Minor adverse	Neutral	Neutral
Low Sensitivity	Moderate adverse	Minor adverse	Neutral	Neutral	Neutral

4.7 **Significant effects:** For the purposes of the impact assessment adverse effects between substantial and major/moderate effect (in darker pink) are considered to be significant and to be of key importance in decision making. Moderate adverse effects (in pale pink) should also be taken into account when considering the overall effects of the development in decision making.

4.8 The lower levels of effect: moderate and minor may not be significant in themselves but cumulatively these effects on a wide range of receptors may either together be considered important in decision making; or alternatively considered important in conjunction with significant effects on other receptors.

4.9 **Definition of significance categories:**

Substantial adverse: The proposed development would result in overwhelming adverse changes to the view from sensitive viewpoints and the enjoyment of that view by high sensitivity visual receptors. It would introduce wholly intrusive or incongruous elements that would harm the appearance and scenic quality of the view. A 'substantial' adverse effect would only affect views from very highly sensitive viewpoints.

Major adverse: The proposed development would result in overwhelming adverse changes to the view from high sensitivity viewpoints and the enjoyment of that view by high sensitivity visual receptors. It would introduce wholly intrusive or incongruous elements that would harm the appearance and scenic quality of the view.

Major/moderate adverse: The proposed development would result in changes to the view and the enjoyment of that view by visual receptors so that the proposed development dominates the view. It would introduce many intrusive or incongruous elements that would harm the appearance and scenic quality of the view.

Moderate adverse: The proposed development would result in changes to the view from sensitive viewpoints and the enjoyment of that view by visual receptors so that the proposed development is prominent in the view. It would introduce some intrusive or incongruous elements that would harm the appearance and scenic quality of the view.

Minor adverse: The proposed development would have some effect on visual receptors but the overall character of the view is sustained and the appearance of the landscape is not materially harmed or has been mitigated.

Neutral: The proposed development would not materially alter the appearance of the area as experienced by visual receptors.