APPENDIX 5.2

LAND EAST OF JUNCTION 11, M40, BANBURY

LANDSCAPE AND VISUAL METHODOLOGY

ASSESSMENT APPROACH

Assessment Guidance

- 1.1 The methodology used to identify and assess the landscape and visual effects of proposed development and their significance is based on the following recognised quidance:
 - Guidelines for Landscape and Visual Impact Assessment (GLVIA), 3rd Edition¹
 - GLVIA3 Statement of Clarification 1/13²
 - An Approach to Landscape Character Assessment³
 - Landscape Institute Technical Guidance Note 06/19 Visual Representation of Development Proposals (TGN 06/19)⁴
- 1.2 Landscape and visual impact assessment is a tool used to identify and assess the effects of change, resulting from development and its significance on the landscape as a resource and people's views and visual amenity. It is an iterative process intended to inform design decisions so that new development can avoid or reduce significant negative (adverse) effects on the landscape and visual environment.
- 1.3 It is recognised as important to draw distinctions between landscape and visual effects during the assessment, treating them independently although related. GLVIA sets out the recommended process for assessing the significance of effects by comparing the sensitivity of the visual or landscape receptor with the magnitude of change resulting from development.
- 1.4 The GLVIA states that the assessment should cover the following stages:
 - Project description: description of the proposed development for the purpose of assessment; main features of proposals and establish parameters.
 - Baseline studies: establishes existing nature of landscape and visual environment in the study area, includes information of the value attached to different resources.
 - Identification and description of effects: that are likely to occur including whether they are adverse or beneficial.
 - Assess significance of effects: systematic assessment of the likely significance of the effects identified.
 - Mitigation: proposes measures designed to avoid/prevent, reduce or offset (or compensate for) any significant negative (adverse) effects.

 $^{^1}$ Landscape Institute and Institute of Environmental Management & Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, $3^{\rm rd}$ Edition, Routledge/Taylor & Francis Group

² Landscape Institute (2013) GLVIA3 Statement of Clarification 1/13, Landscape Institute

³ Natural England (2014) An Approach to Landscape Character Assessment, Natural England

⁴ Landscape Institute (2019) Technical Guidance Note – Visual Representation of Development Proposals, Landscape Institute

<u>Methodology</u>

Desk Study Methodology

1.5 Assessment of Ordnance Survey (OS) map data, aerial photographs, landscape designations and landscape planning policies was undertaken at the outset to inform the extent of the study area and identify sensitive visual receptors and likely sensitivity of the landscape. The opinion and requirements of the Local Planning Authority provided through the scoping opinion have also been included within the assessment. The study area for the LVIA was initially defined as extending to a radius of approximately 3-4km from the centre of the Application Site.

Field Work Methodology

- 1.6 The site survey was undertaken by a chartered landscape architect. Visual and landscape receptors were checked and refined initially from the study site. Visual receptors were then visited from the nearest publicly accessible location to select the most suitable and representative viewpoint. Assessment was undertaken on site; locations and notes recorded on maps and photographs taken from viewpoints. Photographs were taken using a full-frame digital SLR fitted with a fixed 50mm lens which is considered to best represent the view experienced by the human eye.
- 1.7 With reference to TGN 06/19, photographs included to represent views from the representative viewpoints are intended to conform to Type 1 Visualisations.

Landscape Assessment

Landscape Character and Characterisation

- 1.8 Landscape Character Assessment Guidance defines 'landscape' as consisting of the following elements:
 - Natural: Geology, landform, air and climate, soils, flora and fauna.
 - Cultural/Social: land use, settlement, enclosure.
 - Perceptual and Aesthetic: memories, associations, preferences, touch and feel, smells, sounds and sight.
- 1.9 Landscape Character Assessment Guidance encourages assessment at different scales that fit together as a hierarchy of landscape character areas and types so that each level can provide more detail to the one above. Identifying the existing landscape character is part of establishing the baseline conditions of a study site and its study area.

National Character Assessment

Establishes broad pattern of the landscape of the wider countryside

County & District Character Assessment

Establishes pattern of the landscape of the county/district level countryside

Local Character Assessment

Establishes pattern of the landscape at a local level

Site elements and features

Establishes to landscape resources on the site such as trees, hedges etc.

Value of the Landscape Receptor

- 1.10 Value can apply to areas of landscape as a whole, or to the individual elements, features and aesthetic or perceptual dimensions which contribute to the character of the landscape. Value is determined by some or all the following aspects:
 - Importance applied to landscape by designation or planning policy and the level of this importance in terms of local, regional or national importance.
 - The views of the local consultees including the local planning authority, members of the public, special interest groups such as Parish Council, wildlife or walking groups.
 - The rarity, importance and condition of the landscape resource as judged objectively by the landscape professional.
- 1.11 International and Nationally designated landscapes tend to be of the highest value, locally designated landscapes are most likely to be of moderate value and undesignated landscapes can either be of lower to moderate value depending on an assessment taking into account the following factors:
 - Condition of the local landscape
 - Scenic quality
 - Rarity
 - Representativeness
 - Conservation interests
 - Recreation value
 - Perceptual aspects
 - Associations
- 1.12 The definitions of value used are as follows:
 - United Kingdom: such as World Heritage Sites (Very High).
 - **Regional**: such as National Parks, AONB, Conservation Areas, Listed Buildings (**High**).
 - **County**: such as Special Landscape Areas, Areas of Great Landscape Value, several protected features such as Tree Preservation Orders, site may be mentioned in literature, art, tourism or in district/county landscape character assessments or sensitivity assessments. (**Medium High**).

- **Borough/ District**: generally undesignated, may have value at a community level by tourism, literature, art, village greens or allotments, may have a small number of protected features (**Medium**).
- **Local**: no designated features or landscape, limited value, no protected features (**Low**).

Susceptibility of Landscape Receptors (to Development of the Type Proposed)

- 1.13 This relates to the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of the of landscape planning policies.
- 1.14 The definitions of susceptibility of the proposed change to landscape used are as follows:
 - **High**: elements, features or whole landscapes that are susceptible to change, with limited opportunities to accommodate change based on the strength of the existing landform, pattern, land cover, settlement pattern, sense of enclosure, visual context, tranquillity.
 - **Medium**: elements, features or whole landscapes that are partially susceptible to change, with some opportunities to accommodate change based on the strength of the existing landform, pattern, land cover, settlement pattern, sense of enclosure, visual context, tranquillity.
 - **Low**: elements, features or whole landscapes that have limited susceptibility to change, with opportunities to accommodate change based on the strength of the existing landform, land use pattern, land cover, settlement pattern, sense of enclosure, visual context, tranquillity.

Definition of Landscape Sensitivity

1.15 Landscape **sensitivity** is determined by combining judgements of the **susceptibility** to the proposed change and the **value** of the receptor – see **Table 1** below:

Table 1: Definition of Landscape Sensitivity

Sensitivity	Definition		
High	High susceptibility to proposed change May be a designated landscape valued at a regional or national level Landscape characteristics are vulnerable and unable to accommodate		
	change Development may result in significant changes to landscape character		
Medium- High	Medium or high susceptibility to proposed change May be a designated landscape valued at a sub-regional or regional level Landscape characteristics are vulnerable with limited ability to accommodate change Development may result in moderate changes to landscape character		
Medium	Medium susceptibility to proposed change Some designated features and/or valued at a sub-regional level Landscape characteristics are able to accommodate some change		

	Development may not result in significant changes to landscape character			
Medium- Low	Low or medium susceptibility to proposed change Likely to be an undesignated landscape but possibly some designated features and/or valued at a sub-regional level Landscape characteristics are resilient to accommodating change Development may not result in significant changes to landscape character			
Low	Low susceptibility to proposed change Undesignated landscape and/or valued at a district level Landscape characteristics are robust and able to accommodate change Development may not result in significant changes to landscape character			
Negligible	No susceptibility to proposed change Undesignated, valued at a local level Landscape characteristics that are degraded or discordant with landscape character Development may result in an improvement to landscape character			

<u>Landscape Receptors - Overall Magnitude of Change</u>

- 1.16 The magnitude of the change is determined by combining the professional judgements about the size or scale of the change to the landscape receptor, the geographical extent over the area which the change occurs, its reversibility and its duration see **Table 2**.
 - The scale of the change: for example, whether there is complete loss of a particular element/feature/characteristic or partial loss or no loss; proportion of key elements or features of the baseline that will be lost, the value/importance of these elements to the landscape character and the degree of contrast between the development and the landscape character.
 - The geographical extent of the area affected relative to the receptor: this will range from the site itself, a short distance comprising the immediate local area, a medium distance comprising the local and middle landscape and long distance comprising the wider landscape.
 - The duration of the change: 0-1 year for the construction period is considered short term duration, 1-10 years for mitigation to establish is considered medium term duration, 10 years and beyond is considered long term duration.
 - **Reversibility:** the extent to which the development could be removed and the land reinstated. Reversible and temporary development would include solar farms and wind turbines. Other development such as housing would be considered irreversible and permanent.

Table 2: Definition of Landscape Magnitude of Change

Magnitude of Change	Definition
High	Very substantial loss of landscape elements of the landscape, and/or the lost elements make a substantial contribution to landscape character, and/or change affects a large geographical area, and/or the development introduces a dominating and contrasting characteristic to the landscape.

Medium- High	Substantial loss of landscape elements of the landscape, and/or the lost elements make a large contribution to landscape character, and/or change affects a moderate to large geographical area, and/or the development introduces a prominent and partially uncharacteristic feature to the landscape.
Medium	Moderate loss of landscape elements of the landscape, and/or the lost elements make a moderate contribution to landscape character, and/or change affects a moderate geographical area, and/or the development becomes an identifiable feature but not wholly uncharacteristic to the landscape.
Medium- Low	Partial loss of landscape elements of the landscape, and/or the lost elements make a moderate to small contribution to landscape character, and/or change affects a small to moderate geographical area, and/or the development is perceptible but not wholly uncharacteristic to the landscape.
Low	Minor loss of landscape elements of the landscape, and/or the lost elements make a small contribution to landscape character, and/or change affects a small geographical area, and/or the development introduces elements not uncharacteristic to the landscape.
Negligible	Negligible or no loss of landscape elements of the landscape, and/or the lost elements make a limited contribution to landscape character, and/or change affects a very small geographical area, and/or the development introduces characteristics that are consistent with or enhance the landscape, and/or effects may be short term, temporary or reversible.

Assessment Criteria used to Assess Scale of Landscape Effects

- 1.17 Landscape effects are judged by assessing the overall sensitivity (susceptibility to change and value of receptor) of the existing landscape receptor and the overall magnitude of change predicted as a result of the development (size/scale, geographical extent, duration and reversibility of effect). **Table 3** below is utilised to judge the effect.
- 1.18 Landscape effects are considered to be adverse unless specifically stated to the contrary.

Table 3: Scale of Effect and Significance for Landscape Effects

Magnitude of Change	Sensitivity of Receptor				
		High	Medium	Low	Negligible
	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

1.19 Those effects shaded mid-orange are considered to be significant, while those shaded light-orange may be significant, with the final assessment of significance being based on professional judgement and experience.

Visual Assessment

Assessment of Views

- 1.20 A Zone of Theoretical Visibility (ZTV) was produced as an initial desktop tool to inform the extent of the study area based on the theoretical visibility of the development. The ZTV illustrates the extent to which the proposed development site as a whole is potentially visible from the surrounding area. The ZTV was prepared using GIS software (Global Mapper) by carrying out an analysis of the visibility of the Proposed Development (modelled at 9m Above Ground Level, AGL) from the surrounding area up to 4km using a digital terrain model created from OS Terrain 5 DTM data. Calculations were based on bare earth survey OS height data with a viewer height set at 1.6m. Being based on bare earth modelling, the ZTV output does not take into account any screening from land cover such as buildings, hedgerows and trees. ZTV mapping therefore represents a 'worst case' scenario assuming 100% visibility, and the actual extents of visibility are likely to be less extensive. The ZTV was used to identify a range of viewpoints from where the Proposed Development may be visible. The viewpoint locations were then refined and verified as part of the field survey.
- 1.21 Representative viewpoints selected for inclusion in the assessment and for illustration of the visual effects fall broadly into three groups:
 - Representative viewpoints: selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example, certain points may be chosen to represent the views of particular public footpaths and bridleways
 - **Specific viewpoints:** chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations
 - **Illustrative viewpoints:** chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be restricted visibility at certain locations
- 1.22 Visual effects are determined through a process of identifying which visual receptors are likely to experience significant visual effects. The process of identifying effects involves determining the **sensitivity** of each visual receptor and the **magnitude of change** experienced at each receptor. These are then combined to inform a professional judgement of the visual effects.

Value of the View

- 1.23 Visual sensitivity is partially determined by judgements made attributing value to views. Judgements take account of:
 - Recognition of the value attached to particular views, for example in relation to 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 (such as parking places, sign boards and interpretive material) and reference to them in literature or art.
- 1.24 The value of views is defined as follows:
 - United Kingdom: Of national importance identified through publication.
 - **Regional:** recognition of the view by its relation to a heritage asset or national planning designation (AONB, National Park, National Trail). Appearance in guide books, tourist maps or featured in well-known art works.

- Provision of facilities such as interpretation panels, parking places & signage. Views enjoyed at a local or national level. (**High Value**).
- **Borough/ District:** local planning designation (Country Park, AGLV) or valued locally by village design statement or sensitivity assessment. May be some detractor elements, views enjoyed at a local level. (**Medium Value**).
- **Local:** no specific value placed by designation or publication, may be a large proportion of detractor elements within the view, views enjoyed at a community or site level. (**Low Value**).

Susceptibility of Visual Receptors (to Development of the Type Proposed)

- 1.25 Visual sensitivity is partly determined by the susceptibility to change of each visual receptor. The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of:
 - The occupation or activity of people experiencing the view at particular locations; and
 - The extent to which their attention is focussed on the views and visual amenity they experience at particular locations.
- 1.26 The susceptibility of visual receptors to change in views and visual amenity is defined broadly as follows:
 - High: residents at home (generally rooms occupied during daylight hours), people engaged in outdoor recreation (public rights of way or where attention is focussed on the landscape or particular views), visitors to heritage assets or other attractions where the surroundings are important to the experience, communities where views contribute to the landscape setting enjoyed by residents in the area.
 - Medium: travellers on road, rail or other transport modes such as cyclists.
 - **Low:** people engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views, people at their place of work whose attention may be focused on their work or activity.

Definition of Visual Sensitivity

1.27 Combining judgements regarding the susceptibility of change with the value attached to views leads to a professional judgement of sensitivity of each visual receptor – see **Table 4**.

Table 4: Definition of Visual Sensitivity

Sensitivity	Definition
High	Receptor may have high susceptibility to changes in view/visual amenity, views experienced may be of a regional value designated landscape or at a defined publicised viewing point/attraction, receptors may include residents at home (from rooms generally occupied in daylight hours), users of national or long distance trails or visitors to listed parks/gardens.
Medium- High	Receptor may have medium or high susceptibility to changes in view, views experienced may be of a regional or district value designated landscape, receptors may include travellers on scenic road routes,

	residents at home (from rooms not facing the development or generally not occupied in daylight hours), users of public rights of way.
Medium	Receptors may have medium susceptibility to changes in view/visual amenity, views experienced may be within district value locally designated landscape, receptors may include travellers on roads, pedestrians or cyclists.
Medium- Low	Receptors may have with low or medium susceptibility to changes in view/visual amenity, views experienced may be of a district or local value locally designated landscape where there maybe be some detractors, receptors may include commuters on busy roads such as motorways or urban roads, users may be involved in passive outdoor sport such as golf.
Low	Receptors may have low susceptibility to change in views/visual amenity, views experienced are likely to be of local value undesignated landscape with several detractors, receptors may include people at work, people engaged in outdoor sport or recreation which does not depend on landscape as a setting.
Negligible	Receptors may have low or negligible susceptibility to change in views/visual amenity, views experienced are likely to be of local value undesignated landscape dominated by detractors where there are low numbers of receptors engaged in indoor active work.

<u>Visual Receptors - Overall Magnitude of Change</u>

1.28 The magnitude of change is determined by combining the professional judgements about the size or scale of the visual effect, the geographical extent over the area which the effect occurs, its reversibility and its duration – see **Table 5**.

Table 5: Definition of Magnitude of Change for Visual Receptors

Magnitude of Change	Definition	
High	Total loss or very substantial alteration of key views, and/or site may form a very large proportion of the view, and/or all of the site may be visible, and/or views of the site may be experienced over a long distance by high numbers of receptors, and/or views may be permanent an irreversible.	
Medium- High	Substantial alteration of key views, and/or site may form a medium to large proportion of the view, and/or most of the site may be visible, and/or views of the site may be experienced over a moderate to long distance by moderate to high numbers of receptors, and/or views may be permanent and irreversible.	
Medium	Moderate alteration of key views, and/or site may form moderate proportion of the view, and/or around half of the site may be visible, and/or views of the site may be experienced over a moderate distance by moderate numbers of receptors, and/or views may be permanent and irreversible.	

Magnitude of Change	Definition	
Medium- Low	Moderate to minor alteration of key views, and/or site may form moderate to minor proportion of the view, and/or partial views of the site, and/or views of the site may be experienced over a moderate to short distance by moderate to low numbers of receptors, and/or views may be permanent and irreversible.	
Low	Minor alteration of key views, and/or site may form small proportion of the view, and/or partial or obscured views of the site, and/or views of the site may be experienced over a short/local distance by low numbers of receptors, and/or views may be permanent and irreversible.	
Negligible	Limited alteration of key views, and/or site may form very small proportion of the view, and/or limited views of the site, and/or views of the site may be experienced over a very short distance by a limited number of receptors, and/or views may be temporary, reversible, permanent or irreversible.	

Assessment Criteria used to Assess Scale of Visual Effects

- 1.29 Visual effects are judged by assessing the overall sensitivity (susceptibility to change and value of receptor) of the existing visual receptor and the overall magnitude of change predicted as a result of the development (size/scale, geographical extent, duration and reversibility of change). **Table 6** below is utilised to judge the effect.
- 1.30 Visual effects are considered to be adverse unless specifically stated to the contrary.

Table 6: Scale of Effect and Significance for Visual Effects

<u>e</u>	Sensitivity of Receptor				
Change		High	Medium	Low	Negligible
_	High	Major	Major	Moderate	Negligible
Magnitude of	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

1.31 Those effects shaded mid-orange are considered to be significant, while those shaded light-orange may be significant, with the final assessment of significance being based on professional judgement and experience.

Definitions of Significance

1.32 Following identification of the sensitivity, extent and significance of the individual landscape and visual effects the overall effects are combined with each other. A judgement is then made by identifying the most significant effects, after mitigation, resulting in the likely impacts of the proposed development. The definitions of the final statement of significance are shown in **Table 7**.

Table 7: Definition of Significance for Landscape and Visual Effects

Scale of effect	Definition
Major beneficial effect	The proposals would result in: the scheme causing a significant improvement to the existing view successful mitigation providing significant improvements to landscape quality and character fitting in very well with the scale, landform and pattern of the existing landscape
Moderate beneficial effect	The proposals would result in: the scheme causing a noticeable improvement to the existing view successful mitigation providing noticeable improvements to landscape quality and character fitting in well with the scale, landform and pattern of the existing landscape
Minor beneficial effect	The proposals would result in: the scheme causing perceptible improvement in the existing view successful mitigation providing slight improvements to landscape quality and character fitting in with the scale, landform and pattern of the existing landscape
Negligible effect	The proposals would result in: • the scheme causing no discernible deterioration or improvement to the existing view • mitigation that neither deteriorates or improves landscape • the scale, landform and pattern of the current landscape is broadly retained
Minor adverse effect	The proposals would result in: the scheme causing a slight perceptible deterioration to the existing view almost wholly success in mitigating adverse effects not quite fitting the landform and scale of the landscape
Moderate adverse effect	The proposals would result in: the scheme causing a noticeable deterioration to the existing view only partial mitigation of adverse effects variance to the existing landscape, out of scale or at odds with the local pattern and landform

Scale of effect	Definition
Major adverse effect	The proposals would result in: • the scheme being immediately apparent causing significant deterioration to the existing view • no way of fully mitigating adverse effects • considerable variance to the existing landscape, degrading the integrity of its overall character