



A park for
AgriTech
Hinxton

**ENVIRONMENTAL
STATEMENT**

**TECHNICAL
APPENDIX G:
LANDSCAPE AND
VISUAL EFFECTS**

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Technical appendix G part 1: Planning policy

National planning policy

G1.1 The National Planning Policy Framework (NPPF) published by the Department for Communities and Local Government (DCLG), came into effect on 27 March 2012. It sets out the government's planning policies for England and how these are expected to be applied. The NPPF provides a framework within which councils can produce their own local and neighbourhood plans. The relevant guidance to landscape and visual issues are stated below.

Core planning principles

G1.2 The NPPF sets out a range of core planning principles that should underpin decision-making (paragraph 17), some of which are of particular relevance to this application.

- *“always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;*
- *take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;*
- *contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this framework;*
- *promote mixed use developments, and encourage multiple benefits from the use of land in urban areas, recognising that some open land can perform many functions (such as wildlife, recreation, flood risk mitigation, carbon storage, or food production);*
- *conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations”*

Requiring good design

G1.3 The NPPF in paragraph 56 confirms that:

“The government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.”

G1.4 The NPPF in paragraph 57 states:

“It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.”

G1.5 Paragraph 61 states:

“Although visual appearance and the architecture of individual buildings are very important factors, securing high quality and inclusive design goes beyond aesthetic considerations. Therefore, planning policies and decisions should

address the connections between people and places and the integration of new development into the natural, built and historic environment.”

Protecting green belt land

G1.6 Paragraph 79 of the NPPF states that:

“The fundamental aim of green belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of green belts are their openness and their permanence.”

G1.7 Paragraph 80 provides the five purposes of the green belt:

- *“To check the unrestricted sprawl of large built-up areas;*
- *To prevent neighbouring towns merging into one another;*
- *To assist in safeguarding the countryside from encroachment;*
- *To preserve the setting and special character of historic towns; and*
- *To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.”*

G1.8 Paragraph 87 states:

“As with previous Green Belt policy, inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.”

G1.9 Paragraph 88 refers to very special circumstances and states:

“When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.”

Conserving and enhancing the natural environment

G1.10 Paragraph 109 of the NPPF establishes that the planning system should contribute to and enhance the natural and local environment by:

- *“protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and*
- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.”*

G1.11 Paragraph 113 states that:

“Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate and the contribution that they make to wider ecological networks.”

Conserving and enhancing the historical environment

G1.12 Paragraph 128 of the NPPF states that:

“In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting...”

G1.13 Paragraph 131 states that in determining planning applications, local planning authorities should take account of:

- *“The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
- *The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
- *The desirability of new development making a positive contribution to local character and distinctiveness”*

G1.14 Paragraph 132 states that:

“When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be...”

National Planning Practice Guidance (NPPG)

G1.15 The DCLG’s National Planning Practice Guidance on the natural environment and design contains government guidance, the following of which is relevant to this assessment.

G1.16 Landscape character (paragraph 001 Ref ID: 8-001-20140306 revised 06.03.2014) states that:

“One of the core principles in the National Planning Policy Framework is that planning should recognise the intrinsic character and beauty of the countryside. Local plans should include strategic policies for the conservation and enhancement of the natural environment, including landscape. This includes designated landscapes but also the wider countryside.

Where appropriate, landscape character assessments should be prepared to complement Natural England’s National Character Area profiles. Landscape Character Assessment is a tool to help understand the character and local distinctiveness of the landscape and identify the features that give it a sense of place. It can help to inform, plan and manage change and may be undertaken at a scale appropriate to local and neighbourhood plan-making. Natural England provides guidance on undertaking these assessments.”

G1.17 Promoting Landscape character (paragraph 007 Ref ID: 26-007-20140306 revised 06.03.2014) states that:

“Development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, local man-made and natural heritage and culture, while not preventing or discouraging appropriate innovation.

The successful integration of all forms of new development with their surrounding context is an important design objective, irrespective of whether a site lies on the urban fringe or at the heart of a town centre.

When thinking about new development the site’s land form should be taken into account. Natural features and local heritage resources can help give shape to a development and integrate it into the wider area, reinforce and sustain local distinctiveness, reduce its impact on nature and contribute to a sense of place. Views into and out of larger sites should also be carefully considered from the start of the design process.

Local building forms and details contribute to the distinctive qualities of a place. These can be successfully interpreted in new development without necessarily restricting the scope of the designer. Standard solutions rarely create a distinctive identity or make best use of a particular site. The use of local materials, building methods and details can be an important factor in enhancing local distinctiveness when used in evolutionary local design, and can also be used in more contemporary design. However, innovative design should not be discouraged.

The opportunity for high quality hard and soft landscape design that helps to successfully integrate development into the wider environment should be carefully considered from the outset, to ensure it complements the architecture of the proposals and improves the overall quality of townscape or landscape. Good landscape design can help the natural surveillance of an area, creatively help differentiate public and private space and, where appropriate, enhance security.”

G1.18 Promoting a network of greenspaces (paragraph 009 Ref ID: 26-009-20140306 revised 06.03.2014) states that:

“Development should promote public spaces and routes that are attractive, accessible, safe, uncluttered and work effectively for all users – including families, disabled people and elderly people. A system of open and green spaces that respect natural features and are easily accessible can be a valuable local resource and helps create successful places. A high quality landscape, including trees and semi-natural habitats where appropriate, makes an important contribution to the quality of an area.

Public spaces should be designed with a purpose in mind, and wherever possible deliver a range of social and environmental goals. They can take many different forms (for example path, street, square, park, plaza, green), and can serve different functions (for example informal, civic, recreational, commercial). Space left over after development, without a function, is a wasted resource, can detract from a place’s sense of identity and can increase the likelihood of crime and anti-social behaviour occurring (a function could include informal spaces and design

elements that add character, and should not be limited only formal functional uses). The benefit of greenspaces will be enhanced if they are integrated into a wider green network of walkways, cycleways, open spaces and natural and river corridors.”

Local planning policy

G1.19 Current local policy is provided by the adopted South Cambridgeshire Core Strategy Development Plan Document (2007) and Development Control Policies Development Plan Document (2007). Emerging local policy is provided by the Proposed Submission Local Plan (2013).

Current adopted policy

South Cambridgeshire District Council, South Cambridgeshire Core Strategy Development Plan Document, Adopted 25th January 2007

Policy ST/1, Green Belt

- *“To preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre;*
- *To maintain and enhance the quality of its setting;*
- *To prevent communities in the environs of Cambridge from merging into one another and with the city”*

Policy ST/8, Employment provision

“Policies in Local Development Document will ensure sufficient employment land is available to enable further development of the high technology clusters and meet local needs. Additional land will be brought forward for employment development at the Strategic Employment Locations of Northstowe, Cambridge East and Northwest Cambridge.”

South Cambridgeshire District Council, Development Control Policies Development Plan Document, adopted July 2007

Policy DP/1 Sustainable Development

“Development will only be permitted where it is demonstrated that it is consistent with the principles of sustainable development, as appropriate to its location, scale and form”. It then goes on to provide 18 criteria it should aim to cover, including conserving and, where possible, enhancing local landscape character.

Policy DP/2 Design of new development

“New Development Design

1. All new development must be of high quality design and, as appropriate to the scale and nature of the development should:

- a. Preserve or enhance the character of the local area;*
- b. Conserve or enhance important environmental assets of the site;*

- c. *Include variety and interest within a coherent design, which is legible and provides a sense of place whilst also responding to the local context and respecting local distinctiveness;*
- d. *Achieve a legible development, which includes streets, squares and other public spaces with a defined sense of enclosure and interesting vistas, skylines, focal points and landmarks, with good interrelationship between buildings, routes and spaces both within the development and with the surrounding area;*
- e. *Achieve a permeable development or all sectors of the community and all modes of transport, including links to existing footways, cycleways, bridleways, rights of way, green spaces and roads;*
- f. *Be compatible with its location and appropriate in terms of scale, mass, form, siting, design, proportion, materials, texture and colour in relation to the surrounding area;*
- g. *In the case of residential development, provide higher residential densities, and a mix of housing types including smaller homes;*
- h. *Provide high quality public spaces;*
- i. *Provide an inclusive environment that is created for people, that is and feels safe, and that has a strong community focus;*
- j. *Include high quality landscaping compatible with the scale and character of the development and its surroundings.*

Design and Access Statements

2. Design and Access Statements submitted to accompany planning applications and applications for listed building consent should be compatible with the scale and complexity of the proposal and, as appropriate should include:

- k. *A full site analysis of existing features and designations;*
- l. *An accurate site survey including landscape features and site levels;*
- m. *The relationship of the site to its surroundings;*
- n. *Existing accesses for pedestrians, cyclists, equestrians and vehicles;*
- o. *Any known historic importance;*
- p. *Opportunities for maximising energy efficiency and addressing water and drainage issues.*

3. The Access element of the Statement should demonstrate that the development will achieve an inclusive environment that can be used by everyone, regardless of age, gender or disability. It should also address how the development has taken account of the transport policies of the development plan."

Policy DP/3 Development criteria

"All development proposals should provide, as appropriate to the nature, scale and economic viability:

- a. *Affordable housing (in housing schemes);*
- b. *Appropriate access from the highway network that does not compromise safety, enhanced public and community transport and cycling and pedestrian infrastructure;*
- c. *Car parking, with provision kept to a minimum;*

- d. *Safe and secure cycle parking;*
- e. *Outdoor play space;*
- f. *Safe and convenient access for all to public buildings and spaces, and to public transport, including those with limited mobility or those with other impairment such as of sight or hearing;*
- g. *For the screened storage and collection of refuse, including recyclable materials;*
- h. *A design and layout that minimises opportunities for crime;*
- i. *Financial contributions towards the provision and, where appropriate, the maintenance of infrastructure, services and facilities required by the development in accordance with Policy DP/4;*

2. *Planning permission will not be granted where the proposed development would have an unacceptable adverse impact:*

- j. *On residential amenity;*
- k. *From traffic generated;*
- l. *On village character;*
- m. *On the countryside, and landscape character;*
- n. *From undue environmental disturbance such as noise, lighting, vibration, odour, noxious emissions or dust;*
- o. *On ecological, wildlife and archaeological interests;*
- p. *On flooding and flood risk;*
- q. *On the best and most versatile agricultural land;*
- r. *On quality of ground or surface water;*
- s. *On recreation or other community facilities.”*

Policy GB/1 Development in the Green Belt

“There is a presumption against inappropriate development in the Cambridge Green Belt as defined on the Proposals Map”

G1.20 The supporting text states that the main purpose of a green belt is to keep land open by placing a permanent and severe restriction on inappropriate development; therefore most types of development can only be permitted in exceptional circumstances. It goes on to state that development in the green belt will not be allowed simply because it is inconspicuous or will not harm the site or locality. For uses that are appropriate in the green belt, development will only be permitted where there is adequate planting that is maintained through planning permissions to ensure impact is mitigated.

Policy GB/2 Mitigating the Impact of Development in the Green Belt

“1. Any development considered appropriate within the Green Belt must be located and designed so that it does not have an adverse effect on the rural character and openness of the Green Belt.

2. Where development is permitted, landscaping conditions, together with a requirement that any planting is adequately maintained, will be attached to any planning permission in order to ensure that the impact on the Green Belt is mitigated.”

Policy GB/3 Mitigating the Impact of Development Adjoining the Green Belt

"1. Where development proposals are in the vicinity of the Green Belt, account will be taken of any adverse impact on the Green Belt.

2. Development on the edges of settlements which are surrounded by the Green Belt must include careful landscaping and design measures of a high quality in order to protect the purposes of the Green Belt."

Policy GB/5 Recreation in the Green Belt

"Proposals for the use of the Green Belt for increased or enhanced opportunities for access to the open countryside and which provide opportunities for outdoor sport and recreation, appropriate to the Green Belt, will be encouraged where it will not harm the objectives of the Green Belt."

Policy NE/4 Landscape Character Areas

"Development will only be permitted where it respects and retains or enhances the local character and distinctiveness of the individual Landscape Character Area in which is it located. "

"Development on the urban fringe and adjoining the countryside requires special consideration...It will be important to maintain a clear transition between the urban areas and the countryside and to ensure that development on the edge of the urban area does not create obtrusive and unattractive skylines..."

Policy CH/1 Historic landscapes

"Planning permission will not be granted for development which would adversely affect or lead to the loss of important areas and features of the historic landscape whether or not they are statutorily protected. "

Policy CH/3 Listed buildings

"Applications for planning permission and Listed Building Consent (including applications for alterations, extensions, change of use or demolition of Listed Buildings) will be determined in accordance with legislative provisions and national policy (currently PPG15). In assessing such applications the District Council will adopt a presumption in favour of the retention and preservation of local materials and details on Listed Buildings in the district."

Policy CH/4 Development within the curtilage or setting of a Listed Building

"Planning permission will not be granted for development which would adversely affect the curtilage or wider setting of a Listed Building. Proposals must provide clear illustrative and technical material to allow that impact to be properly assessed. "

Policy CH/5 Conservation areas

"Planning applications for development proposals (including applications for Conservation Area Consent for demolitions) in or affecting Conservation Areas will be determined in accordance with legislative provisions and national policy

(currently in PPG15) and guidance contained in specific Conservation Area Appraisals (where they exist) and the District Design Guide.”

Emerging policy

South Cambridgeshire District Council, South Cambridgeshire Local Plan, Proposed submission July 2013

Policy S/3 Presumption in favour of sustainable development

“1. When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals that accord with the Local Plan and Neighbourhood Plans can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area unless material considerations indicate otherwise

2. Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- a. Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or*
- b. Specific policies in that Framework indicate that development should be restricted.”*

Policy S/4 Cambridge Green Belt

“A Green Belt will be maintained around Cambridge that will define the extent of the urban area. The detailed boundaries of the Green Belt in South Cambridgeshire are defined on the Policies Map, which includes some minor revisions to the inner boundary of the Green Belt around Cambridge and to the boundaries around some inset villages.”

Policy HQ/1 Design Principles

“1. All new development must be of high quality design, with a clear vision as to the positive contribution the development will make to its local and wider context. As appropriate to the scale and nature of the development, proposals must:

- a. Preserve or enhance the character of the local urban and rural area and respond to its context in the wider landscape;*
- b. Conserve or enhance important natural and historic assets of the site;*
- c. Include variety and interest within a coherent, place-responsive design, which is legible and creates a positive sense of place and identity whilst also responding to the local context and respecting local distinctiveness;*

- d. Be compatible with its location and appropriate in terms of scale, mass, form, siting, design, proportion, materials, texture and colour in relation to the surrounding area;*
 - e. Deliver a strong visual relationship between buildings that comfortably define and enclose streets, squares and public places, creating interesting vistas, skylines, focal points and landmarks along routes and around spaces;*
 - f. Achieve a permeable development with ease of movement and access for all users and abilities, with user friendly and conveniently accessible streets both within the development and linking with its surroundings and existing and proposed facilities and services, focusing on delivering attractive and safe opportunities for walking, cycling and public transport;*
 - g. Provide safe and convenient access for all users and abilities to public buildings and spaces, including those with limited mobility or those with other impairment such as of sight or hearing;*
 - h. Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues;*
 - i. Provide safe, secure, convenient and accessible provision for cycle parking and storage, facilities for waste management, recycling and collection in a manner that is appropriately integrated within the overall development;*
 - j. Provide a harmonious integrated mix of uses both within the site and with its surroundings that contributes to the creation of inclusive communities providing the facilities and services to meet the needs of the community;*
 - k. Ensure developments deliver flexibility that allows for future changes in needs and lifestyles, and adaptation to climate change;*
 - l. Mitigate and adapt to the impacts of climate change on development through location, form, orientation, materials and design of buildings and spaces;*
 - m. Include high quality landscaping and public spaces that integrate the development with its surroundings, having a clear definition between public and private space which provide opportunities for recreation, social interaction as well as support healthy lifestyles, biodiversity, sustainable drainage and climate change mitigation;*
 - n. Protect the health and amenity of occupiers and surrounding uses from development that is overlooking, overbearing or results in a loss of daylight which avoids unacceptable impacts such as noise, vibration, odour, emissions and dust;*
 - o. Design-out crime and create an environment that is created for people that is and feels safe, and has a strong community focus.*
- 2. Larger and more complex developments will be required to submit Masterplans and Design Codes to agree an overall vision and strategy for a development as a whole that demonstrates a comprehensive and inclusive approach.”*

Policy NH/2 Protecting and enhancing Landscape Character

“Development will only be permitted where it respects and retains, or enhances the local character and distinctiveness of the local landscape and of the individual National Character Area in which is it located.”

Policy NH/6 Green Infrastructure

“1. The Council will aim to conserve and enhance green infrastructure within the district. Proposals that cause loss or harm to this network will not be permitted unless the need for and benefits of the development demonstrably and substantially outweigh any adverse impacts on the district’s green infrastructure network.

2. The Council will encourage proposals which:

- a. Reinforce, link, buffer and create new green infrastructure; and*
- b. Promote, manage and interpret green infrastructure and enhance public enjoyment of it.*

3. The Council will support proposals which deliver the strategic green infrastructure network and priorities set out in the Cambridgeshire Green Infrastructure Strategy, and which deliver local green infrastructure.

4. All new developments will be required to contribute towards the enhancement of the green infrastructure network within the district. These contributions will include the establishment, enhancement and the on-going management costs.”

Policy NH/14 Heritage Assets

“1. Development proposals will be supported when:

a. They sustain and enhance the special character and distinctiveness of the district’s historic environment including its villages and countryside and its building traditions and details;

b. They create new high quality environments with a strong sense of place by responding to local heritage character including in innovative ways.

2. Development proposals will be supported when they sustain and enhance the significance of heritage assets, including their settings, particularly:

c. Designated heritage assets, i.e. listed buildings, conservation areas,

d. Scheduled monuments, registered parks and gardens;

e. The wider historic landscape of South Cambridgeshire including landscape and settlement patterns;

f. Designed and other landscapes including historic parks and gardens, churchyards, village greens and public parks;

g. Historic places;

h. Archaeological remains of all periods from the earliest human habitation to modern times.”

Technical appendix G part 2 – Methodology for the landscape and visual impact assessment

To be read with reference to figures 9.1 to 9.6 at the rear of this appendix.

Introduction

G2.1 The following paragraphs set out the methodology that has been followed in the baseline study of the existing landscape, townscape and visual amenity and the subsequent assessment of the effects of the proposals.

LVIA guidelines

G2.2 The Landscape and Visual Impact Assessment (LVIA) has been carried out in accordance with the following best practice guidelines:

- *The Guidelines for Landscape and Visual Impact Assessment, (GLVIA) 3rd Edition, Landscape Institute (LI) and Institute for Environmental Management and Assessment (IEMA) (2013)*
- *An Approach to Landscape Character Assessment, Natural England (October 2014)*
- *SNH Visual Representation of Wind Farms guidance, version 2.1 December 2014*
- *Landscape Institute Advice Note 01/11, Photography and Photomontage in Landscape and Visual Assessments*

Role of the LVIA

G2.3 Paragraph 2.21 of the GLVIA states that there are two distinct components of the LVIA:

“Assessment of landscape effects: assessing effects on the landscape as a resource in its own right;

Assessment of visual effects: assessing the effects on specific views and on the general visual amenity experienced by people.”

Definition of landscape

G2.4 In describing landscape, paragraph 2.19 of the GLVIA states that:

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

Definition of visual amenity

G2.5 The GVLIA glossary defines the meaning of visual amenity as:

“The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.”

G2.6 The methodology for assessing both the landscape and visual effects is outlined in paragraphs G2.32 to G2.66.

Assessment process

G2.7 The process of landscape and visual assessment (LVIA) includes the following stages:

- Project description – describes the proposed development, identifying the main features of the proposals, and establishes parameters such as maximum extents of the development or sizes of the elements
- Baseline studies – establishes the existing nature of the landscape and visual environment in the study area, including any relevant changes likely to occur independently of the development proposal. Includes information on the value attached to the different environmental resources
- Identification and description of effects – systematically identifies and describes the effects that are likely to occur, including whether they are adverse or beneficial
- Assessing the significance of effects – systematically and transparently assesses the likely significance of the effects identified
- Mitigation – makes proposals for measures designed to avoid / prevent, reduce or offset (or compensate for) any significant negative (adverse) effects

Professional judgement

G2.8 Professional judgement is an important consideration in the determination of the overall landscape and visual effects and even with qualified and experienced professionals there can be differences in the judgements made.

G2.9 Paragraph 2.23 of the GLVIA states that:

“While there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction of a new mine, much of the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development or land use change may have on visual amenity or about the significance of change in the character of the landscape and whether it is positive or negative.”

G2.10 Paragraph 2.24 of the GLVIA states that:

“In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others.”

Baseline assessment

G2.11 The landscape and visual baseline conditions were established by:

Landscape	Visual
Identify elements and features Identify landscape character and key characteristics Consider value attached to landscape Identify landscape receptors	Identify extent of possible visibility (ZTV) Identify visual receptors (people) who may be affected Identify and select representative, illustrative and specific viewpoints

Site familiarisation

G2.12 The site and surrounding area were visited in March and July 2017 to obtain familiarity with the landscape. Field studies and desk studies of photographs, aerial photographs, map information, landscape character assessments and statutory and emerging planning policy documents have enabled the recording of landscape elements such as topography, drainage, land use, development, vegetation and other features.

Defining the study area

G2.13 The study area defines the scope of the assessment. The study area includes the site itself and the wider area around it, within which the proposed development may have a significant influence. The extent of the study area has been established using a zone of theoretical visibility (ZTV) of the proposed development in combination with observations made on site. During the assessment process the study area may change as a result of fieldwork studies or changes to the proposals.

G2.14 A 2.5 km study area was chosen and agreed with the local planning authority during scoping, as the visibility beyond this distance will become limited and the proposed development is unlikely to have any significant effects.

Identifying landscape character, elements and features

G2.15 Published and adopted landscape character assessments (LCA) prepared by relevant authorities at varying levels, from national through to local assessments, have been referred to in order to identify the baseline landscape character, resources and associated value. These established assessments have been reviewed in terms of their status, scale and level of detail provided and therefore suitability for use within the LVIA. This review also took account of the date at which the assessments were carried out and how relevant the content is in relation to the current landscape characteristics.

G2.16 National and county level LCA generally give a broad scale assessment that often provides an overview of the landscape context and setting but does not necessarily represent the local landscape characteristic of the site and surrounding area. Local LCA provide more detail on the types of landscape that occur in the study area. They are therefore considered appropriate as a basis for describing the key characteristics and are used to inform the description of the landscapes that may be affected by the proposals.

G2.17 Detailed fieldwork carried out within the site and immediate surroundings is used to check the applicability of the landscape character assessments throughout the study area and, where variations in the landscape are identified since the LCA was adopted, modifications are made or supplementary information is provided in the baseline assessment.

G2.18 ZTV analysis and field studies have been carried out to determine which landscape character areas will be physically or perceptually affected by the proposals.

Identifying possible extent of visibility (ZTV)

G2.19 Computer generated mapping has been used in combination with fieldwork to assess the potential visibility of the proposals. The extent of visibility over which the proposed development may theoretically be seen, ZTV, is provided in figure 9.11 of the ES.

G2.20 The ZTV has been derived from a Digital Surface Model. The DSM used was based on a 2 m grid provided by Bluesky. This uses photogrammetrically derived information during summer that provides a highly detailed three-dimensional model of the landscape and townscape. Topographic features including landform, woodland, settlements, individual buildings, isolated trees, copses, hedgerows, embankments and other minor topographic features are all modelled, out to a distance of 2.5 km from the application boundary. The accuracy of the DSM falls within acceptable limits; however, there are potential discrepancies between the DSM and the actual landform where there are minor topographic features that are too small to be picked up. The Bluesky data can pick up the majority of the woodland and buildings, although areas can be missed between the 2 m grid.

G2.21 For this project, the ZTV has been generated using the DSM and the following proposed building height parameters, but excluded point features:

- 1 storey up to 6.5 m
- 2 storeys up to 9 m
- 3 storeys up to 13.5 m
- Bridge 7.5 m to platform level

G2.22 The height from which the proposed development would be seen was set at 1.6m (mid way between the average heights for men and women given in the GLVIA). A professional judgement has been made for this assessment that approximately 2.5 km is the distance beyond which proposals of this scale, nature and context would not have a significant effect on either landscape / townscape character or views. The resulting ZTV, figure 9.11 in the ES, illustrates the extent to which any part of the proposals (large or small) is potentially visible from the surrounding area.

G2.23 During fieldwork, any significant discrepancies in the ZTV are recorded and later amended. Fieldwork was confined to accessible parts of the site, public rights of way, transport routes and other publicly accessible areas.

Identifying visual receptors

G2.24 The baseline study will have determined the individuals and / or defined groups of people who have the potential to be affected by the proposals. These are referred to as visual receptors.

G2.25 Paragraph 6.13 of the GVLIA states that visual receptors may include:

“...people living in the area, people who work there, people passing through the landscape on road, rail or other forms of transport, people visiting promoted landscapes or attractions, and people engaged in recreation of different types”.

Identifying viewpoints

G2.26 Following analysis of the ZTV and fieldwork, a series of viewpoints from which the proposals will be seen by the individual or groups of visual receptors were identified and agreed with South Cambridgeshire District Council at scoping. To illustrate all potential viewpoints from which the proposals will be seen by the different visual receptors within the study area is not practical and is unnecessary for the purposes of the EIA. Therefore, viewpoints selected for inclusion in the LVIA broadly fall into three groups:

- Representative viewpoints (represent the experience of different types of visual receptors), for example, certain points may be chosen to represent the views of users from a particular public right of way
- Specific viewpoints (a particular view from a key or promoted viewpoint), for example, viewpoints with a particular cultural landscape associations
- Illustrative viewpoints to demonstrate a particular effect / issue, for example, the restricted visibility at a certain location

G2.27 Generally viewpoints are selected from publicly accessible land and / or transport routes. Representative or specific viewpoints from these areas can take into consideration that similar views may be afforded from receptors of residential properties.

Description of proposals

G2.28 The planning application drawings and design and access statement provide a description of the proposals. In this ES the proposals are described in chapter 2, while chapter 9 summarises the elements that are likely to give rise to landscape or visual effects. The effects on landform and on existing landscape features such as vegetation are also described. Proposals for landscape measures such as new planting are set out.

Mitigation measures

G2.29 The GLVIA describes three forms of mitigation measures. These are:

- *“Primary measures, developed through the iterative design process, which have become integrated or embedded into the project design;*
- *Standard construction and operational management practices for avoiding and reducing environmental effects;*

- *Secondary measures, designed to address any residual adverse effects remaining after primary measures and standard construction practices have been incorporated into the scheme.”*

G2.30 The first two forms are referred to as primary mitigation, while the last is referred to as secondary mitigation. At all stages of the iterative design development, the purpose has been to prevent / avoid, reduce and where possible offset or remedy potential adverse effects by including primary mitigation measures and standard construction and operational management practices. The plans illustrated in the proposals chapter 2, figures 2.2 to 2.6, incorporating these primary measures are used to assess predicted potential effects.

G2.31 Secondary mitigation measures are those that have not been designed into the proposals that form part of this application. Potential secondary mitigation measures are described and considered in the assessment. Where significant adverse effects remain after secondary mitigation, these are referred to as residual effects.

Landscape assessment

G2.32 The landscape assessment judges the potential effects of the proposals on the landscape receptors that have been identified. The significance of a landscape effect is determined by consideration of the sensitivity of the landscape receptors and the magnitude of the landscape effect as a result of the proposals. These are defined in the following paragraphs.

Criteria for assessing potential significance of landscape effects

Sensitivity of landscape receptor

G2.33 The sensitivity of the landscape is assessed by combining the considerations of two factors:

- Value
- Susceptibility to specific change

G2.34 The value of the landscape receptor is defined in the GLVIA (paragraph 5.19) as:

“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.”

G2.35 The value of the landscape receptor is established at the baseline stage and considers two key categories as highlighted in paragraph 5.44 of the GLVIA:

- *“The value of the landscape character types or areas based on review of any designations at both national and local levels, and, where there are no designations, judgements based on criteria that can be used to establish landscape value;*
- *The value of individual contributors to landscape character, especially the key characteristics, which may include individual elements of the landscape, particular landscape features, notable aesthetic, perceptual or experiential qualities, and combinations of the contributors.”*

G2.36 Landscape designations should not be over relied upon to signify the value of the landscape receptors. Other factors that can help in the identification of valued landscapes include:

- Landscape quality (condition)
- Scenic quality
- Rarity
- Representativeness
- Conservation interests
- Recreational value
- Perceptual aspects, including wildness and / or tranquillity
- Associations

G2.37 In the absence of a formal landscape designation or landscape character area, judgement on the value of a landscape is based on the criteria set out in paragraph G2.36.

G2.38 The landscape receptors' susceptibility to specific change is defined in the GLVIA (paragraph 5.40) as follows:

"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 achievement of landscape planning policy and strategies."

G2.39 Paragraph 5.42 of the GLVIA also states that:

"Since landscape effects in LVIA are particular to both the specific landscape in question and the specific nature of the proposed development, the assessment of susceptibility must be tailored to the project."

G2.40 Factors for judging susceptibility to change include:

- Vulnerability or robustness of elements of the landscape
- The tolerance, i.e. the extent to which elements of the landscape can be replaced, restored or may be altered
- The level or role elements of the landscape have in defining the character of the landscape
- The landscape sensitivity to the specific type of development proposed

G2.41 The guidance set out in figure 9.1 has been used in this assessment to arrive at an overall evaluation of landscape sensitivity. Both susceptibility to change and value are judged as high, medium, low or negligible based on the criteria shown. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of susceptibility and value produces an overall

evaluation of landscape sensitivity, which is ultimately a matter of professional judgement, and is defined in the chapter as high, medium, low or negligible.

Magnitude of landscape effect

G2.42 The magnitude of effect is assessed in terms of:

- Size / scale
- Geographical extent
- Duration
- Reversibility

G2.43 The size or scale of an effect is assessed by determining the degree of change that would arise from the proposals. The effect of both loss and addition of new features is judged as major, partial, minor or very minor based on the criteria set out in figure 9.2. The judgements may take into account:

- The extent of existing landscape elements that will be lost (this may be quantified)
- The degree to which aesthetic or perceptual aspects of the landscape are altered through the loss of or addition of landscape resources / elements. For example, removal of hedges may change a small scale intimate landscape into a large scale, open one
- Whether the effect changes any of the key characteristics that are distinctive to the landscape character

G2.44 The geographical extent of effects is assessed by determining the area over which the landscape effects will be felt. The effect is considered across varying scales of wide, intermediate, localised or limited based on the criteria set out in figure 9.2. In general, the effects will vary according to the nature of the project and may not be relevant on every occasion.

G2.45 The duration of effects is assessed by the period of time over which the degree of change to the landscape would arise from the development. Duration is judged as long term, medium term or short term based on the criteria set out in figure 9.2.

G2.46 The reversibility of an effect assesses the prospects or practicality of the effect being reversed. The effect is judged as reversible, partially reversible or permanent, as set out in figure 9.2.

G2.47 Duration and reversibility can be considered together so that a temporary or partially reversible effect is linked to definition of how long that effect may last.

G2.48 The guidance notes and criteria set out in figure 9.2 have been used to make a judgement on the magnitude of landscape effect for this assessment. The magnitude of landscape effect is determined by combining the judgements of the four individual factors of size / scale, geographical extent, duration and reversibility. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of all four factors produces an overall evaluation of magnitude of landscape effect, which is ultimately a matter

of professional judgement, and is defined in the chapter as large, medium, small or negligible.

Judging the overall significance of landscape effect

G2.49 The degree of the effects on the landscape resources is considered from a sequentially combined evaluation of the landscape sensitivity and the magnitude of effect. The matrix in figure 9.3 has been used to guide this judgement. The definitions used are included in that figure. They are applied to both potential effects, and to residual effects. If the degree of effect is moderate or above then the effect is considered to be significant.

G2.50 The GLVIA guidance also states that thought must be given to whether the likely significant landscape effects are judged to be positive (beneficial) or negative (adverse). The GLVIA (paragraph 5.37) suggests that, when judging the effects to be adverse or beneficial, the factors to be considered should include, but not be restricted to the following:

- *“The degree to which the proposal fits within the existing landscape character*
- *The contribution to the landscape that the development may make in its own right, usually by virtue of good design, even if it is in contrast to existing character.”*

Visual assessment

G2.51 The visual assessment judges the potential effects of the proposals on the visual receptors that have been identified. The significance of a visual effect is determined by consideration of the sensitivity of the visual receptors and the magnitude of the visual effect on visual amenity. These are defined in the following paragraphs.

Criteria for assessing potential significance of visual effects

Sensitivity of visual receptors

G2.52 A visual receptor is a particular person or group of people who would be experiencing the view or are likely to be affected at a specific viewpoint.

G2.53 The sensitivity of the visual receptor is assessed by combining the judgements of two factors:

- Value attached to views
- Susceptibility of visual receptors to change

G2.54 The GLVIA suggests that, when judging the value attached to the views experienced (paragraph 6.37), account should be taken 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 and references to them in literature or art”*

G2.55 The value attached to the views experienced is established at the baseline stage and considers these two key categories:

- The quality of the view / visual experience i.e. attractive unspoilt landscape
- The associations that contribute to the visual experience i.e. cultural / historical / ecological interests and planning designations

G2.56 The visual receptors' susceptibility to change is defined in the GLVIA (paragraph 6.32) as follows:

- *“the occupation or activity of people experiencing the view at particular locations; and*
- *the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.”*

G2.57 The guidance set out in figure 9.4 has been used in this assessment to arrive at an overall evaluation of the sensitivity of the visual receptors. Both susceptibility to change and value are judged as high, medium, low or negligible based on the criteria shown. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of susceptibility and value produces an overall evaluation of visual receptor sensitivity, which is ultimately a matter of professional judgement, and is defined in the chapter as high, medium, low or negligible.

Magnitude of visual effect

G2.58 The magnitude of visual effect is assessed in terms of:

- Size / scale
- Geographical extent
- Duration
- Reversibility

G2.59 The size or scale of a visual effect is assessed by determining the degree of change that would arise from the proposals. The effect of loss, addition or change to the composition of the view through the introduction of development is judged as major, partial, minor or very minor based on the criteria set out in figure 9.5. The GLVIA (paragraph 6.39) suggests that, when judging the visual effects, the following be taken account of:

- *“the scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed development;*
- *the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture;*
- *the nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.”*

G2.60 The geographical extent of visual effects is assessed by determining the area over which the visual effects will be seen. The visual effect is considered across varying scales of wide, intermediate, localised or limited based on the criteria set out in figure 9.5. The GLVIA (paragraph 6.40) suggests that extent is likely to reflect:

- *“the angle of view in relation to the main activity of the receptor;*
- *the distance of the viewpoint from the proposed development;*
- *the extent of the area over which the changes would be visible.”*

G2.61 The duration of effects is assessed by the period of time over which the degree of change to the visual receptor would arise from the development. Duration is judged as long term, medium term or short term based on the criteria set out in figure 9.5.

G2.62 The reversibility of an effect assesses the prospects and the practicality of the effect being reversed. The effect is judged as reversible, partially reversible or permanent, as set out in figure 9.5.

G2.63 The guidance notes and criteria set out in figure 9.5 have been used to make a judgement on the magnitude of visual effect for this assessment. The magnitude of visual effect is determined by combining the judgements of the four individual factors of size / scale, geographical extent, duration and reversibility. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of all four factors produces an overall evaluation of magnitude of visual effect, which is ultimately a matter of professional judgement, and is defined in the chapter as large, medium, small or negligible.

Judging the overall significance of visual effects

G2.64 The degree of the effects on the visual receptor is considered from a sequentially combined evaluation of the visual receptor sensitivity and the magnitude of effect. The matrix in figure 9.6 has been used to guide this judgement. The definitions used are included in that figure. They are applied to both potential effects and to residual effects. If the degree of effect is moderate or above then the effect is considered to be significant.

G2.65 The GLVIA guidance also states that thought must be given to whether the likely significant visual effects are judged to be positive (beneficial) or negative (adverse). This is based on professional judgement as to whether the effects will affect the quality of the visual experience for those people who will see the proposed development, given the nature of the existing views. The GLVIA (paragraph 6.44) suggests that, when judging the effects to be adverse or beneficial, the factors to be considered should include, but not be restricted to, the following:

- *“Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant*
- *Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant*
- *Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.”*

Taking account of effects throughout the life of the project

G2.66 The degree of landscape and visual effects can vary considerably during the life cycle of the project. Within the assessment a description of the development is provided at each stage in the life cycle of the project to assist in understanding the scheme and the predicted landscape and visual effects of the development. The description of effects considers the following project stages:

- During construction
- At completion (post-construction - year 0) including seasonal variation and night time
- Year 15 of operation

Sensitivity of the receptor - Landscape

	Value	Susceptibility
High ↑	Internationally/nationally designated landscape / townscape e.g world heritage sites, areas of outstanding natural beauty and national parks / national scenic areas (Scotland)	Landscape / Townscape can not accommodate any change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics
	A very distinctive landscape / townscape with strong, widespread and defining characteristics. High quality with no detracting features. Contains features that could be described as unique or are nationally scarce. Considerable conservation and / or recreational / heritage	Landscape / Townscape is able to accommodate a small change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics
	Locally designated e.g public open space	Landscape / Townscape is able to accommodate a medium change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics.
	Reasonably distinctive landscape / townscape or with some strong contributing characteristics. Average quality with features that are locally commonplace which may exhibit some detracting features. Intermediate conservation and/or recreational / heritage interest. A strong sense of place.	Landscape is able to accommodate a large change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics
Negligible ↓	Not designated.	
	Relatively bland or commonplace landscape / townscape or with limited positive characteristics. Features that make little contribution to local distinctiveness. Some detracting features. Limited conservation and/or recreational / heritage interest. Poor sense of place.	
	Not designated.	
	A degraded or featureless landscape with little or no characteristics of quality or interest. No sense of place.	

		Susceptibility			
		High	Medium	Low	Negligible
Value	High	High	High / Medium	Medium	Medium / Low
	Medium	High / Medium	Medium	Medium / Low	Low
	Low	Medium	Medium / Low	Low	Low / Negligible
	Negligible	Medium / Low	Low	Low / Negligible	Negligible

Magnitude of landscape effects

		Large ←	→ Negligible
Size or scale	Typical description of the receptor	Major impact on landscape resources / elements or major alteration to key elements / features of the landscape	
		Partial impact on landscape resources / elements or moderate alteration to key elements / features of the landscape	
		Minor impact on landscape resources / elements or small alteration of elements / features of the landscape	
		Very minor impact on landscape resources / elements or negligible alteration of elements / features of the landscape	
Geographical extent	Typical description of the receptor	Wide - The effects of the proposed development would influence the entire character area	
		Intermediate - The effects of the proposed development would influence a moderate part of the character area	
		Localised - The effects of the proposed development would influence the character of the immediate setting or surroundings of the site	
		Limited - The effects of the proposed development would only influence the character of the site itself or a very minor extent of the character	

Magnitude of landscape effects

The magnitude of effects is assessed by combining the judgments on the size or scale and the geographical extent of the landscape effect resulting from the proposals. The table provides an overall profile of these criteria for each factor. In determining the magnitude of effects during the construction phase and at completion, further consideration is also given to the duration and reversibility of the landscape effect.

Duration

Duration is a material consideration when determining the magnitude of effect and, where relevant, will be qualified in the data sheets contained within this report.

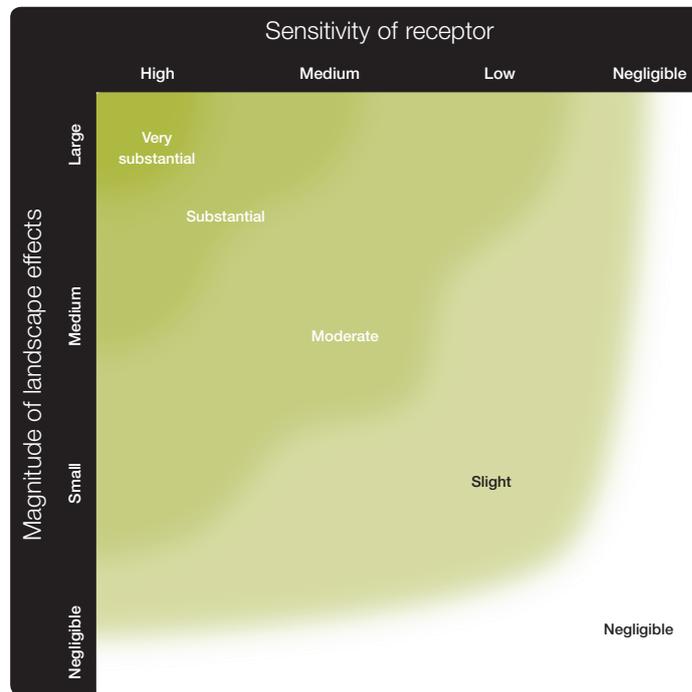
Where the construction or life of the project is proposed to be in excess of 25 years it is, although temporary, considered to be a substantial length of time and so is assigned a magnitude of effect equivalent to a permanent development.

Where the construction or operational phase is less than 25 years, the period over which the effects will be experienced is judged as short (less than 5 years), medium (5-10 years) or long (10-25 years) term.

Reversibility

The reversibility of an effect defines the prospects or practicality of the effect being reversed. Reversibility is judged as fully, partially or unable to reinstate/restore the original baseline situation

Determination of significance matrix – Landscape



In some cases, the judgement of sensitivity or magnitude of change may fall somewhere between two descriptions, for instance a magnitude of change may be considered to be greater than small but less than medium and in these cases it is acceptable to describe these instances as lying between the two, in this instance, small-medium. It is also acceptable to describe effects in the same way, if it is considered that the effect lies between two effect descriptions.

Degrees of effect

Very substantial:

Large change to a landscape of high sensitivity.

Substantial:

Medium-large change to a landscape of medium-high sensitivity, medium change to a landscape of high sensitivity or large change to a landscape of medium sensitivity.

Moderate:

Medium change to a landscape of medium sensitivity, large change to a landscape of low sensitivity or small change to a landscape of high sensitivity.

Slight:

Medium or small change to a landscape of low sensitivity or small change to a landscape of medium sensitivity.

Negligible: Negligible, small, medium or large change to a landscape of negligible sensitivity or negligible change to a landscape of low, medium or high sensitivity.

Significance

If the degree of effect is moderate or above, then the effect is considered to be significant.

Sensitivity of the receptor - Visual

	Value	Susceptibility
High	<p>Views from internationally / nationally designated landscapes / townscapes or landscapes recognised nationally as the best in the UK e.g areas of outstanding natural beauty, national parks/ national scenic areas (Scotland) national trails, registered parks and gardens or world heritage sites</p> <p>Internationally / Nationally recognised views with a strong cultural association or well known references or promoted views in literature / art / guide books / viewpoints marked</p>	<p>Occupiers of residential properties or users of long distance recreation routes / National Trail whose primary focus is on the landscape / townscape</p> <p>Visitors to heritage assets or other attractions where the landscape setting is an important contributor to the experience</p>
	<p>Views from local planning designations e.g country parks, Local Nature Reserves and conservation areas.</p> <p>Views from landscapes and townscapes well used by local residents who have a strong proprietary interest in the view or from landscapes with recognisable features that promote a strong sense of place</p>	<p>Views from public rights of way, rural roads, tourist routes or railway users with secondary focus on the landscape / townscape</p>
	<p>Views from undesignated landscapes or townscapes</p> <p>Views from commonplace landscapes / townscapes with a weak sense of place, limited cultural associations and / or where receptors have limited proprietary interest in the view.</p>	<p>Users of urban roads, railways and footways whose attention is unlikely to be on the landscape / townscape</p> <p>People engaged in outdoor sporting activities which does not depend upon appreciation of views</p>
Negligible	<p>Views from degraded landscapes or townscapes with very limited value to local residents or from landscapes / townscapes that require significant restoration</p>	<p>People at places of work, educational or social venues who have very limited focus on the landscape / townscape. People driving along motorways.</p>

		Susceptibility			
		High	Medium	Low	Negligible
Value	High	High	High / Medium	Medium	Medium / Low
	Medium	High / Medium	Medium	Medium / Low	Low
	Low	Medium	Medium / Low	Low	Low / Negligible
	Negligible	Medium / Low	Low	Low / Negligible	Negligible

Magnitude of change – Visual

		Large ←	→ Negligible
Size or scale	Typical description of the receptor	Major alteration to the composition or nature of views through the introduction of highly prominent elements and / or the alteration of a large proportion of the field of view.	
		Partial alteration to the composition or nature of views through the introduction of elements that are of medium prominence and / or the alteration of a medium proportion of the field of view.	
		Minor alteration to the composition or nature of views through the introduction of elements that are of limited prominence and / or the alteration of a small proportion of the field of view.	
		Very minor alteration to the composition or nature of views through the introduction of elements that are barely visible and / or the alteration of a negligible proportion of the field of view.	
Geographical extent	Wide - Proposed development visible from a large number of locations and is central to the focus of open views		
	Intermediate - Proposed development visible from a number of locations and / or is not central to the focus of views		
	Localised - Proposed development visible from a small number of locations and / or is viewed obliquely to the main focus of views		
	Limited - Proposed development visible from a single location		

Magnitude of visual effects

The magnitude of effects is assessed by combining the judgments on the size or scale and the geographical extent of the visual effect resulting from the proposals. The table provides an overall profile of these criteria for each factor. In determining the magnitude of effects during the construction phase and at completion, further consideration is also given to the duration and reversibility of the visual effect.

Duration

Duration is a material consideration when determining the magnitude of effect and, where relevant, will be qualified in the data sheets contained within this report.

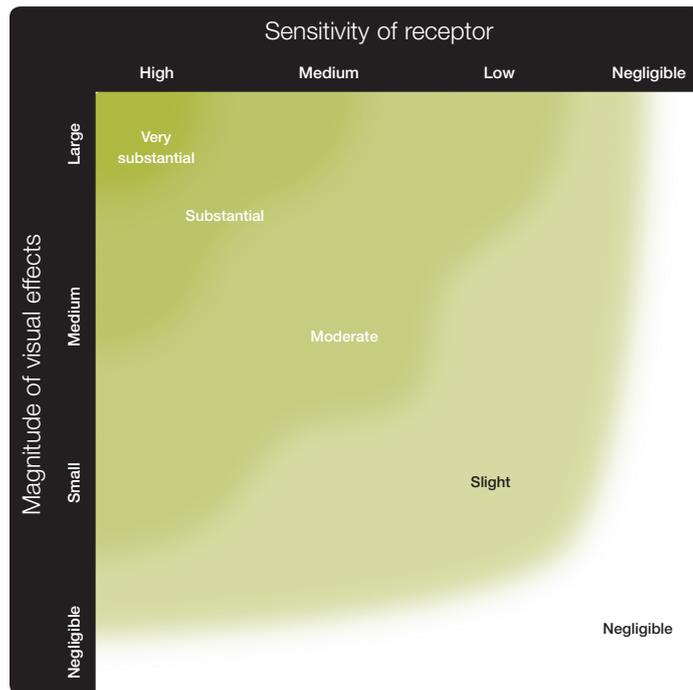
Where the construction or life of the project is proposed to be in excess of 25 years it is, although temporary, considered to be a substantial length of time and so is assigned a magnitude of effect equivalent to a permanent development.

Where the construction or operational phase is less than 25 years, the period over which the effects will be experienced is judged as short (less than 5 years), medium (5-10 years) or long (10-25 years) term.

Reversibility

The reversibility of an effect defines the prospects or practicality of the effect being reversed. Reversibility is judged as fully, partially or unable to reinstate/restore the original baseline situation

Determination of significance matrix – Visual



In some cases, the judgement of sensitivity or magnitude of change may fall somewhere between two descriptions, for instance a magnitude of change may be considered to be greater than small but less than medium and in these cases it is acceptable to describe these instances as lying between the two, in this instance, small-medium. It is also acceptable to describe effects in the same way, if it is considered that the effect lies between two effect descriptions.

Degrees of effect

Very substantial:

Large change to a landscape of high sensitivity.

Substantial:

Medium-large change to a landscape of medium-high sensitivity, medium change to a landscape of high sensitivity or large change to a landscape of medium sensitivity.

Moderate:

Medium change to a landscape of medium sensitivity, large change to a landscape of low sensitivity or small change to a landscape of high sensitivity.

Slight:

Medium or small change to a landscape of low sensitivity or small change to a landscape of medium sensitivity.

Negligible: Negligible, small, medium or large change to a landscape of negligible sensitivity or negligible change to a landscape of low, medium or high sensitivity.

Significance

If the degree of effect is moderate or above, then the effect is considered to be significant.

Technical appendix G part 3: Photographic images methodology

Photographic survey

- G3.1 The aim is to recreate as closely as possible what the human eye can see. 50 mm is a traditionally agreed focal length for matching a photograph to the actual view seen, but a range between 45 mm to 55 mm is often used.
- G3.2 For this assessment, a Canon EOS 6D camera was used in conjunction with a 50mm prime lens. The EOS 6D employs a sensor of similar size to a traditional SLR, therefore the 50mm lens used results in a focal length of 50mm as no modification factor is applied. This methodology is in accordance with the LI Advice note 01/11, *Photography and photomontage in landscape and visual impact assessment*.
- G3.3 In this assessment, the photographs are taken at approximately 1.6 m above ground level using a tripod.
- G3.4 GPS is used to provide a six-figure National Grid reference for the view. The accuracy of this device can vary (depending on factors such as satellite coverage, proximity of buildings, tree coverage etc), so these figures are then checked on detailed OS survey plans to give a more accurate reference.
- G3.5 For panoramic photographs an overlap of between 35% and 50% of each frame is used to allow the creation of a seamless panoramic, using Photoshop.