

Appendix A

LVIA Methodology

1.0 Introduction

1.1 This Appendix provides a description of the survey and assessment methods that have been used to produce the landscape and visual impact assessment (LVIA).

1.2 The assessment approach is based on published guidance set out in the Third Edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA3) published jointly by the Landscape Institute and the Institute of Environmental Management and Assessment in April 2013. It also draws on subsequent publications such as 'An Approach to Landscape Character Assessment' from Natural England (2014), and has been refined and developed over a number of years to reflect emerging best practice, and tested through the planning appeal process.

1.3 The report has been prepared by Tapestry¹, a landscape practice registered with the Landscape Institute (Registered Practice Number 23658) and the assessment has been undertaken by a suitably qualified and experienced Landscape Architect. Guidance emphasises the responsibility of the landscape professional carrying out the assessment to ensure that the approach and methodology is appropriate for the particular development to be assessed.

This methodology reflects the fact that the proposed development has been agreed as being non-EIA development.

2.0 Assessment Approach

2.1 The preparation of the assessment involved the following key stages:

- **Establishing the Landscape Baseline** - through identification of the physical and perceptual landscape characteristics within the site and surrounding study area (in the form of landscape character assessment) and the relative value that is attached to the landscape by way of detailed desk-based study (to identify relevant landscape designations and related planning policy) and site field work.
- **Establishment of the Visual Baseline** - through identification and analysis of the existing visual resource that may be affected including the extent and nature of principal views to the proposed development from visual receptors in the study area.
- **Identification of Potential Effects** - the broad design parameters of the project were established at the time of the commission in terms of the nature of the development. This provided sufficient information to identify the likely scale and nature of the changes to landscape characteristics and value as well as changes affecting visual amenity.
- **Identification of landscape and visual receptors** - these are assessed and assigned a sensitivity rating, which is determined by a combination of their value and their susceptibility to change.

¹Tapestry is a trading name of Tapestry Urbanism Ltd

- **Identification of mitigating measures** - Iterative development of the proposals is integral to our LVIA approach; mitigation measures may therefore be 'primary' measures - inherent features which have been incorporated into the design, or 'secondary' measures - foreseeable additions that are designed to address any residual adverse impacts of development.
- **Final scheme assessment** - Identifying the magnitude and significance of the effects of the proposals during construction and in operation. Typically this will be split into Year 0 and Year 15, but may vary in specific circumstances. Where this happens it will be set out in the assessment.

3.0 Study Area Definition

3.1 The definition of a study area is an important part of a landscape and visual impact assessment as it describes the predicted maximum geographical extents within which potential environmental effects may occur and which are assessed for their significance.

3.2 Typically, there will be two different study areas for the landscape and visual assessments, as any given scheme may be seen over a larger area that landscape impacts will occur. In any case, the study area/s is determined by a two-stage process: a desktop study to identify any relevant landscape designations and sensitive receptors in the landscape surrounding the site, and a field

survey to assess the limits of potential visibility. The latter is itself informed by a Zone of Theoretical Visibility (ZTV) plan, which may be manually created or automatically generated using GIS software. The Assessment will state the extent of the study area for both the visual and landscape assessments, and set out how the ZTV has been generated.

3.3 Any assumptions or limitations - for example, seasonal restriction (ideally the visual survey would be undertaken in Winter, when deciduous trees are not in leaf, to represent the 'worst case' views) will also be set out in the main report.

4.0 Representative Views & Visualisations

4.1 The assessment will include a plan identifying the locations that have been used for the representative viewpoints, and the dates on which any site visits have been undertaken. It will also confirm how they were chosen, and if they were agreed with the local planning authority. The visual assessment is always undertaken on-site, by a qualified landscape professional, with photographs used as a reference to record the location and views as they appeared on the day that they were assessed.

4.2 All photography and/or visualisations are prepared in accordance with Landscape Institute Technical Note 06/19 - 'Visual Representation of Development Proposals' as set out in the adjacent table.

Table 2 from
LI Technical Note 06/19
'Visual Representation of
Development Proposals'

Table 2 Visualisation Types 1-4		Type 1	Type 2	Type 3	Type 4
		Annotated Viewpoint Photograph	3D Wireline / Model (non-photographic)	Photomontage / Photowire	Photomontage / Photowire Survey / Scale Verifiable
Aim of the Visualisation		To represent context and outline or extent of development and of key features	To represent 3D form of development / context	To represent appearance, context, form and extent of development	To represent scale, appearance, context, form, and extent of development
Photographic Equipment	Tripod	Recommended but discretionary	Not relevant	Recommended	Necessary
	Panoramic head	Not relevant		Recommended for panoramas	Necessary for panoramas
	<u>Minimum</u> Camera / Lens	Cropped frame or FFS + 50mm	Not relevant	Cropped frame or FFS + 50mm	Full Frame Sensor (FFS) + 50mm FL lens ¹
Locational Accuracy	Source of camera/viewpoint location data	GPS, OS Maps, geo-referenced aerial photography	Varies according to technology	Use good quality data: GPS, OS Maps, geo-referenced aerial photography, LiDAR	Use best available data: High resolution commercial data, LiDAR, GNSS, or measured / topographic surveys
	Survey-verified ²	Not relevant			When appropriate
Data & Presentation	Verifiable (SNH) ³	Not relevant			Required
	3D model	Not required	Required		
	Image Enlargement ⁴	Typically 100%	Not relevant	Typically 100%	100% - 150%
	Form of Visualisation	sketch / outline / arrows	massing / wireline / textured	wireline / massing / rendered / textured to agreed AVR level ⁵	
	Viewpoint mapping	Dedicated viewpoint location plan			Dedicated viewpoint location plan, + individual inset maps recommended
	Reporting of methodology and data sources	Outline description of sources and methodology recommended		Data, sources and methodology recommended	Verifiable data, sources and methodology required

Table 2 footnotes:

1 FFS+50mm FL - note exceptions to 50mm lens FL. See Section 4 and Appendices 01 and 06.

2 Survey-verified means the camera position and survey features being recorded by highly accurate survey processes. See Section 4 Locational Accuracy & Appendix 14.

3 Verifiable (SNH) has the same meaning as in SNH 2017 - the photographic process and image scaling is capable of being verified to agreed standards by reference to the original photograph with metadata. See Appendices 6 & 11.

4 Image Enlargement - see 3.8 below.

5 AVR level - see Appendix 6.4.

5.0 Assessment of Landscape Effects

Landscape Baseline

5.1 The landscape baseline is the description of the existing environmental qualities of the landscape receptors and the landscape as a whole against which any future changes can be measured, or landscape effects predicted and assessed.

5.2 The landscape baseline is established by considering both a desk study of existing sources and field work to identify and record the character of the landscape and the existing elements and features as well as the perceptual and aesthetic factors which contribute towards it.

5.3 Landscape character and value are separately identified. This is done in order to distinguish between the ability of a landscape to physically accommodate a development in terms of landform, land cover and land use, as opposed to consideration of effects on valued aspects of the landscape which are more subjective in nature.

Landscape Character

5.4 Existing published Landscape Character Assessments are reviewed and critically judged for their applicability to the study area. Typically, the finer scale the assessment, the greater its applicability and in some cases a bespoke assessment of landscape character will be required where no published document exists.

5.5 The landscape baseline will identify and describe the elements that make up the landscape in the study area, namely:

- **Physical Influences** (e.g. Geology, Topography, Soils)
- **Land Cover** (e.g. Vegetation, Tree Cover, Built Form)
- **Human Influences** (e.g. Land Use, Field Pattern, Townscape)

5.6 Once identified, landscape receptors will be categorised into one of four landscape topics:

- **Landscape Character (LC)**
- **Landscape Value (LV)**
- **Landscape Features (LF)**
- **Landscape Designations (LD)**

Landscape Value

5.7 As part of describing the landscape baseline, the value of potentially affected landscape is established. This is done under thematic headings. Existing landscape designations are an indication of higher landscape value and are identified through desk study. It should be noted that a lack of formal designation does not immediately make the value of a landscape of low importance - the value for both designated and undesignated landscapes is assessed during the field work stage.

5.8 The basis of the assessment of landscape value is a hybrid of Landscape Institute Technical Guidance Note 02/21 - 'Assessing Landscape Value Outside of National Designations' and Box 5.1 of GLVIA3.

5.9 Value is presented on a three-point scale of High, Medium and Low. Split grades may be possible where resulting value falls between two grade levels. Table M1 below gives an indication of the value assigned to various landscapes:

Description	Value
Areas identified as having national importance, or being within the setting of such designations, where there is a link to the landscape. Areas demonstrating strong alignment with published landscape character assessment, or being of a nationally significant landscape type. <i>eg Areas with National Landscape or Heritage Designations</i>	High - Due to National Importance
Areas with identified characteristics or features, valued on the basis of the quality or importance of the landscape or heritage feature, including setting and views. <i>eg Areas designated at a County or other regional level</i>	High / Medium - Due to Regional Importance
Areas of landscape that are valued or have recognised importance at a local level, or where there is a strong link to the local community. <i>eg Areas designated at a local level - such as identified in a neighbourhood plan</i>	High / Medium / Low - Assessed by their importance to the locality

Table M1
Landscape Receptor Value

Landscape Susceptibility

5.10 Landscape susceptibility is the degree to which a defined landscape and its associated attributes might respond to the specific development type / development scenario or other change proposed, without undue negative effects on landscape character and the landscape resource.

5.11 In this assessment, Landscape Susceptibility is measured on a three-point scale of High, Medium and Low. Split grades may be possible where a resulting value falls between two grade levels.

Table M2 below gives an indication as to how this may be assessed.

5.12 It should be noted that the relationship between susceptibility to change and value can be complex and is not linear. For example, a highly valued landscape (such as a National Landscape (AONB)) may have a low susceptibility to change due to both the characteristics of the landscape and/or nature of the proposed change.

Description	Grade
The landscape receptor is highly susceptible to the development because the key characteristics of the landscape have no or very limited ability to accommodate it without undue adverse effects taking account of the existing character and quality of the landscape.	High - Landscape receptor has very limited capacity to accommodate proposed development
The landscape receptor is moderately susceptible to the development because the relevant characteristics of the landscape have some ability to accommodate it without undue adverse effects, taking account of the existing character and quality of the landscape.	Medium - Landscape receptor has some capacity to accommodate proposed development.
The landscape receptor has low susceptibility to the development because the relevant characteristics of the landscape are generally able to accommodate it without undue adverse effects, taking account of the existing character and quality of the landscape.	Low - Landscape receptor has good capacity to accommodate proposed development.

Table M2
Landscape Susceptibility Grade

Landscape Sensitivity

5.13 Landscape sensitivity is derived from combining the judgements on landscape value and landscape susceptibility together. It is then carried forward to determine the significance of the effect (in combination with an assessment of the magnitude of the effect).

5.14 The determination of sensitivity is based on professional judgement; however, high value / high susceptibility receptors are likely to be highly sensitive to change, with the inverse for low value / low susceptibility receptors. Again, a three-point scale is used to define landscape receptor sensitivity, however it includes split grades which effectively makes it a five-point grading system.

5.15 To allow easier inspection and review of the assessment process a sensitivity matrix is used, however this is only for guidance, and the assessment may deviate from this where there is a justified reason for doing so. In those situations, the narrative that accompanies the assessment will provide a clear rationale for doing so. The sensitivity matrix can be seen in **Table M3**, adjacent.

Category + Grade		Susceptibility				
		High	High - Medium	Medium	Medium - Low	Low
Value	High	Very High	High	High / Medium	Medium	Medium
	High - Medium	High	High / Medium	Medium	Medium	Medium
	Medium	High / Medium	Medium	Medium	Medium	Medium / Low
	Medium - Low	Medium	Medium	Medium	Medium / Low	Low
	Low	Medium	Medium	Medium / Low	Low	Very Low

Table M3 - Sensitivity Matrix

6.0 Magnitude of Landscape Effects

6.1 The magnitude of effect on landscape receptors is assessed by considering a number of factors. These include:

- Size or scale of the proposed development;
- Geographical extent of the effect;
- Contrast or integration with existing landscape character;
- Duration of effects; and
- Reversibility.

6.2 The size or scale of the magnitude of landscape effects relates to the loss or addition of features to the particular landscape receptor likely to be caused by the development. The assessment takes into account:

- The extent / proportion of the landscape element that is lost or added;
- The contribution of that element to the character of the landscape;
- The revised setting of the landscape or landscape element resulting from the development;

- The degree to which aesthetic or perceptual aspects of the landscape receptor are altered; and
- Whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.

6.3 The geographical extent over which landscape effects occur is distinct from the size or scale. For example, large scale effects may be limited to the immediate site area. The geographical extent, where noted, is defined as:

- **Wide** - Influencing several character areas
- **Medium** - Affecting the landscape character area in which the site is located only
- **Local** - Impacting upon the site and its immediate surrounds only
- **Site** - Only impacting the landscape within the red line

6.4 The duration of effects is also taken into account, and classified as short, medium or long term. Unless otherwise stated, the durations are defined as:

- **Short Term** - Less than 5 years
- **Medium Term** - 5 - 15 years
- **Long Term** - More than 15 years

6.5 Reversibility is also taken into account, and requires a judgement about whether the landscape effect is reversible or not. It is judged on a scale of reversible, partially reversible, or permanent. While they may or may not be individually broken down, all these factors are considered to derive an overall magnitude of change for each receptor, which is determined through professional judgement. The magnitude of effect is presented on a four-point scale of High, Medium, Low and Very Low. A description of the magnitude categories is described below in **Table M4**. An additional option of 'No Change' may be used where the proposals would not cause any change to the landscape or landscape character / elements / features / characteristics.

Additional Assessments of Effects

6.6 The main assessment of effects is based on the 'permanent scheme' that is, the final scheme that is being proposed when it is finished. However, two further assessments may be considered alongside this. The **Construction Phase Effects** addresses the anticipated additional landscape impacts associated with the construction phase of the project. These would typically include:

- Nominal and temporary adverse landscape impacts on aesthetic and perceptual attributes of the surrounding landscape character areas, through increased vehicular traffic during construction;

Magnitude	Description
High	Total loss of, or significant impact on, key characteristics, features or elements of the landscape or townscape
Medium	Partial loss of, alteration to, or noticeable impact on, key characteristics, features or elements of the landscape or townscape
Low	Minor loss of, or alteration to, one or more key landscape / townscape characteristics, features or elements
Very Low	Very minor loss or alteration to one or more key landscape / townscape characteristics, features or elements

Table M4
Magnitude of Change for
Landscape Effects

- Nominal and temporary adverse landscape impacts on tranquillity through increased vehicular traffic and construction vehicles for the duration of the construction on site;
- Adverse impact on the landscape due to the potential presence of additional lighting associated with construction;

6.7 There may also be an assessment of **Cumulative Landscape Effects** where the impact of the proposed scheme is considered in combination with other schemes in the local area. Which schemes are included in this assessment is agreed with the local planning authority.

6.8 For EIA schemes, there is always a cumulative effects assessment, but for non-EIA schemes, such as this, it is optional with a final decision being taken based upon the likely scale of impacts and in discussion with the LPA.

Mitigation

6.9 The proposals may seek to incorporate mitigation into the design to help offset or limit any effects. These measures may be:

- **Embedded Mitigation** - incorporated into the proposed design as a result of early input into the design process by the assessment team (LVIA is an iterative process)

- **Standard Mitigation** - measures that will be included as a matter of course, such as the use of cut-off lighting in sensitive areas.
- **Project-Specific Mitigation** - these are measures unique to the project, such as use of specific materials.

6.10 Mitigation can also be on-site or off-site, but it is generally assumed to be on-site unless specified otherwise. In all cases, a scheme is assessed on the basis that the mitigation will be delivered and secured through a planning condition or similar. In outline schemes, the mitigation will be as shown on any illustrative masterplan or proposals.

6.11 The assessment of impacts on landscape receptors takes into account the proposed mitigation measures, and may specify a year at which the assessment is completed as a result, as mitigation planting will be more impactful in Year 15 than in Year 1. When a year is not specified, it will be assuming the magnitude of effect as it is likely to be experienced in Year 15.

7.0 Assessment of Visual Effects

Visual Baseline

7.1 The visual baseline is the description of the existing qualities of views and visual amenity for the individual visual receptors against which any future changes can be assessed, or visual effects predicted and assessed.

7.2 The visual baseline is established by considering both a desk study of existing sources such as landscape character assessments and OS mapping to identify prominent or promoted views and field work to identify and record the character and extent of the views and the features and aesthetic and perceptual factors which contribute to the general visual amenity.

Visual Receptors

7.3 Visual receptors are defined in GLVIA3 as:

“...people within the area who would be affected by the changes in views and visual amenity”. This is an important point, as the assessment of visual effects will typically use Viewpoints as the basis for assessment, but the viewpoints themselves are not visual receptors. Where the term viewpoint is used in this assessment, it should be read as meaning the visual receptor (person/s) at that location, as stated.

7.4 People will have different responses to views which are dependent upon context such as the:

- Location;
- Time of day;
- Season; and
- Degree of exposure to views.

7.5 Responses to views are also dependent upon the purpose of people being in a particular place such as:

- Recreation;
- Residence;
- Employment; and
- Passing through on roads, rail or other forms of transport.

7.6 As people move through the landscape, certain activities or locations may be specifically associated with the experience and enjoyment of the landscape, such as:

- The use of paths such as footpaths, bridleways, byways and National Trails;
- National or local cycle routes; and
- Tourist or scenic routes, and associated viewpoints on land or water

7.7 It is also important to note that visual experience is generally kinetic experienced as we walk along a path or route - and as such the viewpoint can only ever be a 'snapshot' of the experience. In some cases, such as a designated lookout or scenic viewpoint, the kinetic experience is less important. However, people can also be affected by other senses when experiencing a view - for example a viewpoint in an area with significant noise may seem less 'tranquil' than a similar viewpoint where there is no background noise or disturbance.

Visual Receptor (Viewpoint) Locations

7.8 Identification of potential visual receptor locations is informed by desk and field studies in conjunction with consideration of a Zone of Theoretical Visibility (ZTV) for the proposed development to identify places where people might be expected to receive a view of the proposed development.

7.9 Once receptor locations have been identified, it is necessary to document the following information:

- Assessment of the Value of the Receptor;
- Assessment of the Susceptibility of the Receptor;
- Assessment of the Sensitivity of the Receptor.

7.10 Typically a photographic record of the view experienced from the visual receptor will also be taken as a reference. Details of these representative photographs are set out in Section 4.0 of the methodology.

Visual Receptor Value

7.11 The assessment considers the interest or reason a receptor has in experiencing a view and the value that they can reasonably attach to it. The value attached to views is described as either High, Medium, or Low. Split grades may be possible where resulting value falls between two grade levels, leading to a 5-point scale. **Table M5**, right, gives an indication of the value assigned to views and visual amenity.

7.12 Existing landscape designations can be a general indicator of visual value (especially where scenic beauty is part of the reason for designation) but this cannot be assumed and must be confirmed by assessment on site. Likewise, the lack of an existing designation does not mean a view is without value. Value for designated and undesignated views is assessed during the field survey.

Visual Receptor Susceptibility

7.13 Susceptibility of visual receptors to change in views and visual amenity is derived from the consideration of:

- 1. The occupation or reason why one is experiencing the view or area (Nature of the Viewer); and
- 2. The amount of interest or attention one may have in the view and appearance of the area (Experience of the Viewer).

Nature of the Viewer

7.14 The nature of the viewer is defined by the occupation or activity of the viewer at the viewpoint or series of viewpoints. The most common groups of viewers considered in the visual assessment include residents, motorists and people taking part in

recreational activities or working. Viewers, whose attention and activity is focussed on the landscape, or with static long-term views, are likely to have a higher sensitivity. Viewers travelling in cars or on trains would tend to have lower sensitivity as their view experience is transient and moving. The least sensitive viewers are usually people at their place of work as they are generally less sensitive to changes in views.

Experience of the Viewer

7.15 The experience of the visual receptor relates to the extent to which the viewer’s attention or interest may be focussed on the view and the visual amenity they experience in a particular location. The susceptibility of the viewer to change arising from the

Value	Description
High	Views from and/or visual amenity associated with viewpoints of regional or national importance, or viewpoints that are afforded protection in planning policy. Also popular visitor attractions where views and visual amenity form a key part of the attraction or route, such as Scenic Viewpoints, and where signage and information on a view is provided - potentially including facilities such as seating. Also, inclusion within guidebooks or cultural references is also a sign of a high value receptor location.
Medium	Views from and/or the visual amenity associated with viewpoints of district or local importance, local visitor attractions or public open spaces and routes where views and visual amenity form an integral part of the attraction. The view will have recognisable scenic qualities which are appreciated at a local level, potentially views towards (but not within) a designated landscape.
Low	Views from and/or visual amenity associated with everyday locations or routes that do not benefit from any designation or cultural associations.

Table M5
Visual Receptor Value

Proposed Development may be influenced by the viewer's attention or interest in the view, which may be focussed in a particular direction, from a static or transitory position, over a long or short duration, and with high or low clarity. For example, if the principal outlook from a settlement is aligned directly towards the Proposed Development, the experience of the visual receptor would be altered more notably than if the experience relates to a glimpsed view at an oblique angle from a car travelling at high speed.

7.16 The visual amenity experienced by the viewer varies depending on the presence and relationship of visual elements, features or patterns experienced in the view and the degree to which the landscape in the view may accommodate the influence of the Proposed Development.

7.17 Judgements on visual susceptibility are presented on a three-step scale of Low, Medium or High. Split grades may be possible where resulting value falls between two grade levels. A description and indication of typical receptors associated with the grades of visual susceptibility are described in **Table M6**, right.

Typical Receptors	Grade & Description
<ul style="list-style-type: none"> Residents at home; People whether residents or visitors, who are engaged in outdoor recreation, including the use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views; Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience; and Communities where views contribute to the landscape setting enjoyed by residents in the area; 	High - Little or no ability to accommodate change caused by development without adverse consequences for the visual receptor group experiencing the view/ and or general visual amenity.
<ul style="list-style-type: none"> Travellers on road, rail or other transport routes along scenic routes, where the appreciation of the view contributes to the enjoyment and quality of the journey; and Users of public rights of way where the view is of moderate interest. 	Medium - Some ability to accommodate change caused by development without adverse consequences for the visual receptor group experiencing the view/ and or general visual amenity.
<ul style="list-style-type: none"> Travellers on road, rail or other transport routes, where the view is fleeting and incidental to the journey; People engaged in outdoor recreation where the view is not part of the recreational experience; and People at their place of work, whose attention may be focussed on their work or activity, not on their surroundings; and where the setting is not important to the quality of working life. 	Low - An ability to accommodate change caused by development without adverse consequences for the visual receptor group experiencing the view/ and or general visual amenity

Table M6

Visual Susceptibility Grades

Visual Receptor Sensitivity

7.18 Visual Sensitivity is derived from combining the judgements of value of a view or visual amenity and susceptibility of the visual receptor together. It is itself carried forward to determine the significance of visual effect.

7.19 The assessment provides a clear rationale for both the existing value of the view or visual amenity and its susceptibility to change arising from the type of development proposed. The rationale is the record of why a visual receptor's sensitivity has been graded in a particular way, and whilst determination of sensitivity is based on professional judgement, high value/high susceptibility receptors are likely to be highly sensitive to change, with lower value and/or low susceptibility receptors being likely to be of low sensitivity to change.

7.20 Again, a three-point scale is used to define landscape receptor sensitivity, however it includes split grades which effectively makes it a five-point grading system. To allow easier inspection and review of the assessment process, the sensitivity matrix at **Table M7**, right, is used to help determine visual receptor sensitivity.

Category + Grade		Susceptibility				
		High	High - Medium	Medium	Medium - Low	Low
Value	High	Very High	High	High / Medium	Medium	Medium
	High - Medium	High	High / Medium	Medium	Medium	Medium
	Medium	High / Medium	Medium	Medium	Medium	Medium / Low
	Medium - Low	Medium	Medium	Medium	Medium / Low	Low
	Low	Medium	Medium	Medium / Low	Low	Very Low

Table M7 - Visual Receptor Sensitivity Matrix

Magnitude of Visual Change

7.21 The magnitude of visual change is an expression of the scale of change that would result from the visibility of the Project. In assessing the magnitude of change, the assessment focusses on the following five factors:

1. Size or scale of the proposed development;
2. Geographical extent of the effect;
3. Contrast or integration with the existing landscape character;
4. Duration of effects; and
5. Reversibility.

7.22 The size or scale of the magnitude of landscape effects relates to the loss or addition of features to the particular landscape receptor likely to be caused by the development. The assessment takes into account:

- The extent/proportion of the landscape element that is lost or added;
- The contribution of that element to the character of the landscape;
- The revised setting of the landscape or landscape element resulting from the development;
- The degree to which aesthetic or perceptual aspects of the landscape receptor are altered; and
- Whether the effect changes the key characteristics of the landscape, which are critical to its distinctive character.

7.23 The geographical extent over which the landscape effects occur is distinct from the size or scale. For example, large scale effects may be limited to the immediate site area. The geographical extent, where noted, is defined as:

- **Wide** - Influencing several landscape character areas.
- **Medium** - Landscape character area in which the site lies.
- **Local** - The Site and immediate surrounds.
- **Site** - Only the Site level of the development itself.

7.24 The contrast with the character and context within which the Proposed Development would be seen and the degree of contrast or integration of any new features with existing landscape elements, in terms of scale, form, mass, line, height, colour, luminance, and motion. Developments which contrast or appear incongruous in terms of colour, scale, and form are likely to be more visible and have a higher magnitude of change.

7.25 The duration of effects is classified as short, medium or long term. Unless otherwise stated the durations are typically defined as:

- Short term: 0-5 years
- Medium term: 5 – 15 years
- Long term: more than 15 years

7.26 Reversibility is different from duration and passes a judgement about whether the landscape effect is reversible or not. It is judged on a scale of reversible, partially reversible, or permanent.

7.27 All of these factors are considered together, to derive an overall magnitude of change for each receptor, which is determined by the use of professional judgement. The magnitude of effect is presented on a four-point scale of High, Medium, Low and Very Low.

7.28 An additional option of ‘No Change’ may be used where the proposals would not be visible in the view. A description of the magnitude categories is described below in **Table M8**.

Magnitude	Description
High	The proposals would cause a complete or very large change in the view, resulting from the loss of important features in or the addition of significant new ones, to the extent that this would substantially alter the composition of the view and the visual amenity it offers. Views are often full or sequential, and the angle of view in relation to the main activity of the receptor is wide. The distance of the viewpoint from the development is close up and/or the extent of the area over which the changes would be visible is large.
Medium	The proposals would cause a noticeable change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would alter, to a moderate degree, the composition of the view and the visual amenity it offers. Views may be partial/intermittent, and the angle of view in relation to the main activity of the receptor is moderate. The distance of the viewpoint from the development is moderate and/or the extent of the area over which the changes would be visible is moderate.
Low	The proposals would cause a perceptible change in the view, resulting from the loss of features or the addition of new ones, to the extent that this would partially alter the composition of the view and the visual amenity it offers. Views may be partial only and the angle of view in relation to the main activity of the receptor is tangential. The distance of the viewpoint from the development is significant and/or the extent of the area over which the changes would be visible is slight.
Very Low	The proposals would cause a barely perceptible change in the view, which may result from the loss of features or the addition of new ones, to the extent that this would barely alter the composition of the view and the visual amenity it offers. Views may be glimpsed only, or the angle of view in relation to the main activity of the receptor is slight. The viewpoint is distant from the development and/or the extent of the area over which the changes would be visible is barely perceptible.

Table M8
Magnitude of Effect for
Visual Receptors

8.0 Evaluation of Significance

8.1 The assessment of the significance of effect is derived by combining the professional judgements of sensitivity and magnitude of effect for each landscape and visual receptor. To aid in this process a matrix (as seen in **Table M9**, below) is used. However, in line with the emphasis placed in GLIVIA3 on professional judgement, an overly mechanical use of the matrix is avoided through the provision of accompanying narrative and rationale for the assessments for each landscape and visual receptor. Such narrative assessments provide a level of detail over and above the outline assessment provided by the matrix alone.

8.2 The landscape and visual assessment unavoidably involves a combination of quantitative and qualitative assessment, and where possible cross reference is made to objective evidence. Photomontage visualisations will also be used where appropriate to support the visual assessment conclusions.

8.3 On complex or major schemes, a consensus of professional opinion will be sought through consultation, internal peer review and the adoption of a systematic, impartial and professional approach. Importantly, each effect results from its own unique set of circumstances and is assessed on a case-by-case basis. The matrix presented in **Table M9** is therefore only a guide, and

		Landscape & Visual Sensitivity				
		Very High	High	Medium	Low	Very Low
Magnitude of Effect	High	Major	Major / Moderate	Moderate	Moderate	Minor
	Medium	Major / Moderate	Moderate	Moderate	Minor	Minor / Negligible
	Low	Moderate	Moderate	Minor	Minor / Negligible	Negligible
	Very Low	Moderate	Minor	Minor / Negligible	Negligible	Negligible

Table M9
Landscape & Visual
Significance Matrix

deviation or decisions in those cases where the matrix suggests multiple or intermediate rating are possible, will be set out in the accompanying narrative. Significant landscape and visual effects are those in the highlighted boxes in **Table M9** and they relate to all those effects that result in a 'Major' or 'Major / Moderate' level of effect. In some circumstances, 'Moderate' level effects may also be considered significant by the assessor, and in this situation it will be explained in the assessment.

8.4 To aid with the decision making around significance of effect, **Table M10**, right, sets out the broad descriptions that are used to categorise effects, based on the matrix. It should be noted that the table is only used as a 'guide' and never used to replace professional judgement, particularly in instances when assessing the nature of an effect (i.e. adverse, neutral or beneficial). Its purpose is solely to ensure consistency of approach and results.

Table M10
Significance of Effect Descriptions

Significance of Effect	Landscape	Visual
Major	The proposals will result in a total change in the key characteristics of the receptor or alterations to the quality and integrity of the landscape receptor such that the proposals are the dominant element markedly altering the baseline landscape context.	The proposals will result in a total change in view or introduce/ alter elements, features or characteristics where the baseline visual context markedly alters with the proposals becoming the dominant visual element.
Moderate	The proposals will result in a prominent change in the key characteristics of the receptor or partial alterations to the quality and integrity of the landscape receptor but where the baseline landscape context remains.	The proposals will result in a large change in view or introduce/ alter elements, features or characteristics where the baseline visual context alters with the proposals being one of the principal visual elements.
Minor	The proposals will result in a notable change in the key characteristics of the receptor or partial alterations to the quality and integrity of the landscape receptor but where the baseline landscape context remains.	The proposals will result in a noticeable change in view or introduce/ alter elements, features or characteristics but where the baseline visual context remains.
Negligible	The proposals will result in a small and barely perceptible change in character of the receptor that is discernible but does not alter its key characteristics or will alter the quality and integrity of the landscape receptor in a small way.	The proposals will result in some very small change in view/ areas visual amenity or introduce/ alter elements, features or characteristics in a barely perceptible way.

Nature of Effects

8.5 In addition to the scale of significance, the nature of each effect is also considered as part of the assessment. Guidance provided in GLVIA3 on the nature of effects states that “*..in the LVA, thought must be given to whether the landscape effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity*”. However, no formal guidance on how to do this is given, so identifying the nature of effect requires interpretation and reasoned professional opinion.

8.6 Typically, the LVIA will categorise based on three types of effect, which for this assessment are defined as:

- **Beneficial** effects contribute to the landscape and visual resource through the enhancement of desirable characteristics or the introduction of new, beneficial attributes. The removal of undesirable existing elements or characteristics can also be beneficial, as can their replacement with more appropriate components.
- **Neutral** effects occur where the development fits with the existing landscape character or visual amenity. The development neither contributes to nor detracts from the landscape and visual resource and can be accommodated with neither beneficial or adverse effects, or where the effects are so limited that the change is hardly noticeable.

- **Adverse** effects are those that detract from the landscape character or quality of visual attributes experienced through the introduction of elements that contrast, in a detrimental way, with the existing characteristics of the landscape and visual resource, or through the removal of elements that are key in its characterisation.

8.7 The effects may also be assessed using other metrics such as whether the effect is direct or indirect, the anticipated duration of the effect and any cumulative effects that may be experienced. The assessment of these is dependent on the specifics of the proposed development, and the receptors being assessed. As such, they may not always be separately stated in the assessment report.

Construction Effects

8.8 In addition to the operational phase effects described in the main assessment, it is normally anticipated that there will be additional landscape and visual impacts associated with the construction phase of the project. These effects will be short-term in nature, and fully reversible - if they are not, then they should be incorporated into the main assessment. The assessment will set out what construction effects are anticipated for the Proposed Development, and identify if any Significant Adverse impacts are predicted.

Cumulative Assessment

8.9 The assessment of potential landscape and visual impacts is primarily focused upon the proposed development placed within its landscape context. However, there may be effects which arise as a result of the proposed development in combination with other proposed (consented) but not yet built developments in the area. These are known as cumulative effects are described as *"..the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together."*

8.10 In carrying out landscape assessment it is for the author, in discussion with the Local Planning Authority, to form a judgement on whether or not it is necessary to consider any other planned developments and to form a judgement on how these could potentially affect a project.

8.11 Typically, cumulative landscape effects are determined using the same methodology as prescribed above in landscape effects in line with paragraph 7.27 of GLVIA3, and cumulative visual effects are determined using the same methodology as prescribed above in visual effects in line with paragraph 7.37 of GLVIA3. An assessment of whether the effects are combined (in combination/in succession, or sequential (frequently or occasionally) as per box 7.1 of GLVIA3 will be used where such assessment is appropriate.

