

Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK NORTH (ILPN)

Intermodal Logistics Park North (ILPN) Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Preliminary Environmental Information Report (PEIR)

Appendix 10.1: Landscape and Visual Impact Assessment Methodology

October 2025

Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

This document forms a part of a Preliminary Environmental Information Report (PEIR) for the Intermodal Logistics Park North (ILPN) project.

A PEIR presents environmental information to assist consultees to form an informed view of the likely significant environmental effects of a proposed development and provide feedback.

This PEIR has been prepared by the project promoter, Intermodal Logistics Park North Ltd. The Proposed Development is described in Chapter 3 of the PEIR and is the subject of a public consultation.

Details of how to respond to the public consultation are provided at the end of Chapter 1 of the PEIR and on the project website:

<https://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north/>

This feedback will be taken into account by Intermodal Logistics Park North Ltd in the preparation of its application for a Development Consent Order for the project.

Appendix 10.1 ♦ Landscape and Visual Impact Assessment Methodology

GUIDANCE

- 1.1 The methodology and criteria used for this assessment of landscape and visual effects has been developed based on the non-prescriptive Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013 (GLVIA3). GLVIA3 sets out the principles that underpin landscape and visual assessment but does not provide a strict formula to reach judgements about level of effect and significance. Such judgements instead rely on reasoned argument and experienced professional judgement.
- 1.2 The following additional guidance has also informed detailed aspects of the approach taken to the assessment of the Scheme:
 - Natural England (2014) *An Approach to Landscape Character Assessment*.
 - The Landscape Institute (2016) *Technical Guidance Note 08/15: Landscape Character Assessment*.
 - The Landscape Institute (2017) *Technical Information Note 01/2017: Tranquillity – An Overview*.
 - The Landscape Institute (2019) *Technical Guidance Note 06/19: Visual Representation of Development Proposals*.
 - The Landscape Institute (2020) *Technical Guidance Note 04/2020: Infrastructure*.
 - The Landscape Institute (2021) *Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations*.
 - The Landscape Institute (2024) *Technical Guidance Note LITGN-2024-01: Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition*.
- 1.3 The methodology used for this assessment is based on this guidance, with primary reference to GLVIA3. This methodological approach focuses on proportionality in the assessment and the identification of likely significant landscape and visual effects. The adopted assessment methodology has focused on providing appropriate environmental information regarding the following potential landscape and visual impacts of the Proposed Development:
 - the construction of the Proposed Development, including site clearance operations. As the Proposed Development would be constructed in a series of planned phases with early phases of warehousing proposed to be delivered prior to the rail terminal becoming operational. All proposed environmental mitigation would be implemented by Year 0, on the opening of the first phase of operation; and

- the permanent installation of a rail freight terminal, warehouses and associated infrastructure within an area of predominantly open arable fields, set within existing large-scale road and rail infrastructure.

THE PURPOSE OF THE ASSESSMENT

- 1.4 Landscape and Visual Impact Assessment (LVIA) is a tool used to systematically identify and assess the nature and significance of the effects of a proposed development upon the landscape and upon people's views. Through an iterative design process, it can also inform changes to the development and evolution of mitigation strategies, minimising effects wherever possible.
- 1.5 GLVIA3 states that, initially, the sensitivity of landscape and visual receptors should be considered, which comprises judgements about:
- the susceptibility of the receptor to the type of change arising from the specific proposal; and
 - the value attached to the receptor.
- 1.6 Secondly, it states that the magnitude of the effect should be considered, which comprises judgements about:
- the scale of the effect;
 - the geographical extent of the area or view that will be affected;
 - the duration of the effect; and
 - the reversibility of the effect.
- 1.7 The following table (Table 1.1) provides an overview of these factors which contribute to the assessment of landscape and visual effects. It specifically identifies the six principal considerations that are considered in reaching a conclusion on the level of effect.

Table 1.1 Considerations in the overall assessment of level of landscape and visual effect

Sensitivity (Nature of the Receptor)		Magnitude of Effect (Nature of the Effect)			
Susceptibility	Value	Scale of Effect	Extent of the Effect	Duration of the Effect	Reversibility of the Effect
High	High	High	Extensive	Long-term	Irreversible
Medium	Medium	Medium	Limited	Medium-term	Partially

Sensitivity (Nature of the Receptor)		Magnitude of Effect (Nature of the Effect)			
Low	Low	Low	Localised	Short-term	Reversible
		Negligible			Reversible
		No Change			

1.8 With reference to GLVIA3 and Technical Guidance Note LITGN-2024-01, this LVIA has taken the ‘sequential combination’ approach, whereby:

- susceptibility to change and value have been combined into an assessment of sensitivity for each receptor;
- scale, geographical extent, duration and reversibility of each effect have been combined into an assessment of magnitude of each effect; and
- sensitivity and magnitude have then been combined to a judgement regarding the overall level of effect.

1.9 Detailed criteria are provided subsequently within this methodology for the six main landscape and visual considerations listed in Table 1.1 along with an explanation of how these varied considerations are combined to reach an overall professional judgement on sensitivity, magnitude, level of effect and significance. Separate criteria are provided for landscape and for visual effects.

1.10 Professional judgement will be applied transparently: for each receptor, the assessment will separately set out susceptibility and value with justification, and separately set out scale, extent, duration and reversibility with justification, before combining to a final effect judgement.

1.11 Whilst Chapter 10 presents a summary of the level and significance of effects on landscape and visual receptors, the detailed reporting of the six main considerations listed in Table 1.1 is presented for each receptor in the relevant appendices to Chapter 10, i.e. PEIR Appendix 10.3, which comprises the assessment of effects on landscape character areas; and PEIR Appendix 10.4, which comprises the assessment of effects on representative viewpoints.

LANDSCAPE ASSESSMENT RECEPTORS AND CRITERIA

Landscape Receptors

- 1.12 Landscape receptors in this assessment comprise landscape character areas. Consideration has been given to landscape elements, principally landform, watercourses, woodlands, trees and hedgerows, as landscape receptors. However, while any notable change to landscape elements has been documented in the assessment, this provides a consideration within the narrative of the assessment of effects on landscape character. For example, the potential loss of hedgerow within the Site has been documented and the potential influence of that loss on the character area within which it falls has been described. Equally, where new landscape features have been proposed as embedded mitigation, such as trees and hedgerow, they have also been considered as part of the assessment of long-term effects on landscape character.
- 1.13 There are no designated landscapes within the study area and therefore designations do not form part of the identification of landscape receptors.

Landscape Sensitivity Criteria (Nature of the Receptor)

- 1.14 The sensitivity of landscape receptors identified in the landscape assessment (i.e. landscape character areas) is assessed as a combined judgement of their susceptibility to the type of change proposed and the value attached to the landscape. The assessment of sensitivity has been expressed using a three point scale of **High**, **Medium** or **Low**, as are the individual judgements regarding susceptibility and value. Where professional judgement suggests it is required, intermediate levels of sensitivity have been expressed to refine the assessment, i.e. Low to Medium or Medium to High. 'Negligible' and 'No' levels of susceptibility, value and sensitivity are excluded from the scale as it is considered that all landscapes possess some sensitivity to change, whether that is documented or not.
- 1.15 When combining susceptibility to change and value, the following consistently applies:
- a landscape character area which is considered to be of High susceptibility to change and High value would be assessed as being of High sensitivity;
 - a landscape character area of Medium susceptibility and Medium value would be assessed as being of Medium sensitivity; and
 - a landscape character area of Low susceptibility and Low value would be assessed as being of Low sensitivity.
- 1.16 However, the relationship between susceptibility to change and value can be complex and is not typically linear. For example, a landscape character area within a High value landscape, such as a National Park, may demonstrate Low susceptibility to change. Equally, a landscape character area which is judged to be of Low value, could demonstrate High susceptibility to change. The final assessment of sensitivity is therefore one of professional judgement based on clear descriptions of susceptibility to change and value in the landscape assessment.

Susceptibility

1.17 The characteristics of different landscape areas have been considered in relation to the following indicators of higher susceptibility to the changes likely to be associated with the introduction of the Proposed Development:

- **Scale:** A larger scale landscape (relative to the development proposed) will typically be less susceptible to change than a smaller scale landscape.
- **Openness:** A landscape which is more enclosed may be more susceptible to change than a more open landscape.
- **Pattern/Complexity:** The susceptibility of a receiving landscape to change will be influenced by the specific pattern of features and elements present and by the complexity of this pattern. A simpler landscape pattern will typically be more susceptible than a complex one. With specific reference to a rail freight terminal and warehousing development in a relatively flat landscape, the nature of the landscape pattern relative to the form of the development may be an important factor in the final design.
- **Development/Human Influence:** A landscape that includes obvious alterations to natural ground levels, includes many contemporary development elements or structures, or that is clearly functional/utilitarian in its land use will typically be less susceptible to change that introduces contemporary structures, as opposed to a landscape where development is either absent or more traditional in style, or where natural influences and natural or long-established landforms are predominant.
- **Connections with adjacent areas:** A landscape which has a clear relationship with other surrounding landscapes, for example in relation to views in and out, will typically be more susceptible to change than one that is more enclosed where such intervisibility not present.
- **Visual Interruption:** A landscape where views are frequently interrupted by screening features, for example vegetation cover or variations in landform, will typically be less susceptible to change than one where there are few screening features.

1.18 A particular landscape character area may have different characteristics that are more or less susceptible to change. As such, the overall susceptibility to change is allocated using professional judgement based upon consideration of the various factors outlined above and the relative weight attached to these (which will vary from landscape to landscape). The rationale in support of the assessment of susceptibility is set out for each receptor in the assessment, so that it is clear how each judgement has been made.

Value

1.19 The value (or importance) of different landscape areas to people is independent of any development proposal. The absence of a formal landscape designation does not necessarily imply that a landscape is of lower value. Value is defined in the GLVIA3 as:

1.20 [5.19] "...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...Landscapes or their component parts may be valued at the community, local, national or international levels...":

- factors that can help in identifying valued landscapes include:
- presence/absence of statutory landscape designations;
- presence/absence of local landscape designations and associated policies;
- landscape quality/condition;
- scenic quality;
- rarity of particular elements/features;
- representativeness;
- conservation interest;
- recreation value;
- perceptual aspects; and
- cultural associations.

Combined Judgement Regarding Sensitivity

1.21 Sources of evidence to inform judgements on value will include citations for national and local landscape designations; local and neighbourhood plans; Conservation Area appraisals; public right of way information; visitor facility records; local historic environment records; and consultee or community evidence where available. Where documentary evidence is limited, the rationale for the value judgement will be clearly explained.

1.22 Judgements regarding value in this LVIA follow these principles:

- High value would typically refer to a landscape which has nationally recognised value, such as National Parks and National Landscapes, which are national designations;
- Low value would typically refer to a landscape which has local value and typically there would be an absence of documented evidence of value, such as a designation.
- Between these judgements, it is for professional judgement to determine where other landscapes sit with regards their landscape value. For example, a landscape which includes a well-used park or walking trail which attracts visitors, may be attributed a Medium level of value.

Magnitude of Landscape Effect Criteria (Nature of the Effect)

- 1.23 The nature of the landscape effect that is likely to occur, i.e. its magnitude, is determined by considering four separate factors, namely: scale or size; the extent of the view influenced; its duration; and its reversibility. These four factors are combined to derive an overall magnitude of effect for each receptor, which is determined by use of professional judgement. The assessment treats scale/size as the primary factor. Extent, duration and reversibility are then considered as modifiers to that scale judgement. Where modifiers indicate materially greater or lesser likely effects, the assessor has adjusted the scale (e.g. Medium, modified to Medium to High) and provided justification.
- 1.24 With reference to LITGN-2024-01, clarification point 3(3) states:
- “For magnitude of effect, it is likely that the size/scale of effect will be the most important factor, with geographical extent and duration/reversibility considered as ‘modifiers.’*
- 1.25 The assessment of magnitude of visual effect has been expressed using a five point scale of **Large, Medium, Small, Negligible** and **No Change**. Where professional judgement suggests it is required, intermediate levels of magnitude have been expressed to refine the assessment, i.e. Small to Medium or Medium to Large.
- 1.26 Whilst scale of effect retains the same criteria, geographical extent, duration and reversibility each have different criteria, which are set out subsequently.

Scale of Landscape Effect

- 1.27 The scale, or size, of landscape effect likely to arise as a result of the Scheme within different landscape areas is categorised as **High, Medium, Low, Negligible** or **No Change**.
- 1.28 Scale, or size, of effect, forms the most important factor in the judgement regarding magnitude of effect.
- 1.29 The assessment of landscape change takes account of: elements that are taken away from the landscape; elements that are added to the landscape; and the degree to which this would result in a change to landscape character. The assessment therefore reflects the level of ‘consistency’ or ‘fit’ between the existing baseline characteristics of the landscape and anything introduced into it by the Scheme. This assessment has adopted the following terminology and criteria:
- High scale of landscape effect: the Scheme would form a dominant or highly prominent landscape element and/or would result in substantial alteration to, or inconsistency with, an area’s key landscape characteristics.
 - Medium scale of landscape effect: the Scheme would form a reasonably conspicuous landscape element and/or would result in some alteration to, or inconsistency with, an area’s key landscape characteristics.
 - Low scale of landscape effect: the Scheme would form a reasonably inconspicuous landscape element and/or would result in only minor alteration to, or inconsistency

with, an area's key landscape characteristics.

- Negligible: The Scheme would comprise a barely perceptible landscape element and/or would not change an area's key landscape characteristics.
- No Change: The Scheme would not give rise to any direct or indirect change to an area's landscape characteristics.

Extent of Landscape Effect

- 1.30 Consideration of the geographical extent of landscape effect refers to the extent over which a change in landscape character might be experienced. With reference to LITGN-2024-01, clarification point 5(11) states:

"The Panel suggests that geographical extent should reflect the relevance of the location (for example it may more strongly or weakly manifest one of the key characteristics than other areas, or it may have a geographic role in connecting parts of the receptor) and the spread of effects, as a 'modifier' to the scale of effect so that it does not understate the magnitude of effects for extensive receptors such as large character areas or designations."

- 1.31 The extent of landscape effect that is likely to arise as a result of the Scheme upon landscape areas is categorised as **Extensive, Limited or Localised**. It is not possible to provide consistent criteria for these descriptive terms that apply in every instance (i.e. to different types of landscape receptors), however the extent of landscape effect is therefore described and explained within the assessment.

Duration of Landscape Effect

- 1.32 The duration of the landscape effect likely to arise as a result of the Scheme on landscape elements or within different landscape areas is categorised as **Long-term, Medium-term or Short-term**. This consideration is used to qualify and contextualise the assessment of scale of landscape effect and therefore informs the overall judgement regarding level of effect. The following definitions have been adopted within this assessment:

- Long-term landscape effect: a change typically lasting more than 15 or more years.
- Medium-term landscape effect: a change typically likely to persist for more than three years but no greater than 15 years.
- Short-term landscape effect: a change unlikely to persist for more than three years.

- 1.33 Long-term effects are of sufficient length that they may be considered in some instances to have similar influence as a permanent effect on the consideration of overall level of landscape effect. However, it is important that a distinction is made between a truly permanent effect and one which is long-term to ensure there is clarity when subsequently considering reversibility of the effect. Duration and reversibility of effect are separate but interlinked considerations and so it is important that clarity on terminology used supports their different influence on the overall effect.

Reversibility of Landscape Effect

- 1.34 The reversibility of a landscape effect relates to the prospects and practicality of an effect being able to be wholly or partially reversed, or whether the change cannot realistically be reversed, i.e. it is permanent. This is categorised as **Irreversible, Partially reversible or Reversible**.
- 1.35 Whatever the expected duration of a landscape effect, consideration of reversibility relates to whether a landscape effect could be reversed rather than whether it will be reversed. This enables a distinction to be made between a landscape change which is expected to be permanent but could nevertheless be removed without residual effect should the source of the change (e.g. solar panels and wind turbines) become unexpectedly obsolete or reach the end of a time limited period of operation which is followed by a pre-planned decommissioning phase, and a landscape change that is practicably irreversible (e.g. a quarry). The following criteria have been adopted within this assessment:
- Irreversible: For example introduction of built development which requires intensive engineered elements (foundations, masonry etc) and/or requires major changes in landform and/or the removal of landscape elements, such as veteran trees, that could not be easily replicated.
 - Partially reversible: Effects that could be largely reversed within approximately twenty years, for example the recreation of a hedgerow or semi-mature woodland of similar species mix and character.
 - Reversible: Effects that do not require the fundamental alteration of landform or the removal of landscape elements, such as trees, and any changes that could be reversed within a reasonably short duration for example the recreation of an area of grassland or juvenile woodland. Reversibility in terms of built development considers whether there is fundamental alteration to the underlying landscape, such as through the introduction of impermeable surfaces, concrete and masonry. In the case of a rail freight terminal and warehousing, the construction would typically require earthworks which would be considered irreversible.

VISUAL ASSESSMENT RECEPTORS AND CRITERIA

Visual Receptors

- 1.36 The assessment of visual effects considers how changes in the landscape affects views experienced by people. Visual receptors in this assessment comprise the following categories:
- People in residential properties.
 - Users of public rights of way.
 - Users of community facilities.
 - People using roads.
 - People in their places of work, i.e. employment sites.
- 1.37 An understanding of how these receptors are likely to be visually affected is informed by a detailed assessment of the visual effects at representative viewpoints provided in PEIR Appendix 10.4. These viewpoints often represent effects on more than one category of visual receptor (e.g. both residential properties and a road). Further explanation of how the representative viewpoints have been used in this assessment is provided towards the end of this methodology. (Section 4). In addition, an assessment of visual effects on visual receptors is provided in PEIR Appendix 10-5.
- 1.38 Whilst the detailed visual assessment of effects is provided in PEIR Appendix 10.4, Appendix 10.5 provides a more extensive listing of different types of receptors and utilises the detailed visual assessment provided in Appendix 10.4. The conclusions reached regarding visual effects on each of the viewpoints included in Appendix 10.4 are based on comprehensive descriptions of sensitivity (susceptibility and value) and magnitude of effect (scale, extent, duration and reversibility). This document however, comprises a combination of references to relevant summary information from Appendix 10.4 and supplementary summary narrative to ensure that visual effects have been presented in an accessible form for each of the key receptors within the study area, such as settlements and footpaths.

Visual Sensitivity Criteria (Nature of the Receptor)

- 1.39 The sensitivity of visual receptors identified in the assessment (i.e. people) is assessed as a combined judgement of their susceptibility to change and the value attached to their view. The assessment of the sensitivity is expressed using a three point scale of **High**, **Medium** or **Low**, as are the individual judgements regarding susceptibility and value. Where professional judgement suggests it is required, intermediate levels of sensitivity have been expressed to refine the assessment, i.e. Low to Medium or Medium to High. 'Negligible' and 'No' levels of susceptibility, value and sensitivity are excluded from the scale as it is considered that all people possess some sensitivity to change in their view, whether that is documented or not.
- 1.40 When combining susceptibility to change and value, the following consistently applies:
- a visual receptor considered to be of High susceptibility to change and High value would

be assessed as being of High sensitivity;

- a visual receptor of Medium susceptibility and Medium value would be assessed as being of Medium sensitivity; and
- a visual receptor of Low susceptibility and Low value would be assessed as being of Low sensitivity.

1.41 However, the relationship between susceptibility to change and value can be complex and is not necessarily linear. For example, there could be a visual receptor with a highly-valued view, such as a view across a designated landscape, which demonstrates low susceptibility to change, due to their immediate view of a busy road. Equally, a view which includes no documented evidence of value and is therefore judged to be of low value, which could demonstrate high susceptibility to change. The final assessment of sensitivity is one of professional judgement based on clear descriptions of susceptibility to change and value in the visual assessment.

Susceptibility

1.42 The susceptibility of a visual receptor to the potential visual effects of the Scheme relates to the expectations of people in different locations and engaged in different activities. This is largely determined by the category of visual receptor, e.g. resident, footpath user, road user or other.

1.43 Within the assessment, the typical categories of visual receptor are generally regarded to display the following levels of visual susceptibility:

1.44 Higher visual susceptibility:

- Residents, including standalone properties in open rural locations and properties known to be used as holiday lets.
- Public right of way and designated trail users, including pedestrians, cyclists and some horse riders. Open countryside is generally agreed to be associated with recreational or tourist use and users are of higher level of susceptibility to change, albeit some routes are evidently more functional, as is discussed subsequently.
- Promoted viewpoints, whether pedestrian or vehicular, based on the view being the focus of the location for visitors.
- Other tourist or recreational locations where visual amenity is likely to be highly valued (possibly including publicly accessible locations of historic interest).
- Publicly accessible ornamental parks and gardens which are designed for their views.

1.45 Medium visual susceptibility:

- Residents in built up locations with lower levels of visual amenity.

- Incidental footpath users of routes that are: more functional, i.e. used to travel between two locations, in contrast to a scenic route used purely for recreation; in less scenic areas of countryside, perhaps such as large-scale arable landscapes; or in built up areas.
- Routes well used by cyclists and horse riders, where the clear focus is on sport/activity or transport rather than visual amenity.

1.46 Lower visual susceptibility:

- People in their places of employment.
- Open spaces principally used for sport.
- Road users in cars using routes that are not generally associated with recreational or tourist use and views are considered to be less scenic.

Value

1.47 In accordance with paragraph 6.37 of GLVIA3, judgements regarding value attached to the views experienced by visual receptors take account of:

- Recognition of the value attached to particular views, for example in relation to landscape designations, heritage assets or through planning designations.
- Indicators of the value attached to views 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.

1.48 Judgements regarding value in this LVIA follow these principles:

- High value would refer to a view across a landscape which has clear documented evidence of value, and typically comprise nationally recognised value, such as a view of part of a National Park or National Landscape, which are national designations;
- Low value would typically refer to a view across a landscape which has local value and typically there would be an absence of documented evidence of value, such as a designation.
- Between these judgements, it is for professional judgement to determine where other views sit with regards their value and for this to be recorded clearly within the visual assessment. An example would be users of a regionally recognised Long Distance Trail which is assumed to be popular for walkers and may be attributed a medium level of value.

1.49 Clarifications within Technical Guidance Note LITGN-2024-01 which are of relevance to value, and which form part of this methodology are:

- Clarification 6(3) states that the 'value' aspect of visual sensitivity relates to the view and not the receptor;

- Clarification 6(3) also highlights that scenic quality and documented recognition of value which reflects its “value to society” are different considerations: *“Where the scenic quality of a view is not locally recognised or documented (reflecting its value to society) the assessor needs to provide clear explanation for their judgements.”*
- Clarification 6(4) refers to the attributing of value to views experienced by residential receptors and states that: *“In residential areas there may be indications that a specific view is valued, for example as identified in a Conservation Area appraisal or Local/Neighbourhood Plan, or a bench placed in a particular location within a settlement to provide an attractive view or composition of features.”*

Magnitude of Visual Effect Criteria (Nature of the Effect)

- 1.50 The nature of the visual effect that is likely to occur, i.e. its magnitude, is determined by considering four separate factors, namely: scale or size; the extent of the view influenced; its duration; and its reversibility. These four factors are combined to derive an overall magnitude of effect for each receptor, which is determined by use of professional judgement. The assessment treats scale/size as the primary factor. Extent, duration and reversibility are then considered as modifiers to that scale judgement. Where modifiers indicate materially greater or lesser likely effects, the assessor has adjusted the scale (e.g. Medium, modified to Medium to High) and provided justification.
- 1.51 With reference to LITGN-2024-01, clarification point 3(3) states:
- “For magnitude of effect, it is likely that the size/scale of effect will be the most important factor, with geographical extent and duration/reversibility considered as ‘modifiers.’”*
- 1.52 The assessment of magnitude of visual effect has been expressed using a five point scale of **Large, Medium, Small, Negligible** and **No Change**. Where professional judgement suggests it is required, intermediate levels of magnitude have been expressed to refine the assessment, i.e. Small to Medium or Medium to Large.
- 1.53 Whilst scale of effect retains the same criteria, geographical extent, duration and reversibility each have different criteria, which are set out subsequently.

Scale of Visual Effect Criteria

- 1.54 The scale of visual effect likely to arise as a result of the Scheme for different visual receptors is categorised as **High, Medium, Low, Negligible** or **No Change** and is determined by considering the following:
- the scale of change in view, in respect of the loss of or addition of features, and change in composition, including the proportion of the view occupied by the development;
 - the degree of contrast or integration of new features or other changes; and
 - the nature of the view and whether the views would be full, partial or glimpsed.
- 1.55 This assessment has adopted the following terminology and criteria:

- High scale of visual effect: The visual changes associated with the Scheme would form a dominant or highly prominent element within the view and/or result in substantial change to the quality and character of the available view.
- Medium scale of visual effect: The visual changes associated with the Scheme would form a reasonably conspicuous element within the view and/or result in some noticeable change to the quality and character of the available view.
- Low scale of visual effect: The visual changes associated with the Scheme would form a visible but only very minor element within the view, without materially affecting the overall quality and/or character of the available view.
- Negligible: The visual changes to the existing available view associated with the Scheme would be barely discernible.
- No change: The Scheme would not be visible from this receptor.

Extent of Visual Effect

1.56 The geographical extent of a visual effect will vary from viewpoint to viewpoint and will reflect the following:

- the angle of view in relation to the main activity of the receptor;
- the distance from the proposed development; and
- the extent over which change in view would be visible.

1.57 Where relevant, the extent of visual effect likely to arise as a result of the Scheme is categorised as Extensive, Limited or Localised. It is not possible to provide consistent criteria for these descriptive terms that apply in every instance. Instead, the terms are used in the assessment of visual effects as qualifiers that contextualise the assessment of individual viewpoints and receptors and provide reasoning within the combined assessment of significance.

1.58 LITGN-2024-01 provides Clarification 6(8) regarding geographical extent for visual receptors and states:

“Geographical extent should reflect the relevance of the location and spread of effects, as a ‘modifier’ to the scale of effect so that it does not understate the magnitude of effects for extensive receptors such as people using long-distance footpaths. For example, in considering views from a long distance footpath it may be relevant to consider both the frequency of use of particular parts of the route and the degree to which visibility arises from those parts of the route. Open views of a development from long stretches of a more frequently used section would be expected to contribute to a greater extent (and magnitude) of effect than a glimpsed view from an overgrown section with little sign of recent use. What the decision-maker wants to know is where the most important (or ‘significant’ in the case of EIA) effects will arise, and why and to what degree that matters.”

Duration of Visual Effect Criteria

- 1.59 The duration of the visual effect likely to arise as a result of the Scheme on visual receptors is categorised as **Long-term**, **Medium-term** or **Short-term**. This consideration is used to qualify and contextualise the assessment of scale of visual effect and therefore informs the overall judgement regarding level of effect. The following definitions have been adopted within this assessment:
- Long-term visual effect: a change typically lasting 15 or more years.
 - Medium-term visual effect: a change typically likely to persist for more than three years but less than 15 years.
 - Short-term visual effect: a change unlikely to persist for more than three years.
- 1.60 Long-term effects are of sufficient length that they may be considered in some instances to have similar influence as a permanent effect on the consideration of overall level of visual effect. However, it is important that a distinction is made between a truly permanent effect and one which is long-term to ensure there is clarity when subsequently considering reversibility of the effect. Duration and reversibility of effect are separate but interlinked considerations and so it is important that clarity on terminology used supports their different influence on the overall effect.

Reversibility of Visual Effect Criteria

- 1.61 The reversibility of a visual effect relates to the prospects and practicality of an effect being able to be wholly or partially reversed, or whether the change cannot realistically be reversed, i.e. it is permanent. This is categorised as **Irreversible**, **Partially reversible** or **Reversible**.
- 1.62 Whatever the expected duration of a visual effect, consideration of reversibility relates to whether a visual effect could be reversed. This enables a distinction to be made between changes associated with the introduction of something which is expected to be permanent, but could nevertheless be removed without residual effect should it become unexpectedly obsolete or it involves a pre-planned decommissioning phase, and visual change that is practicably irreversible. The following criteria have been adopted within this assessment:
- Irreversible: For example visual effects associated with major changes in landform or the removal or landscape elements, such as veteran trees, that could not be easily replicated.
 - Partially reversible: Visual effects that could be largely reversed within approximately 15 years, for example the recreation of semi-mature woodland of similar species mix and character in a view.
 - Reversible: Visual effects that could be reversed within a reasonably short duration, for example the recreation of juvenile woodland. Reversible visual changes also include the removal of built features from a view which do not require fundamental alteration to the underlying landscape, such as some wind turbines or solar arrays.

The Use of Representative Viewpoints

- 1.63 The assessment of the effects on specific visual receptors is underpinned by a detailed assessment of the visual effects of the Scheme at selected representative viewpoints. These representative viewpoints and their associated visualisations provide a detailed insight into the anticipated appearance of the visual effects likely to occur as a result of the Scheme in specific locations. The Scheme has adopted an approach to include a relatively high number of representative viewpoints to ensure that the visual assessment is supported by a thorough set of graphic information (i.e. photographic plates and photomontages) and detailed assessments.
- 1.64 The detailed assessment of the visual effects at representative viewpoints is contained in PEIR Appendix 10.4.

LEVEL OF EFFECT AND SIGNIFICANCE

Level of Effect

- 1.65 As was stated in Section 2, and with reference to GLVIA3 and Technical Guidance Note LITGN-2024-01, this LVIA has assessed the level of effect on each landscape and visual receptor through the following process:
- susceptibility to change and value have been combined into an assessment of sensitivity for each receptor;
 - scale, geographical extent, duration and reversibility of each effect have been combined into an assessment of magnitude of each effect; and
 - sensitivity and magnitude have then been combined to a judgement regarding the overall level of effect.
- 1.66 The weighting attributed to each of the six main considerations (susceptibility; value; scale, geographical extent, duration and reversibility), and the combined judgements of sensitivity and magnitude, requires the application of experienced professional judgement and may vary depending on the landscape or visual receptor or effect being assessed. This is categorised as **Minor**, **Moderate** or **Major**. Where professional judgement suggests it is required, of effect have been expressed to refine the assessment, i.e. Minor to Moderate or Moderate to Major.
- 1.67 When combining sensitivity and magnitude, the following consistently applies:
- a visual receptor considered to be of High sensitivity and which would be subject to a Large magnitude of effect, would be assessed as a Major level of effect;
 - a visual receptor of Medium sensitivity and a Medium magnitude of effect would be assessed as a Moderate level of effect; and
 - a visual receptor of Low sensitivity and a Small magnitude of effect would be assessed as a Minor level of effect.

- 1.68 However, the relationship between sensitivity and magnitude can be complex and is not linear, with the potential for variation from these scenarios. The final assessment of level of effect is one of professional judgement based on clear descriptions within the assessment of: susceptibility to change and value (sensitivity); and scale, geographical extent, duration and reversibility (magnitude of effect).

Significance of Effect

- 1.69 The purpose of Environmental Impact Assessment (EIA) is to determine the likely significant effects of a development proposal. For the purposes of this Environmental Statement, references to whether an effect is significant or not significant are made within the meaning of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- 1.70 Not all landscape and visual effects arising as a result of a particular proposal will be significant. Furthermore, a significant effect does not necessarily mean that such an effect is unacceptable to decision-makers. This is a matter to be weighed in the planning balance alongside other factors. What is important is that the likely effects of any proposal are transparently assessed and described in order that the relevant determining authority can bring a balanced and well-informed judgement to bear as part of the decision making process.
- 1.71 Referring to State of Environmental Impact Assessment Practice in the UK (Institute for Environmental Management and Assessment 2011), this guidance identifies a range of different factors that should be considered when evaluating the significance of an effect, including:
- knowledge and experience of significance from previous assessments;
 - details of the development proposal, such as construction and operational activities, and the nature of the effect associated with such activity;
 - details about the environmental sensitivity of the area that will be affected;
 - feedback from scoping and consultation; and
 - the wider legal and policy context, which offers protection to the environment and community.
- 1.72 The level of effect can only be defined in relation to each particular development and its specific location. The final assessment of the level of effect and conclusion as to whether this is significant for decision makers is one of professional judgement.
- 1.73 Where scale of effect is identified as ‘negligible,’ effects are automatically considered not to be significant due to the minimal level of change from baseline (which would often not be perceptible).
- 1.74 Greater than ‘moderate’ effects are more likely to be significant. This does not preclude a ‘moderate’ effect or lower being significant or a greater than ‘moderate’ effect not being significant. This judgement will depend on the specific circumstances being considered.

1.75 GLVIA3 identifies that:

[3.32] “The Regulations require that a final judgement is made about whether or not each effect is likely to be significant. There are no hard and fast rules about what effects should be deemed ‘significant’ but LVIA’s should always distinguish clearly between what are considered to be significant and non-significant effects...”

[3.33] It is not essential to establish a series of thresholds for different levels of significance of landscape and visual effects, provided that it is made clear whether or not they are considered significant. The final overall judgement of the likely significance of the predicted landscape and visual effects is however, often summarised in a series of categories of significance reflecting combinations of sensitivity and magnitude. These tend to vary from project to project but they should be appropriate to the nature, size and location of the proposed development and should as far as possible be consistent across the different topic areas of the EIA.”

[5.56] & [6.44] “There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and [landscape] context and with the type of proposal”.

- 1.76 Effects may be either adverse (negative) or beneficial (positive). An effect can be significant and adverse, or significant and beneficial. If change occurs, with no obvious deterioration or improvement resulting, this can be said to be Neutral.

THE ITERATIVE ASSESSMENT AND DESIGN PROCESS

- 1.77 PEIR Chapter 4 sets out the overall approach to the iterative assessment and design of the Scheme and explains the sequence of iterative stages that have been followed across all environmental parameters to identify the preferred layout and design. It explains the relationship between the initial stages of assessment, design refinement, mitigation and assessment of the significance of residual effects.
- 1.78 The iterative design and assessment process for the project has been such that the potential landscape and visual effects of achieving the Scheme objectives has informed its design. The scheme parameters contain substantial embedded landscape and visual mitigation including the location of embedded landscape and visual mitigation planting (primarily comprising trees, hedgerow and grassland).
- 1.79 Given that landscape and visual mitigation is embedded, the landscape and visual assessment focuses on operational effects that consider embedded mitigation measures as part of the assessed design, with the Year 15 assessment considering mitigation planting to have reached a reasonable level of maturity, as is described more fully in Chapter 10.

CUMULATIVE EFFECTS

1.80 An assessment of cumulative effects is concerned with the additional effects of a proposed development in conjunction with other development(s) that do not already form part of the existing baseline.

1.81 GLVIA3 identifies that cumulative landscape and visual effects are those that:

[7.2] "...result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other development (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future".

1.82 GLVIA3 goes on to identify that:

[7.5] "The challenge is to keep the task reasonable and in proportion to the nature of the project under consideration. Common sense has an important part to play in reaching agreement about the scope of the assessment. Where the competent authority and other stakeholders are uncertain about the preferred approach the landscape professional may have to exercise judgement about what is appropriate and be able to justify the approach taken. It is always important to remember that the emphasis in EIA is on likely significant effects rather than on comprehensive cataloguing of every conceivable effect that might occur..."

1.83 The (non-cumulative) LVIA addresses the effects of introducing the proposed development into a context where other existing development is present. The presence of this other existing development forms part of the assessment baseline. Where there is complete certainty that development which is consented or under construction will be implemented within the near future, then these developments are also considered as part of the future baseline.

1.84 Cumulative effects can include:

- an intensification of the effects of one development resulting from an extension to it, or the introduction of another development;
- the 'filling' of an area with development over time, such that it may substantially alter the landscape and/or views;
- the interaction between different developments, which may lead to a greater total effect than the sum of the effects of each development individually;
- temporal effects of simultaneous or successive developments over a period of time;
- indirect effects of development, such as enabling or disabling other development, which may lead to landscape and visual effects; and
- the effects of a future action that may have consequences for other existing/proposed development.

1.85 It should be noted that a cumulative effect may not necessarily be significant or adverse.

1.86 Cumulative landscape effects may be either:

- physical effects on the landscape fabric, resulting from changes to landscape elements/feature, or the introduction of new elements/features;
- effects on aesthetic/perceptual attributes of the landscape; and/or
- effects on the overall character of the landscape.

1.87 Cumulative visual effects may be either:

- in combination - where two or more features are seen together at the same time from the same place, in the same arc of view, with their visual effects being combined;
- in succession - where two or more features are present in views from the same place, but cannot be seen at the together because they are not in the same arc of view. As the arc of view experienced by the observer changes, the features become visible in succession; or
- sequential - where two or more features are not present in views from the same point on a route and cannot therefore, ever be seen at the same time even if the arc of view experienced by the observer changes. The observer must move to another point on the same route to see the second or more of them, so they will then appear in sequence. These sequential views may occur frequently along the route, or more occasionally.