Green Hill Solar Farm

EN010170

Environmental Statement

Chapter 8: Landscape and Visual Impact Assessment

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Contents

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Landscape and Visual Impact Assessment

Prepared by
Name: Chris Jackson
Job title: Director of Landscape Architecture

Approved by
Name: Mark Topping
Job title: Director

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8 Landscape and Visual Impact Assessment

8.1 Introduction

8.1.1 This chapter presents the findings of the Environmental Impact Assessment (EIA) concerning the potential Landscape and Visual impacts of the Scheme during the construction, operation and maintenance, and decommissioning phases.

8.1.2 The following aspects will be considered within the Landscape and Visual Impact Assessment (LVIA) process:

- The existing landscape and visual baseline scenario within a defined Study Area, and the nature of change;
- The effects upon landscape and visual receptors arising as a result of the Scheme and the significance associated with identified effects based on the sensitivity of these receptors to change and the magnitude of any change that will likely occur. It also defines whether an effect is beneficial, adverse, or neutral; and
- Embedded mitigation proposals established in response to design proposals to date and identified landscape and visual receptors.

8.1.3 For project description details, please refer to Chapter 4: Scheme Description [**EN010170/APP/GH6.2.4**] of this Environmental Statement (ES).

8.1.4 This chapter has been prepared by Lanpro (see Statement of Competence [**EN010170/APP/GH6.3.1.1**]).

Appendices and Figures

8.1.5 This chapter is supported by the following appendices:

- Appendix 8.1: LVIA Methodology **[EN010170/APP/GH6.3.8.1]**
- Appendix 8.2: Scoping LVIA Receptor Sheets **[EN010170/APP/GH6.3.8.2]**
- Appendix 8.3: ES LVIA assessment sheets **[EN010170/APP/GH6.3.8.3]**
- Appendix 8.4: Landscape Character Area Descriptions **[EN010170/APP/GH6.3.8.4]**
- Appendix 8.5: Landscape Consultation **[EN010170/APP/GH6.3.8.5]**

8.1.6 This chapter is supported by the following standalone figures:

- Figure 8.1: Scheme Location and Study Area [**EN010170/APP/GH6.4.8.1]**
- Figure 8.2: Aerial Photography **[EN010170/APP/GH6.4.8.2]**
- Figure 8.3: Scheme Landform **[EN010170/APP/GH6.4.8.3]**
- Figure 8.4: Provisional Agricultural Land Classification **[EN010170/APP/GH6.4.8.4]**
- Figure 8.5: Landscape Character Areas [**EN010170/APP/GH6.4.8.5**]
- Figure 8.6: Landscape Receptors [**EN010170/APP/GH6.4.8.6**]
- Figure 8.7: Visual Receptors [**EN010170/APP/GH6.4.8.7**]

- Figure 8.8: Bare Earth Zone of Theoretical Visibility (ZTV) **[EN010170/APP/GH6.4.8.8]**
- Figure 8.9: Augmented ZTV of Full Scheme [**EN010170/APP/GH6.4.8.9**]
- Figure 8.10: Viewpoint Locations [**EN010170/APP/GH6.4.8.10**]
- Figure 8.11: Private Receptors [**EN010170/APP/GH6.4.8.11**]
- Figure 8.12: Transport Receptors [**EN010170/APP/GH6.4.8.12**]
- Figure 8.13: PRoW Receptors [**EN010170/APP/GH6.4.8.13**]
- Figure 8.14: Baseline Photography and Photomontages [**EN010170/APP/GH6.4.8.14**]

8.1.7 This chapter is supported by the following tables:

- **Table 8.1: Matrix for Determining Landscape Sensitivity**
- **Table 8.2: Matrix for Determining Visual Sensitivity**
- **Table 8.3: Matrix for Determining Significance of Landscape and Visual Effects**
- **Table 8.4: Cumulative Developments**
- **Table 8.5: Viewpoint Locations**
- **Table 8.6: Photomontage Locations**
- **Table 8.7: Embedded Mitigation: Landscape Design Parameters**
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- **Table 8.22: Significant Cumulative Visual Effects**

- **Table 8.23: Significant Residual Landscape Effects**
- **Table 8.24: Significant Residual Visual Effects**

8.2 Consultation

8.2.1 Pre-application consultation that has been undertaken on the Scheme (and how regard has been had to the feedback received) is described in the Appendix 5.4 Non-statutory Consultation Summary Report **[EN010170/APP/GH5.4]** that forms part of the DCO application. There is further detail on 'LVIA specific' consultations that have taken place to date contained within Appendix 8.5 Landscape Consultation **[EN010170/APP/GH6.3.8.5]** of this ES.

EIA Scoping Consultation

8.2.2 The Scheme was subject to EIA scoping with a Scoping Opinion issued on the 30 August 2024 **[EN010170/APP/GH6.3.2.2]** Specific responses to the LVIA Scoping comments are located within Appendix 5.4 Non-statutory Consultation Summary Report [**EN010170/APP/GH5.4**].

Pre and Post Section 42 Consultation

8.2.3 Non-statutory consultation and engagement with local authorities was undertaken in January 2024 to introduce the Scheme and to commence and continue discussions on detailed matters relating to this LVIA chapter. Early introductory meetings with stakeholders and five early-engagement workshops were undertaken between March and May 2024.

8.2.4 Applicant responses to the Section 42 Consultation with Local Authorities are contained within supporting Appendix 5.8 Section 42 Applicant Responses **[EN010170/APP/GH5.8]** of this ES.

Section 42 Consultation

8.2.5 A Preliminary Environmental Information Report (PEIR) was published in November 2024. This included a Preliminary Landscape and Visual Impact Assessment which set out the methodologies and assessment used to undertake the LVIA. The host authorities were invited to comment in response to the statutory consultation held between November 2024 to December 2024 under Section 42(1) (b) of the 2008 Planning Act and the EIA Regulations. The key matters raised in these responses have been taken into account in preparing the LVIA and are set out within Appendix 8.5 Landscape Consultation **[EN010170/APP/GH6.3.8.5]** of this ES.

Voluntary Consultation

8.2.6 Voluntary consultation with individual property owners was also undertaken throughout the duration of the Scheme development and the preparation of the ES including discussion of bespoke mitigation relevant to individual properties. Further details are set out in 5.1 Consultation Report **[EN010170/APP/GH5.1]**. These meetings have allowed for the assessment to have a greater understanding of potential effects upon these properties and has informed some site specific mitigation proposals, for example the use of instant screening within Site A and A.2 and the use of avoidance areas within Site C.

ES Topic Area Consultation

8.2.7 Interrelationships with Ecology and Biodiversity **[EN010170/APP/GH6.2.9]**, Cultural Heritage **[EN010170/APP/GH6.2.12]** and Glint and Glare **[EN010170/APP/GH6.2.15]** ES topic areas along with detailed consultation with the authors of each ES Chapter has been undertaken when developing the landscape and visual baseline and in identifying landscape and visual effects for this LVIA chapter.

8.3 Legislation, Planning Policy and Guidance

8.3.1 This section provides an overview of the legislation planning policy and guidance against which the Scheme will be considered in relation to Landscape and Visual matters.

Legislation

European Legislation

European Landscape Convention (Ref 8.1)

8.3.2 The European Landscape Convention (ELC) is the first international treaty dedicated to the protection, management, and planning of all landscapes in Europe. Signed by the UK government in 2006 and introduced in March 2007, the ELC provides a people-centred and forward-looking way to reconcile management of the environment with the social and economic challenges of the future and aims to help people reconnect with place. The ELC is not a directive of the European Union, rather it is a Convention of the Council of Europe.

8.3.3 The ELC does not advocate the same measures and policies for all landscapes. Instead, it encourages approaches that are adaptable to particular landscape types and which respond to their unique characteristics.

8.3.4 The ELC contains 18 articles which, collectively, promote landscape protection, management and planning and organising European cooperation on landscape issues. Articles 5 and 6 commit signatory states to a number of actions which are designed to help ensure compliance with the overarching aims of the ELC. These include the need to recognise landscapes in law, to establish policies aimed at landscape planning, protection and management and the integration of landscape into other policy areas.

UK Legislation

8.3.5 For general legislation information on the Planning Act 2008 and EIA Regulations 2017 please refer to Chapter 1: Introduction **[EN010170/APP/GH6.2.1]** of this ES.

The Environment Act 2021 (Ref 8.2)

8.3.6 The Environment Act 2021 provides a framework for environmental protection in the UK and requires government and public bodies to set targets for air quality, water, biodiversity, and waste reduction.

8.3.7 Key commitments of the Act include halting species decline by 2030 and the introduction of mandatory BNG requirements for all Town and Country Planning

Act (TCPA) and Nationally Significant Infrastructure Project (NSIP) developments.

8.3.8 Commitments that would be secured through the DCO application which are relevant to the LVIA include:

- Part 6 Nature and Biodiversity
    - Section 99: Biodiversity gain in nationally significant infrastructure projects outlines that Schedule 15 makes provision about biodiversity gain in relation to development consent for nationally significant infrastructure projects specifically. This is expected to become a legal requirement for nationally significant infrastructure projects from November 2025.

Planning Policy

National Planning Policy

National Policy Statement (NPS) (Ref 8.3)

8.3.9 National Policy Statements for Nationally Significant Infrastructure Projects are produced by government. They give reasons for the policy set out in the statement and include an explanation of how the policy takes account of government policy relating to the mitigation of, and adaptation to, climate change. The Energy NPS, dated November 2023, provides NPS EN-1 to 5 which were designated on 17 January 2024. The following policies are relevant to the proposals:

- NPS EN-1 Overarching NPS for energy;
    - Section 4.6 Environmental and Biodiversity Net Gain
    - Paragraph 4.6.13 states

"In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains and benefits to communities relevant to the local area, and to national policy priorities, such as:

- *reductions in GHG emissions*
- *reduced flood risk*
- *improvements to air or water quality,*
- *climate adaptation,*
- *landscape enhancement*
- *increased access to natural greenspace, or*
- *the enhancement, expansion or provision of trees and woodlands The scope of potential gains will be dependent on the type, scale, and location of specific projects.*

Applicants should look for a holistic approach to delivering wider environmental gains and benefits through the use of nature-based solutions and Green Infrastructure."

- Section 4.7 Criteria for good design for Energy Infrastructure

Paragraph 4.7.1 *"The visual appearance of a building, structure, or piece of infrastructure, and how it relates to the landscape it sits within, is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. The functionality of an object – be it a building or other type of infrastructure – including fitness for purpose and sustainability, is equally important."*

Paragraph 4.7.2 *"Applying good design to energy projects should produce sustainable infrastructure sensitive to place, including impacts on heritage, efficient in the use of natural resources, including land-use, and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area."*

Paragraph 4.7.3 *"Good design is also a means by which many policy objectives in the NPSs can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies, can help mitigate adverse impacts such as noise. Projects should look to use modern methods of construction and sustainable design practices such as use of sustainable timber and low carbon concrete. Where possible, projects should include the reuse of material."*

Paragraph 4.7.4 *"Given the benefits of good design in mitigating the adverse impacts of a project, applicants should consider how good design can be applied to a project during the early stages of the project lifecycle."*

Paragraph 4.7.5 *"To ensure good design is embedded within the project development, a project board level design champion could be appointed, and a representative design panel used to maximise the value provided by the infrastructure. Design principles should be established from the outset of the project to guide the development from conception to operation. Applicants should consider how their design principles can be applied post-consent."*

Paragraph 4.7.6 *"Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, land form and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area. Applicants should also, so far as is possible, seek to embed opportunities for nature inclusive design within the design process."*

Paragraph 4.7.7 *"Applicants must demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected."*

- Section 5.10 Landscape and Visual

Paragraph 5.10.4 *"Landscape effects arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the*

development, whose specific siting and design make the assessment a case-by-case judgement."

Paragraph 5.10.5 *"Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation."*

Paragraph 5.10.6 *"Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate."*

- Section 5.11 Land Use, Including Open Space, Green Infrastructure, and Green Belt

Paragraph 5.11.1 *"An energy infrastructure project will have a direct effect on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of energy infrastructure projects there may be particular effects on open space including green and blue infrastructure."*

Paragraph 5.11.7 *"Green and blue infrastructure can also enable developments to provide positive environmental, social, health and economic benefits. Green infrastructure includes green space such as parks and woodlands but also other environmental features such as street trees, hedgerows and green walls and roofs. It also includes blue infrastructure such as canals, rivers, streams, ponds, lakes and their borders. Well designed and managed green and blue infrastructure provides multiple benefits at a range of scales. It can contribute to biodiversity recovery, sequester carbon, absorb surface water, cleanse pollutants, absorb noise and reduce high temperatures. The Green Infrastructure Framework – Principles and Standards for England can be used to consider green infrastructure in development and plan for good quality and targeted creation or improvement."*

- NPS EN3 for renewable energy infrastructure; and
    - Section 2.5 Consideration of good design for energy infrastructure

Paragraph 2.5.1 *"Section 4.7 of EN-1 sets out the criteria for good design that should be applied to all energy infrastructure."*

Paragraph 2.5.2 *"Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage"*

- 2.10 Solar Photovoltaic Generation

Paragraph 2.10.42 *"Applicants are encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, and in particular during operation of the site."*

Paragraph 2.10.43 *"Applicants are encouraged where possible to minimise the visual outlook from existing public rights of way, considering the impacts this may have on any other visual amenities in the surrounding landscape."*

Paragraph 2.10.44 *"Applicants should consider and maximise opportunities to facilitate enhancements to the public rights of way and the inclusion, through site layout and design of access, of new opportunities for the public to access and cross proposed solar development sites (whether via the adoption of new public rights of way or the creation of permissive paths), taking into account, where appropriate, the views of landowners."*

Paragraph 2.10.94 *"The approach to assessing cumulative landscape and visual impact of large-scale solar farms is likely to be the same as assessing other onshore energy infrastructure. Solar farms are likely to be in low lying areas of good exposure and as such may have a wider zone of visual influence than other types of onshore energy infrastructure."*

Paragraph 2.10.95 *"However, whilst it may be the case that the development covers a significant surface area, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography, the area of a zone of visual influence could be appropriately minimised."*

Paragraph 2.10.96 *"Landscape and visual impacts should be considered carefully pre application. Potential impacts on the statutory purposes of nationally designated landscapes should form a part of the pre application process."*

Paragraph 2.10.97 *"Applicants should carry out a landscape and visual assessment and report it in the ES. Visualisations may be required to demonstrate the effects of a proposed solar farm on the setting of heritage assets and any nearby residential areas or viewpoints."*

Paragraph 210.98*"Applicants should follow the criteria for good design set out in Section 4.7 of EN-1 when developing projects and will be expected to direct considerable effort towards minimising the landscape and visual impact of solar PV arrays especially within nationally designated landscapes."*

Paragraph 2.10.99 *"Whilst there is an acknowledged need to ensure solar PV installations are adequately secured, required security measures such as fencing should consider the need to minimise the impact on the landscape and visual impact"*

Paragraph 2.10.100 *"The applicant should consider as part of the design, layout, construction, and future maintenance plans how to protect and retain, wherever possible, the growth of vegetation on site boundaries, as well as the growth of existing hedges, established vegetation, including mature trees within boundaries. Applicants should also consider opportunities for individual trees within the boundaries to grow on to maturity."*

Paragraph 2.10.101 *"The impact of the proposed development on established trees and hedges should be informed by a tree survey and arboricultural/hedge assessment as appropriate."*

Paragraph 2.10.131 *"Applicants should consider the potential to mitigate landscape and visual impacts through, for example, screening with native hedges, trees and woodlands."*

Paragraph 2.10.132 *"Applicants should aim to minimise the use and height of security fencing. Where possible applicants should utilise existing features, such as hedges or landscaping, to assist in site security, or screen security fencing."*

Paragraph 2.10.133 *"Applicants should minimise the use of security lighting. Any lighting should utilise a passive infra-red (PIR) technology and should be designed and installed in a manner which minimises impact."*

- NPS EN-5 for electricity networks infrastructure.
    - Section 2.5 Environmental and Biodiversity Net Gain

Paragraph 2.5.1 *"When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to:*

i. reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or

ii. connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements."

- Section 2.9 Applicant assessment

Landscape and Visual Impact paragraph 2.9.9 *"New substations, sealing end compounds (including terminal towers), and other above-ground installations that serve as connection, switching, and voltage transformation points on the electricity network may also give rise to adverse landscape and visual impacts."*

National Planning Policy Framework (NPPF) (Ref 8.4)

8.3.10 The NPPF was last updated in February 2025. Key policies relating to Landscape and Visual issues include:

- Paragraph 105 in respect of protecting and enhancing public rights of way (PRoW) and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails;
- Paragraph 135 sets out that developments:
    - b) are visually attractive as a result of good architecture, layout, and appropriate and effective landscaping; and
    - c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities).
- Paragraph 136 which recognises the important contribution trees make to the character and quality of the environment, that appropriate measures are

in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible;

- Paragraph 187 states that planning policies and decisions should contribute to and enhance the natural environment and local environment by:

  a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

  b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

  c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

  d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

  e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

  f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

- Paragraph 193 sets out:

  c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Local Planning Policy

8.3.11 The nine Sites which make up the Scheme are located within the administrative boundaries of: West Northamptonshire Council, North Northamptonshire Council and Milton Keynes City Council. Green Hill A, A.2 and B are located within the administrative boundary of West Northamptonshire, Green Hill C to F and Green Hill BESS are located within the administrative boundary of North Northamptonshire and Green Hill G is located within the administrative boundary of Milton Keynes.

8.3.12 Local Planning policies are considered from the following documents:

- North Northamptonshire Local Plan (Adopted 2016) (Ref 8.5)
  - Policy 4 - Biodiversity and Geodiversity; and
  - Policy 19 The Delivery of Green Infrastructure.
- West Northamptonshire Joint Core Strategy Local Plan Part 1 (Adopted 2014) (Ref 8.6)
  - Policy BN1 - Green Infrastructure Connections;
  - Policy BN2 – Biodiversity;
  - Policy BN3 - Woodland Enhancement and Creation; and
  - Policy BN5 - The Historic Environment and Landscape.
- Milton Keynes Local Plan - Plan: MK 2016 to 2031 (Adopted 2019) (Ref 8.7)
  - Policy NE3 - Biodiversity and Geological Enhancement;
  - Policy NE4 - Green Infrastructure;
  - Policy NE5 - Conserving and Enhancing Landscape Character;
  - Policy NE7 - Protection of the best and most versatile agricultural land;
  - Policy D1 - Designing a high-quality place;
  - Policy D2 - Creating a positive character; and
  - Policy SC2 - Community energy networks and large-scale renewable energy schemes.
- Emerging Milton Keynes City Plan, 2050 (Ref 8.8)
  - The emerging plan will build upon the current Milton Keynes adopted Local Plan 2019 listed above.
- Wellingborough Local Plan Part 2 (Adopted 2019) (Ref 8.9)
  - Policy GI 1 - Local Green Infrastructure Corridors.

8.3.13 The Scheme is adjacent to the Borough of Bedford and therefore the following planning policy documents have been considered:

- Bedford Borough Local Plan 2030 (Adopted 2020); and
- Emerging Bedford Borough Local Plan 2040 (Examination underway).

Neighbourhood Plans

8.3.14 Neighbourhood Plans in close context of the scheme include; Overstone Neighbourhood Plan, which considers land in close proximity to Green Hill B, Cogenhoe and Whiston Neighbourhood Plan, which considers land in close proximity to the Green Hill BESS, Earls Barton Neighbourhood Plan, which considers land in close proximity to Green Hill E and Lavendon Neighbourhood Plan, which considers land in close proximity to Green Hill G.

8.3.15 Neighbourhood Planning policies are considered from the following documents:

- Overstone Neighbourhood Plan (Adopted 2021) (Ref 8.10)
  - Policy 8 – Landscape and Sensitive Views.
- Earls Barton Neighbourhood Plan (Adopted 2014) (Ref 8.11)
  - Policy EB.OS1 - The areas listed as Local Green Spaces and will be protected from development due to their particular local significance and community value unless very special circumstances can be demonstrated. These include:
  - Land surrounding All Saints Church and the Recreation Grounds;
  - Playing Fields and recreation land surrounding Earls Infant and Junior Schools;
  - Sports and Leisure pitches located around the Grange;
  - Earls Barton Cemetery Land;
  - Allotment land adjacent to Earls Barton Cemetery;
  - Allotment land to the south of Station Road opposite Thorpe Road;
  - Public realm land at the end of Compton Way;
  - Public realm at The Knoll, Land between Corden Crescent and Dowthorpe Hill;
  - Public realm land on the corner of Elizabeth Way and Manor Road;
  - Open countryside land between High Street and Churchill Road; and
  - Earls Barton Pocket Park land South of A45.
- Lavendon Neighbourhood Plan (Adopted 2019) (Ref 8.12)
  - Policy E1: Access to the countryside;
  - Policy E2: Biodiversity offset and development; and
  - Policy E3: Trees and hedgerows.

Guidance

Guidance Name

Planning Practice Guidance (PPG), Natural Environment (Landscape)

8.3.16 Planning Practice Guidance (PPG), Natural Environment (Landscape), paragraph 036 Reference ID: 8-036-20190721 (Ref 8.13) outlines the following:

"The National Planning Policy Framework is clear that plans should recognise the intrinsic character and beauty of the countryside, and that strategic policies should provide for the conservation and enhancement of landscapes. This can include nationally and locally-designated landscapes but also the wider countryside.

Where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence.

Policies may set out criteria against which proposals for development affecting these areas will be assessed. Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures, such as appropriate design principles and visual screening, where necessary. The cumulative impacts of development on the landscape need to be considered carefully."

Planning Practice Guidance, Renewable and Low Carbon Energy

8.3.17 Planning Practice Guidance, Renewable and Low Carbon Energy Reference: ISBN 9781409839835 (Ref 8.14) Paragraph 013 outlines that:

"The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in very undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively"

and that

"The approach to assessing cumulative landscape and visual impact of large scale solar farms is likely to be the same as assessing the impact of wind turbines. However, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero"

8.3.18 The LVIA will be undertaken in line with the following guidance which represents the standard approach and guidance relevant to LVIA for renewable energy developments within the UK:

- Landscape Institute and Institute of Environmental Management and Assessment 'Guidelines for Landscape and Visual Effect Assessment', 2013, Third Edition (GLVIA3) (Ref 8.15):
- Landscape Institute Technical Guidance Note LITGN-2024-01 Published August 2024 (Ref 8.16);
- An Approach to Landscape Character Assessment (Ref 8.17);
- Landscape Institute Technical Guidance Note 06/19, Visual Representation of Development Proposals (Ref 8.18);
- Landscape Institute Technical Guidance Note 02/19, Residential Visual Amenity Assessment (RVAA) (Ref 8.19); and
- Landscape Institute Technical Guidance Note 02/21, Assessing landscape value outside national designations (Ref 8.20).

8.4 Assessment Methodology and Significance Criteria

8.4.1 The methodologies described in the following section have been developed in line with the relevant guidance for assessing potential significant effects.

8.4.2 A full detailed LVIA methodology is set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]** of this ES.

8.4.3 The methodology for this LVIA chapter is based on the general recommendations set out in Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, LI IEMA, 2013. The guidelines are not prescriptive and set out a general approach that should be tailored to specific circumstances of the project that is being assessed. The methodology adopted for this assessment is set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**. The assessment process comprises broadly of three stages: baseline appraisal (including fieldwork), production of visualisations and assessment of effects, including cumulative and in-combination effects, within the following step by step process:

- A desk study to assess the landscape and visual baseline is supported by a suite of landscape figures as listed within Section 8.1 which includes a review of published landscape character assessments as set out within Section 8.5. This baseline stage of the process was undertaken to identify the landscape and visual receptors to be assessed. These landscape and visual receptors have been finalised following consultation with statutory consultees at a series of meetings and workshops, the outcome of which is summarised in 5.1 Consultation Report **[EN010170/APP/GH5.1]**;
- Detailed fieldwork to confirm aspects of the desk study and to verify proposed viewpoint locations;
- An assessment of the sensitivity (nature of the receptor) of landscape and visual receptors. This is defined through a combination of their value and susceptibility to change;
- An assessment of the magnitude of impact (nature of effect) of the Scheme during the construction period (winter), operation at year 1 (winter) and operation at year 15 (summer) and at decommissioning stage (winter). The magnitude of impact is assessed in relation to the size, scale, duration, and reversibility of the effect;
- An assessment of the significance of the effect to the landscape and visual receptors for the four stages of the Scheme (construction, operation (Year 1), operation (Year 15), and decommissioning (For the purposes of the EIA the Scheme will be decommissioned in 2089. This would be the year when decommissioning of the Scheme would commence and has been based on the maximum operational lifetime of the Scheme of 60 years). This process systematically and transparently assesses the likely significant effects of the Scheme taking into account of embedded mitigation at each of these four stages;
- Mitigation proposals are set out to prevent/avoid, reduce, and where possible offset or/compensate for any significant adverse landscape and visual effects. Embedded mitigation forms an integral, committed and deliverable part of the Scheme design and can also comprise standard construction practices. They are assumed to be implemented and are therefore factored into the assessment process. Embedded mitigation is taken into account during the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme;

- An assessment of the Cumulative Effects of the Scheme under two divisions, these being: the assessment of Cumulative Sites based on the 9 areas of land forming the Site, and the assessment of Cumulative Developments being the Scheme in combination with other similar developments, these being other renewable projects in the local area; and
- Preparation of an Outline Landscape and Ecology Management Plan (OLEMP) [EN010170/APP/GH7.4] with a proposed schedule to be implemented throughout the lifetime of the Scheme. The Outline LEMP prescribes how the mitigation measures identified and proposed are to be implemented and managed to ensure the effectiveness and certainty in achieving the objectives of the mitigation strategy. This stage has been undertaken in conjunction with the ecology consultants.

8.4.4 Landscape effects and visual effects are considered separately in this assessment. Landscape effects relate to both direct physical effects of the Scheme (for example loss of existing trees) and effects on wider landscape character, including perceptual effects. Visual effects relate to the effect on views and visual amenity experienced by various receptors including residents, users of PRoW, road users and recreational users. Views from conservation areas, listed buildings, scheduled monuments and Registered Parks and Gardens are also considered where these features include recognised viewpoints, for example, used by tourists or other receptors. It should be noted that this LVIA chapter and supporting appendices, addresses effects on recognised views from cultural heritage resources; effects on 'setting' are not considered in this assessment and are presented in Chapter 12: Cultural Heritage **[EN010170/APP/GH6.2.12]** of this ES.

8.4.5 Effects are identified as being either reversible or irreversible and the duration of effects is also considered. Effects are described as being either beneficial, neutral or adverse depending on whether they are considered to have a positive or negative effect on the landscape or within views.

8.4.6 Impact assessment of any proposed development is an iterative process, with the overall aim being to avoid Environmental Impacts or, where impacts cannot be avoided completely, reducing identified impacts to acceptable levels. Based on the findings of this assessment, landscape and visual mitigation measures are designed to help integrate the Scheme into its landscape setting and mitigate any specific visual or physical effects that are identified. This LVIA chapter and supporting appendices considers the effects of mitigation measures being in place and identified residual impacts.

Spatial Scope: Study Area

8.4.7 The following Study Areas have been defined based on the Scheme's Order limits as described in Chapter 3: The Development Site **[EN010170/APP/GH6.2.3]** and physical characteristics and key parameters of the proposed Scheme as described in Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**.

8.4.8 The boundaries of the Sites (Green Hill A to G and BESS) and the Cable Route Corridor together define the extents of the Scheme.

8.4.9 GLVIA3 states that the Study Area must be reasonable and proportionate and must ensure that the focus when defining the appropriate Study Area is on where likely significant effects upon Landscape and Visual receptors may occur, together with likely significant cumulative effects.

8.4.10 The Study Areas have been informed through a combination of desktop study, as well as professional judgement on similar scale projects. They have been established through consideration of the existing landform and vegetation, as well as the scale of the Proposed Development and heights of the proposed infrastructure and the potential for significant effects. Identification of the Study Areas has considered the diminishing nature of visual perception as distance from visual receptors increases. As per GLVIA 3 Paragraph 6.11 "*The effects of distance on views must also be considered – for example parts of the [Zone of Theoretical Visibility] that are most distant from the proposal may be omitted from the final visual effects baseline if it is judged that visibility from this distance will be extremely limited. This will vary with the type of project and must be agreed with the competent authority."*

8.4.11 As a result, the proposed Study Areas for visual receptors are smaller than the proposed Landscape Study Areas, which consider the interconnectivity of the wider landscape context. The Scheme Location and Study Areas are illustrated on Figure 8.1 **[EN010170/APP/GH6.4.8.1]** and comprise four Study Areas which are described below.

8.4.12 The following Study Areas have been agreed with North Northamptonshire Council as per scoping response dated the 30 August 2024.

The 0.5km Study Area for the Cable Route Corridor (The Cable Route Corridor Study Area)

8.4.13 A Study Area of 0.5km is proposed from the outer boundary of the Cable Route Corridor.

8.4.14 The 0.5km radius is considered appropriate for the Cable Route Corridor, as the proposed cable would be underground and the only above ground features visible during the operational period would be limited to ground level inspection chambers. Construction activity and lay down areas would be visible during the construction phase only. Visual effects from construction of the Cable Route Corridor would be short term and temporary.

8.4.15 Landscape and visual effects resulting from the Cable Route Corridor would be localised and loss of landscape features such as trees and hedgerows would be mitigated through micro siting of the proposed cabling and directional drilling.

8.4.16 Beyond 0.5km, even with good visibility, it is deemed that this element of the Scheme would be barely perceptible. Within the assessment, this parameter is referred to as the 'Cable Route Corridor Study Area.'

8.4.17 The Cable Route Corridor is shown on the Crossing Schedule **[EN010170/APP/GH7.18]**.

8.4.18 The Cable Route Corridor Study Area is shown on **Figure 8.1 [EN010170/APP/GH6.4.8.1].**

8.4.19 All Landscape and Visual receptors within this Study Area will be assessed during the construction phase.

The 1km Study Area (The Local 1km Study Area)

8.4.20 The assessment of Local 1km Study Area focuses on impacts upon both Landscape and Visual receptors. This is the 1km area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS and is considered reasonable and proportionate as the Local Study Area for the LVIA.

8.4.21 All Landscape Receptors within the Local 1km Study Area will be included in the LVIA. This includes the landscape fabric of the site itself (landscape fabric being the individual tangible elements or features of the landscape, such as landform, woodland, hedges, tree cover, vegetation, for example which can usually be described and quantified), and the local landscape character (informed by all relevant landscape character assessments). The Landscape Fabric of the Sites themselves is considered a landscape receptor which will be assessed separately to the relevant Landscape Character Areas.

8.4.22 All Visual Receptors within the Local 1km Study Area would be included within the LVIA. However, Visual receptors within the Local 1km Study Area with no intervisibility of the main solar sites have been scoped out of the LVIA as it is considered unlikely that effects (if any) would be identified as being Significant.

8.4.23 Within the assessment, this parameter is referred to as the 'Local 1km Study Area'. Please refer to paragraph 8.4.10 for reasoning of proposed variation of Study Areas.

The 2km Study Area (The Wider 2km Study Area)

8.4.24 This is the 2km area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS and is considered reasonable and proportionate as the Wider Study Area for the LVIA.

8.4.25 The Wider Study Area focuses on impacts upon both Landscape and Visual receptors.

8.4.26 Effects to landscape character within the Wider 2km Study Area will be included within the LVIA, (informed by all relevant landscape character assessments).

8.4.27 Visual receptors located outside of the Local 1km Study Area that are identified as having direct, extensive, and/or open views towards the Scheme (particularly larger and taller elements or large open expanses of PV arrays) will be separately identified and included within this 2km Study Area and included within the LVIA.

8.4.28 Visual receptors which are considered to have direct, extensive, and/or open views towards the scheme have been identified through a combination of Zones of Theoretical Visibility (ZTV) and site surveys to ground truth visibility.

8.4.29 All visual receptors located beyond the Local 1km Study Area which do not have direct, extensive and / or open views towards the Scheme have not been carried forward for further assessment within the LVIA, as beyond this point, receptors without direct, extensive, and/or open views towards the Scheme are unlikely to experience significant effects.

8.4.30 Within the assessment, this parameter is referred to as the 'Wider 2km Study Area'. Please refer to paragraph 8.4.10 for reasoning of proposed variation of Study Areas.

The 5km Study Area (The Outer 5km Study Area)

8.4.31 This is for the area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS that is considered appropriate as the extent of the Outer Study Area for the LVIA. Any Landscape or Visual receptors beyond the Outer 5km Study Area are not included within the LVIA.

8.4.32 Effects to landscape character within the Outer 5km Study Area will be included within the LVIA (informed by all relevant landscape character assessments).

8.4.33 The Outer 5km Study Area focuses on impacts upon landscape receptors only, with all visual receptors beyond the Wider 2km Study Area scoped out of the LVIA. Please refer to paragraph 8.4.10 which refers to GLVIA3 and reduction of visibility due to distance.

8.4.34 It is considered that within the Outer 5km Study Area, even with excellent visibility it is deemed that the Scheme would be barely perceptible and that it would not lead to any significant Visual effects, either independently or cumulatively**. Figures 8.8.1 – 8.9.16** demonstrate potential visibility of the Scheme considering landform and vegetation.

8.4.35 Within the assessment, this parameter is referred to as the 'Outer 5km Study Area'. Please refer to paragraph 8.4.10 for reasoning of proposed variation of Study Areas.

Temporal Scope: Assessment Years

8.4.36 The assessment scenarios for the purposes of the EIA (and considered in this LVIA chapter and supporting appendices) are:

- Existing Baseline: 2025;
- Construction: 2027 – 2029. The construction programme for the entire Scheme is anticipated to be approximately 24 months with the potential likelihood of overlapping construction works on the different Sites;
- Operation: 2029. It has been assumed for the purposes of the EIA that the Scheme will be operational by end of Q1 2029;
- Decommissioning 2089. This would be the year when decommissioning of the Scheme would commence and has been based on the maximum operational lifetime of the Scheme of 60 years. It has therefore been assumed for the purposes of the EIA that the Scheme will be decommissioned in 2089. Decommissioning is expected to take between 12 and 24 months. A 24-month decommissioning period has been assumed for the purposes of the realistic worst-case assessment in the LVIA; and
- A future year of 2044 (15 years post first operation of the Scheme) is considered for this LVIA chapter and supporting appendices i.e., 15 years after commissioning, which is the typical period for the maturation of landscape planting.

Construction Phase

8.4.37 For the purposes of the assessment, the construction phase effects are effects that result from activities during site preparation / enabling works, construction, and commissioning activities, for example, effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on Site. Construction durations are described in Chapters 2: EIA Process and Methodology **[EN010170/APP/GH6.2.2]** and Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]** of the ES.

8.4.38 An overall 24-month construction period is anticipated for the Scheme.

Operational Phase

8.4.39 These are effects associated with operation and maintenance activities during the generating lifetime of the Scheme, for example, the effects of the physical presence of the solar arrays and associated infrastructure, and their use and maintenance. Timescales associated with these effects are defined. In EIA terms, effects can be defined as short term (lasts for up to 12 months); medium term (lasts for 1 - 5 years); long term (more than 5 years); reversible long-term effects (long-term effects, which last for the lifetime of the Scheme, but which cease once it has been decommissioned); and permanent effects (those which cannot be reversed following decommissioning).

Decommissioning Phase

8.4.40 Effects are those arising from activities for the duration of the decommissioning stage and will likely be short term, for example, site traffic, noise and vibration from decommissioning activities, dust generation, site runoff etc.

Assessment Years

8.4.41 The EIA considers the Environmental Impacts of the Scheme at all three stages described above. The operational life of the Scheme no more than 60 years and decommissioning is therefore estimated to be in 2089. This time period is assessed in the EIA (and within this LVIA chapter and supporting appendices).

8.4.42 The 'existing baseline' year for assessment is 2025 as this is the date on which baseline studies for the project were completed. A future baseline, Year 15 (2044) is also considered within this LVIA chapter and supporting appendices. The future baseline considers factors that will change the current baseline, without the Scheme proceeding. Committed developments within the 5km Study Area for this LVIA are one factor that can influence the future baseline ('committed developments' are those with current planning permission or allocated in adopted development plans). The potential effects of the Scheme are considered against both the current baseline and the future baseline in this LVIA chapter and supporting appendices.

Site Visits and Field Work

8.4.43 Following desk-based assessment, fieldwork was undertaken at key stages during the EIA and augmented by additional fieldwork where necessary, which are:

- PEIR stage;
- LVIA chapter and appendices, baseline appraisal stage;
- LVIA chapter and appendices, production of visualisations stage; and
- LVIA chapter and appendices, assessment of effects stage.

8.4.44 Initial Site work was undertaken throughout the course of 2024. The majority of the fieldwork was undertaken during December 2024 on a worst-case basis when there were no leaves on hedges and trees. Summer visits were undertaken in July 2024 when there was greater vegetation cover.

8.4.45 Site assessment was undertaken for each Site and Cable Route Corridor using publicly accessible viewpoints. Assessment of residential property and other non-accessible receptors was estimated based on effects identified from the closest publicly accessible areas. In a small number of cases, at the request of near neighbours, visits were undertaken to local residential properties to understand the nature of views from within the private dwelling.

Components of LVIA

8.4.46 There are two components of LVIA that are described in GLVIA3 as follows:

*1. "**assessment of landscape effects**: assessing effects on the landscape as a resource in its own right*

*2. **assessment of visual effects**: assessing effects on specific views and on the general visual amenity experienced by people".*

8.4.47 This LVIA chapter and appendices have taken into account both the landscape and visual effects throughout the assessment process, and this is set out within the full methodology suite included in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**. This appendix is split into four separate sub appendices:

- LVIA Methodology;
- Cumulative Assessment Methodology;
- Residential Visual Amenity Assessment Methodology; and
- Zone of Theoretical Visibility Methodology.

8.4.48 The consideration of the effects on the landscape resource is therefore based on the landscape receptors shown on Figure 8.6 **[EN010170/APP/GH6.4.8.6]** and the visual resource is based on the visual receptors shown on Figure 8.7 **[EN010170/APP/GH6.4.8.7]**.

8.4.49 A series of 'representative and specific viewpoints' are shown on Figures 8.10 **[EN010170/APP/GH6.4.8.10]** to 8.10.5 **[EN010170/APP/GH6.4.8.10.5]**. Verified photography and photomontages are shown on Figure 8.14.1 **[EN010170/APP/GH6.4.8.14.1]**. to Figure 8.14.NN13 **[EN010170/APP/GH6.4.8.14.NN13]**.

8.4.50 These viewpoints have been selected to represent the experience of different types of visual receptor, including users of PRoW, residential properties, transport routes, heritage, and recreational sites. Selected viewpoints include specific locations that are popular vantage points or tourist destinations, and

those suggested through Section 42 and Section 47 consultation. Viewpoints have also been selected to illustrate landscape character effects or likely Cumulative Effects of the Scheme.

Assessment of Landscape Effects

8.4.51 Landscape Effects have been assessed upon Landscape receptors collectively for the Sites themselves considered as 'Landscape Fabric'. Landscape Fabric is the tangible elements or features of the landscape, such as landform, woodland, hedges, tree cover, vegetation, for example, which can usually be described and quantified.

8.4.52 Effects to Landscape Character have been assessed within each Study Area (1km, 2km and 5km). Due to the interconnected relationship landform has, the assessment for each Study Area considers the effect of the Scheme on the landscape as a single receptor, made up of all landscape receptors within the Study Area, for example all National Character Areas and all Regional Landscape Character Types and Areas within the individual Study Areas. This approach ensures that the assessment looks at the effects of the Scheme on the unique holistic patchwork of landscape character within each Study Area and avoids focusing the assessment on the effects to individual local or national LCAs where it would be difficult to then ascertain the effect of the Scheme on landscape character as a whole. For assessment of Landscape Effects please refer to Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3].**

8.4.53 It is important to note that the impact of changes to the landscape can appear different depending on the scale at which they are assessed. When assessing effects on the Landscape Fabric within the boundary of each Site, the focus is on the landscape components found in that defined area. Within the context of an individual Site, these changes can be minimal, particularly where the existing landscape components are largely retained and are often reinforced through additional planting.

8.4.54 When considering how these changes affect the broader landscape character within the 1km Local Study Area, the 2km Wider Study Area and the 5km Outer Study Area, the significance may be greater or diminish over distance. Small alternations to the landscape components within a Site may disrupt or support the overall patters and distinctive character that define the landscape character of the area.

8.4.55 The detailed LVIA methodology used for the ES assessment is set out within Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**. For the overall EIA assessment methodology please refer to Chapter 2: EIA Process and Methodology **[EN010170/APP/GH6.2.2]**.

Assessment of Visual Effects

8.4.56 Visual Effects have been assessed upon individual visual receptors which have been given visual receptor numbers as shown on Figure (series) 8.7 **[EN010170/APP/GH6.4.8.7]**. Some visual receptors such as settlements and roads within settlements, are considered collectively in order to understand visual effects to the grouping as a whole. For assessment of Visual Effects please refer to Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3].**

8.4.57 The detailed LVIA methodology used for the ES assessment is set out within Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**. For the overall EIA assessment methodology please refer to Chapter 2: EIA Process and Methodology **[EN010170/APP/GH6.2.2]**.

Sensitivity of Receptors

Sensitivity of Landscape Receptors

8.4.58 The judgement on landscape sensitivity is based on consideration of both the landscape receptor's value and its susceptibility to change arising from the Scheme.

8.4.59 For details on how landscape value and susceptibility is assessed please refer to Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

8.4.60 Appendix 8.1 provides criteria for determining landscape value for both designated and undesignated landscapes. As listed, landscape value is based on factors such as natural and cultural heritage, its condition, associations, distinctiveness, and recreational opportunities and how it is perceived.

8.4.61 GLVIA3 (paragraph 5.39) indicates that combining susceptibility and value can be achieved in a number of ways and needs to include professional judgement. However, it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity.

8.4.62 **Table 8.1** below illustrates how landscape value and susceptibility are combined to determine the level of landscape sensitivity.

Table 8.1: Matrix for Determining Landscape Sensitivity

Landscape Susceptibility / Landscape Value	High	Medium	Low	Very Low
High	High	High to Medium	Medium	Medium to Low
Medium	High to Medium	Medium	Medium to Low	Low
Low	Medium	Medium to Low	Low	Low to Very Low
Very Low	Medium to Low	Low	Low to Very Low	Very Low

Sensitivity of Visual Receptors

8.4.63 The judgement on visual sensitivity is based on consideration of both the visual receptor's value and its susceptibility to change arising from the Scheme.

8.4.64 For details on how a visual receptor's value and susceptibility is assessed please refer to Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

8.4.65 Appendix 8.1 provides criteria for determining value attached to views which is dependent upon designation, cultural associations, popularity, and where views provide appreciation of the landscape.

8.4.66 Professional judgements are made on the merit of the view based on the visual receptor. It should be noted that the levels are indicative and in practice there is not a clear distinction between criteria levels.

8.4.67 **Table 8.2** below illustrates how the visual value and susceptibility are combined to determine the level of landscape sensitivity.

Table 8.2: Matrix for Determining Visual Sensitivity

Visual Susceptibility / Visual Value	High	Medium	Low	Very Low
High	High	High to Medium	Medium	Medium to Low
Medium	High to Medium	Medium	Medium to Low	Low
Low	Medium	Medium to Low	Low	Low to Very Low
Very Low	Medium to Low	Low	Low to Very Low	Very Low

Magnitude of Change

Magnitude of Landscape Change

8.4.68 The overall assessment of magnitude of landscape change, combines size and scale, geographical extent and duration and reversibility. Overall magnitude of change is assessed from high to very low depending on these factors. Not all aspects of a criterion need to be met for an evaluation to be given.

8.4.69 For definitions of landscape change please refer to Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

Duration and Reversibility of Visual Effects

8.4.70 The following terminology is used to describe the duration of the change.

- Short-term: 0-5 years;
- Medium-term: 5-10 years; and
- Long-term: 10 to 40 years (or longer).

8.4.71 For the purposes of the LVIA process, the operational phase of the Scheme is assessed as a long-term duration and the construction and decommissioning phases is assessed as short-term duration.

8.4.72 Reversibility is the judgement about whether or not the Scheme can be removed and once removed whether the view can be fully restored.

Magnitude of Visual Change

8.4.73 The overall assessment of magnitude of visual change, combines size and scale, geographical extent and duration and reversibility. Overall magnitude of change is assessed from high to very low depending on these factors. Not all aspects of a criterion need to be met for an evaluation to be given.

8.4.74 For definitions of visual change please refer to Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

Duration and Reversibility of Visual Effects

8.4.75 The following terminology is used to describe the duration of the change.

- Short-term: 0-5 years;
- Medium-term: 5-10 years; and
- Long-term: 10 to 40 years (or longer).

8.4.76 For the purposes of the LVIA process, the operational phase of the Scheme is assessed as a long-term duration and the construction and decommissioning phases is assessed as short-term duration.

8.4.77 Reversibility is the judgement about whether or not the Scheme can be removed and once removed whether the view can be fully restored.

Assessment of Significance

8.4.78 **Table 8.3** below shows how the combined factors of sensitivity and magnitude are considered together to determine the significance of landscape and visual effects.

8.4.79 Landscape and visual effects assessed as Major, Major/Moderate, and Moderate are considered to be significant as highlighted in grey below.

8.4.80 Landscape and visual effects assessed as Moderate/Minor, Minor, Minor Negligible and Negligible are not considered as significant.

Table 8.3: Matrix for Determining Significance of Landscape and Visual Effects

Sensitivity / Magnitude	High	Medium	Low	Very Low
High	Major	Major/ Moderate	Moderate	Moderate/Minor
Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor
Low	Moderate	Moderate/ Minor	Minor	Minor/ Negligible
Very Low	Moderate/ Minor	Minor	Minor/ Negligible	Negligible

8.4.81 Effects of the Scheme are considered adverse unless stated otherwise (neutral/beneficial) as defined in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

Cumulative Effects

8.4.82 For details of the cumulative methodology please refer to Cumulative Methodology within Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**.

8.4.83 Cumulative landscape effects, are likely to include effects on:

- The fabric of the landscape;
- The aesthetic aspects of the landscape; and
- The overall character of the landscape.

8.4.84 Cumulative visual effects can be caused by combined visibility, which:

"occurs where the observer is able to see two or more developments from one viewpoint and/or sequential effects which occur when the observer has to move to another viewpoint to see different developments"

as set out in GLVIA3 (Table 7.1) which states 'Combined' visual effects are:

"Where two or more developments are or would be within the observer's arc of vision at the same time without moving her/his head".

8.4.85 The cumulative assessment has been approached as three separate divisions under the following headings:

- the assessment of Cumulative Sites based on the Sites which make up the Scheme;
- the assessment of Cumulative Developments being the Scheme in combination with other similar developments, these being solar projects in the local area; and
- the assessment of Cross Topic Effects.

8.4.86 The following text defines the separate divisions of cumulative assessment.

Cumulative Site Effects

8.4.87 Due to the dispersed nature of the Sites within the Scheme, an assessment of the landscape and visual effects of Green Hill A-G and the Green Hill BESS, taken together, has been undertaken to determine the effects of the Scheme as a whole.

8.4.88 The cumulative effects of each of the Sites are assessed and combined to achieve a set of effects of the Scheme to reach an overall conclusion on where likely significant effects might occur as a result of the Scheme.

Cumulative Development Effects

8.4.89 A cumulative assessment has been undertaken, assessing both the cumulative landscape and visual effects of the Scheme in conjunction with other local developments. The Cumulative Developments assessment considers the additional effects resulting from the Scheme in combination with the effects resulting from other similar developments, these being other renewable projects taken together, that are listed below as set out within Appendix 8.1 LVIA Methodology **[EN010170/APP/GH6.3.8.1]** and in line with industry guidance (GLVIA3). In this case, the Scheme has assessed the cumulative effects as a combined set of effects as 'Developments' reaching an overall conclusion on

where likely significant effects might occur based on the following Cumulative Developments:

Table 8.4: Cumulative Developments

ID	App Reference	Description	Distance from Project
8	Grendon Lakes Main Road Grendon Northampton NN7 1JW	Development of battery energy storage system (BESS)	Adjacent to BESS Site

Cross Topic Effects

8.4.90 Cross topic environmental effects resulting from the Scheme are considered where LVIA impacts and those of another chapter both operate on the same receptor - e.g. cultural heritage; or noise and vibration. Chapter 25: Cumulative Effects and Effect Interactions of the ES **[EN010170/APP/GH6.2.25]** addresses those identified Cross Topic Cumulative Effects resulting from the Scheme. It is anticipated cross topic effects will primarily arise from following disciplines.

Glint and Glare

8.4.91 The LVIA has considered the conclusions of the Glint and Glare Assessment **[EN010170/APP/GH6.2.15]** in association with an assessment of the magnitude of Landscape and Visual impacts using the methodology prescribed above.

Lighting

8.4.92 The LVIA has considered the construction, operational and decommissioning lighting proposals (as set out within Chapter 4 Scheme Description **[EN010170/APP/GH6.2.4]** and further discussed in Chapter 24: Other Environmental Matters **[EN010170/APP/GH6.2.24])** for the Scheme including details of directionality and intermittent lighting.

8.4.93 Lighting is not required within the Solar Arrays for the operational phase. Motion sensing security lighting will be provided within substations and within the BESS to be used only for maintenance and security purposes.

8.4.94 Temporary site lighting during construction will be required to enable safe working during construction and decommissioning during hours of darkness and will be designed as far as reasonably practicable to minimise potential for light spillage outside the Scheme and Cable Corridor, particularly towards houses, traffic and ecological habitats.

8.4.95 Standard good practice measures would be employed to minimise light spill, including glare during construction, operation and decommissioning.

Cultural Heritage

8.4.96 The LVIA has considered the findings of the Cultural Heritage chapter of the ES **[EN010170/APP/GH6.2.12]**. The LVIA focuses on likely significant effects of views from heritage assets (where accessible) but does not comment upon the

setting of such assets. This has been undertaken as part of the Cultural Heritage chapter of the ES. However, consultation has been undertaken with the cultural heritage consultant through the LVIA process to help inform landscape character.

Arboriculture

8.4.97 The LVIA has considered the findings of the Chapter 19 Arboriculture **[EN010170/APP/GH6.2.19]** undertaken and has considered effects upon Landscape and Visual receptors where vegetation removal be required as part of the Scheme. Due to the nature of the Scheme, it is considered that existing vegetation on site would be retained (where possible) and any removal to accommodate elements associated with construction or access would be subject to a BS5837:2012 tree survey and associated Arboricultural Impact Assessment.. Mitigation associated with any such tree loss associated with the Scheme has been included in the landscape mitigation plans forming part of the LVIA. We have worked closely with the arboricultural consultant throughout the application process to ensure local arboreal assets and character inform the LVIA and associated mitigation plans.

Ecology

8.4.98 The LVIA has considered the findings of the ecological reports and close liaison with the ecology consultant has formed a key part of the LVIA mitigation strategy. Whilst ecological effects have been dealt with wholly in the Ecology and Biodiversity chapter of the ES **[EN010170/APP/GH6.2.9]**, this approach ensures that the landscape mitigation proposed is considered holistically with ecological requirements to maximise the benefits of the Scheme in terms of green infrastructure, habitat creation and ecological mitigation.

Residential Visual Amenity Assessment

8.4.99 Current guidance on Residential Visual Amenity Assessment (RVAA) is contained within the Landscape Institute's Technical Guidance Note (TGN) 2/19.

8.4.100 Steps 1-3 of RVAA guidance align with the standard LVIA based approach defined in GLIVIA3 to assess the effects on residential amenity as follows:

- Step 1 – Definition of study area and scope of the assessment;
- Step 2 – Evaluation of Baseline Visual Amenity;
- Step 3 – Assessment of likely change to visual amenity of properties;
- Step 4 – Forming the RVAA judgement; and
- Step 4 of the RVAA is defined as being required as follows:

"In this final step, and only for those properties where the largest magnitude of effect has been identified, a further judgement is required."

8.4.101 Steps 1-3 have been undertaken as part of the LVIA for the Scheme. Following assessment of affects upon residential properties at year 15, there do not remain any significant effects at the highest magnitude of significance (major (Adverse). Therefore, a full RVAA has not been required.

8.5 Assessment Assumptions and Limitations

8.5.1 The methodology for landscape and visual assessment has considered the following assumptions and limitations:

- The LVIA is based upon the Scheme layout illustrated within the Landscape and Ecology Mitigation Plans included within Figures 4.10 to 4.20;
- Fieldwork has been undertaken from publicly accessible locations only;
- Assessment of effects upon residential properties has been undertaken from the curtilage of residential properties where publicly accessible unless other arrangements are agreed with individual residents to gain access to their property. Professional judgement has been used to assess views from residential properties aided by the ZTV, aerial photography and LVIA figures; and
- Photography included within Figures 8.14 (series) Viewpoint Photography and photomontages, is verifiable in line with TGN 06/19 and has been captured in both summer and winter.

8.5.2 Assessment of effects at construction, operation and maintenance and decommissioning is assessed as follows:

- Construction – Assessment is based on the construction of Green Hill A – G, BESS Site and associated infrastructure including energy storage, substation and Cable Corridor as set out in Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**, and assessment work has been undertaken in both summer and winter in order to assess a worst-case scenario;
- Operation (Year 1) - Assessment is based on Green Hill A – G, BESS Site and associated infrastructure being operational at the same time and assessment and assessment work has been undertaken in both summer and winter in order to assess a worst-case scenario;
- Operation (Year 15) - Assessment is based on Green Hill A – G, BESS Site and associated infrastructure being operational at the same time and assessed in summer with vegetation in leaf offering maximum screening potential. A uniform rate of growth is allowed for trees, shelterbelts, and woodland mitigation planting of 0.4m every 1 year. At Year 15 this will result in new trees, shelterbelts, and woodland plantings having reached a minimum height of 7.5m. A uniform growth rate is allowed for new hedgerows of 0.4m every 1 year. This would result in hedgerows being able to be maintained at a height of 4.5m by Year 15. It is expected that alongside the regular maintenance of equipment, infrastructure such as panels and batteries will require replacement. It is not expected that an extensive replacement of all components will be required across the entirety of the Scheme during one period; instead, the programme for replacement of equipment across the Scheme should is anticipated to be staged to maintain the electrical export to the National Grid. The replacement activity would be considerably less intensive than during construction, with any environmental effects identified being appropriately mitigated with similar measures to those identified for the construction of the Scheme. Whilst

Solar PV Panels typically have a lifespan of up to 40 years or more, and it has been assumed that Solar PV Panels will be replaced once during the lifetime of the Scheme. The Solar PV Panels are anticipated to be replaced over a 24 month period. The BESS could be replaced up to five times during the operational phase. Details of replacement are set out in more detail within Chapter 4 Scheme Description **[EN010170/APP/GH6.2.4]**; and

- Decommissioning – Assessment is based on a similar process to that of construction with the scheme being no longer operational. Assessment work has been undertaken in both summer and winter in order to assess a worst-case scenario but assumes retention of existing and mitigating green infrastructure on site.

8.6 Baseline Conditions

8.6.1 This section describes the baseline environmental characteristics for the Scheme and surrounding areas with specific reference to landscape and visual setting.

Existing Landscape Baseline

8.6.2 The existing baseline conditions are derived from in-progress or completed desk based and field-based studies, the methodologies of which are given separately in Appendix 8.1 LVIA Methodology **[EN010170/APP/GH6.3.8.1].**

8.6.3 The Sites within the Scheme cover an area of approximately 1,200.6 hectares (ha) within a rural landscape setting of Northamptonshire and Buckinghamshire, located between the towns of Northampton, Wellingborough, and Bedford and the city of Milton Keynes.

8.6.4 As shown on Figure 8.1 **[EN010170/APP/GH6.4.8.1],** the nine Sites (Green Hill A to G and the Green Hill BESS) are situated within a series of land parcels across a large geographic area of just under 23km north to south. This area extends from the northern extent of the most northern Site, Green Hill A located near to the settlement of Old, to the southern extent of the most southern Site, Green Hill G located near to the settlement of Lavendon. Each of the Sites is separated by varying distances therefore, from a Landscape and Visual perspective, each land parcel is considered to vary in terms of interconnecting relationships. The individual fields within the Scheme have been described from a general wider landscape context within the text below and are described in detail Site by Site below from paragraph 8.6.33 onwards.

8.6.5 The 9 Sites primarily comprise agricultural land delineated by low hedgerows, treed hedgerows, scattered woodland, and woodland blocks.

8.6.6 Landform across the 9 Sites primarily consists of gently undulating topography which often provides enclosure and limits expansive views. Due to the nature of this landform alongside the extensive existing vegetation in the form of hedgerows, trees, and woodland, the individual Sites which make up the Scheme are relatively well contained. Views are available across the landscape immediately surrounding each Site but due to the containment provided by the landform and vegetation are likely be limited to localised short distance views rather than wide ranging or panoramic.

8.6.7 Green Hill A, A.2, B, C, D and to an extent Green Hill E are located upon the Sywell Plateau, an area of elevated landform that rises to a high point of 160m AOD, although it generally has an almost consistent elevation of around 130m AOD.

8.6.8 Green Hill E, F and G contain a greater topographical height difference when compared to the other Green Hill Sites. Green Hill E and F are located either side of the Nene Valley where topography falls from north to south on land associated with Green Hill E and from south to north on land at Green Hill F. Green Hill G is located on the southern slopes of the Yardley - Whittlewood Ridge, a plateau which separates the Nene Valley to the north and Ouse Valley to the south.

8.6.9 Green Hill BESS is located on the lower land (approximately 50m AOD) within the Nene Valley, adjacent to the Grendon Substation. The Green Hill BESS comprises agricultural land, directly southwest of extensive areas of wetland that run parallel to the River Nene. Features such as overhead pylons associated with Grendon Substation are prominent locally and compromise the rural character and detract from the local landscape context of the surrounding wetlands.

8.6.10 The existing substation and surrounding land parcels are screened, with mature existing bands of woodland, screening from Station Road and woodland planting to the extents of the substation boundary.

8.6.11 Green Hill A, A.2, B, F, G, and the Green Hill BESS are more rural when compared to the remaining three Sites. Green Hill C, D and E are located closer to the urban fringe of larger conurbations, located between Northampton and Wellingborough. Green Hill C skirts the edge of Sywell aerodrome, with all of Green Hill C, D and E in proximity to an industrial estate on the western edge of Wellingborough.

8.6.12 Figure 8.1 Scheme Location and Study Area **[EN010170/APP/GH6.4.8.1]** illustrates the proposed Sites which the Scheme comprises and the associated Study Area for the LVIA which has been defined based on the Site setting described in this section.

8.6.13 Landscape designations are assessed within each land parcel (Green Hill A - G and Green Hill BESS) and within the Outer 5km Study Area. Landscape Receptors are shown on Figure 8.6 **[EN010170/APP/GH6.4.8.6]**. A description of key designations within the Outer 5km Study Area has also been included within the Site Characters described in Section 8.6 below, to provide a more rounded assessment of designations within the wider landscape. The exception is the listed buildings, due to the high number of listed buildings within the 2km and Outer 5km Study Area, only those closest have been described. All the listed buildings have been recorded on Figure 8.6 **[EN010170/APP/GH6.4.8.6].**

8.6.14 There are no National landscape designations such as National Parks or National Landscapes, contained within the Outer 5km Study Area of the Scheme.

Landscape Character Areas

8.6.15 The character of the landscape evolves over time as a result of the interaction of human activity and the natural environment (people and place). Attributes used to assess landscape character include:

- Physical – geology, landform, climate, soils, land cover;
- Cultural and Social – land use, settlement, enclosure and history; and
- Aesthetics – colour, texture, pattern, form and perception.

8.6.16 The published National Character Areas (NCAs), Landscape Character Types (LCTs) and Landscape Character Areas (LCAs) within the study area from National to District level are described below and are shown on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.17 A full suite of landscape characteristics and sensitivities of the relevant Character areas within the Outer 5km Study Area have been included within Appendix 8.4 Landscape Character Area Descriptions **[EN010170/APP/GH6.3.8.4]**.

National Landscape Character

8.6.18 The Sites are located within four of the National Character Areas (NCAs) as defined by Natural England and as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]:**

- NCA Profile: 95 Northamptonshire Uplands (NE565);
- NCA Profile: 89 Northamptonshire Vales (NE527);
- NCA Profile: 91 Yardley-Whittlewood Ridge (NE501); and
- NCA Profile: 88 Bedfordshire and Cambridgeshire Claylands (NE555).

8.6.19 Green Hill A.2, C, D, E and the Green Hill BESS are located wholly within NCA 89 Northamptonshire Vales. Green Hill A and B are predominantly located within NCA 89 Northamptonshire Vales, with some of the western extents of both sites located within NCA 95 Northamptonshire Uplands.

- Green Hill F is located wholly within 91 Yardley-Whittlewood Ridge; and
- Green Hill G is located within both 91 Yardley-Whittlewood Ridge and 88 Bedfordshire and Cambridgeshire Claylands.

8.6.20 The NCAs are a national scale assessment and though they provide a useful broad scale overview of landscape character, the detail of more local scale landscape character assessment studies is more relevant to LVIA for development proposals of this scale.

Regional Landscape Character

8.6.21 The Scheme is located within eight Regional Landscape Character Types (LCT) as defined by Northamptonshire Council Current Landscape Character Assessment 2010 (Ref.13) and Milton Keynes Landscape Character Assessment 2022 (Ref.14) as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]:**

- Northamptonshire LCT 5 Clay Plateau;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes;
- Northamptonshire LCT 18 Broad River Valley Floodplain;
- Northamptonshire LCT 12 Limestone Valley Slopes;
- Northamptonshire LCT 8 Low Wooded Clay Ridge;
- Northamptonshire LCT 6 Undulating Claylands;
- Milton Keynes LCT 1 Wooded Wolds; and
- Milton Keynes LCT 2 Undulating Valley Slopes.

8.6.22 These regional LCTs are broken down further into eight Landscape Character Areas (LCA). The Sites are located in the following LCAs:

- Northamptonshire LCA 5b Sywell Plateau;
- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;
- Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill;
- Northamptonshire LCA 12a Wollaston to Irchester;
- Northamptonshire LCA 8b Salcey Forest and Yardley Chase;
- Northamptonshire LCA 6c Bozeat Claylands;
- Milton Keynes LCA 1a Yardley Chase Wooded Wolds; and
- Milton Keynes LCA 2a Ouse Northern Undulating Valley Slopes.

8.6.23 Green Hill A, A.2, B, C and D are located wholly within Northamptonshire LCA 5b Sywell Plateau. The majority of Green Hill E is also located within Northamptonshire 5b Sywell Plateau, with the exception of parts of the southern, eastern and western edges which are partly located within the Northamptonshire LCA 4c Ecton and Earls Barton Slopes.

8.6.24 The Green Hill BESS is located primarily within Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill. A small portion of the southern extent of the Green Hill BESS is located within the Northamptonshire LCA 12a Wollaston to Irchester along with the northern portion of Green Hill F.

8.6.25 The remaining extent of Green Hill F is located primarily within Northamptonshire LCA 8b Salcey Forest and Yardley Chase, with only a very small portion of the Site within Northamptonshire LCA 6c Bozeat Claylands.

8.6.26 Green Hill G is located primarily within Milton Keynes LCA 2a Ouse Northern Undulating Valley Slopes, with the northern extent of the Site located within Milton Keynes LCA 1a Yardley Chase Wooded Wolds.

8.6.27 The Outer 5km Study Area is located within a further six LCTs defined by the Northamptonshire Landscape Character Assessment 2010, Milton Keynes Landscape Character Assessment 2022 (Ref.15) and Bedford Borough Landscape Character Assessment 2020 (Ref.16), listed below:

- Northamptonshire LCT 13 Undulating Hills and Valleys;
- Northamptonshire LCT 17 River Valley Floodplain;

- Milton Keynes LCT 2 Undulating Valley Slopes;
- Bedfordshire LCT 1 Clay Farmland;
- Bedfordshire LCT 2 Wooded Wolds; and
- Bedfordshire LCT 3 Limestone Valleys.

8.6.28 These are divided into a further 16 LCAs listed below;

- Northamptonshire LCA 4b Moulton Slopes;
- Northamptonshire LCA 4d Hanging Houghton;
- Northamptonshire LCA 4e Pitsford Water;
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes;
- Northamptonshire LCA 6b Hackleton Claylands.
- Northamptonshire LCA 13d Cottesbrooke and Arthingworth;
- Northamptonshire LCA 17c Brampton Valley Floodplain;
- Northamptonshire LCA 17d River Ise Floodplain;
- Northamptonshire LCA 18C The Nene - Duston Mill to Billing Wharf;
- Milton Keynes LCA 2b Ouse Southern Undulating Valley Slopes;
- Milton Keynes LCA 3b Ouse Floodplains;
- Bedfordshire LCA 1A Cranfield to Stagsden;
- Bedfordshire LCA 1B Riseley;
- Bedfordshire LCA 2A Hinwick;
- Bedfordshire LCA 2B Pavenham; and
- Bedfordshire LCA 3A Harrold - Great Ouse.

8.6.29 The Outer 5km Study Area contains areas defined as ‘Urban' which is associated with large settlements including Wellingborough and Northampton.

8.6.30 Given the distance between the proposals, and those LCTs and LCAs that are peripheral to the Outer 5km Study Area, effects upon key landscape characteristics of the LCTs and LCAs listed below are limited overall. These Character Areas have been considered in the round within each Study Area as set out in Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3].**

- Bedfordshire LCT 1 Clay Farmland;
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes;
- Northamptonshire LCA 4d Hanging Houghton;
- Northamptonshire LCA 18C The Nene - Duston Mill to Billing Wharf;
- Milton Keynes LCA 2b Ouse Southern Undulating Valley Slopes;
- Bedfordshire LCA 1A Cranfield to Stagsden;
- Bedfordshire LCA 1B Riseley;

- Bedfordshire LCA 2B Pavenham; and
- Bedfordshire LCA 3A Harrold - Great Ouse.

8.6.31 The Scheme itself is not located within any Local Landscape Character Assessment (LLC) however part of the eastern extent of the Study Area is located within LLC areas identified in the Northampton Urban Fringe Landscape Character and Sensitivity Study produced by Northampton Borough Council in 2018 (Ref.17). The purpose of the report is to provide a detailed understanding of the character and sensitivity of the landscapes within and surrounding Northampton to inform allocation of sites for housing development for the Northampton Local Plan Part 2. The report focuses on the development of Northampton's urban fringe in relation to housing as opposed to renewable energy infrastructure.

8.6.32 Local Landscape Character Areas defined within the Northampton Urban Fringe overlap the same geographical area as LCA's defined within the Northamptonshire Council Current Landscape Character Assessment 2010, however extent of boundary lines defining the LCA's vary. For the purpose of the LVIA, only LCA's defined within the Northamptonshire Council Current Landscape Character Assessment, have been assessed collectively as a representative LCA of the geographical extent within the relevant Study Areas.

Site Character

8.6.33 The nine Sites which make up the Scheme are situated within a series of land parcels across a large geographic area. Each site, Green Hill A to G and the Green Hill BESS, are separated by varying distances and therefore from a landscape and visual perspective each land parcel is considered to have varying interconnecting effects on the local landscape. The landscape baseline for the Sites is shown in Figures 8.1 to 8.6.5 and are described below.

Green Hill A

8.6.34 Green Hill A is located within a rural setting of Northamptonshire. The closest settlements to Green Hill A include the village of Old, approximately 300m to the west, and the village of Walgrave, approximately 600m to the south. These two villages sit within the wider context of smaller villages scattered throughout the wider rural landscape, connected by local 'B' and narrow roads, connecting smaller urban nodes within the wider landscape.

8.6.35 Green Hill A covers an area of approximately 173.69 ha and is currently being used for agricultural purposes, predominantly arable. Green Hill A is divided into 29 fields which are divided centrally by Newland Road which runs through the Site north to south. Other surrounding roads in close proximity include Broughton Road which runs adjacent to the northern extent of Green Hill A, and Walgrave Road which runs parallel to the southern boundary of the Site at a distance of 300m.

8.6.36 Green Hill A is located on rolling landform with gently sloping undulation which varies between 104m to 136m AOD and roughly rise and fall in a northwest, southeast orientation. The surrounding farmland comprises a similar pattern of rolling landform.

8.6.37 Green Hill A comprises a series of medium scale regular shaped agricultural fields, defined by extensive hedgerows and hedgerow trees. The Site also contains a mature native woodland block which meanders north to south, parallel to Newland Road and forms a strong landscape feature in the local context.

8.6.38 Surrounding Green Hill A, the landscape is similar to the agricultural farmland contained within the Site itself, delineated by low hedge lines and treed hedgerows, with the occasional scattered wooded block.

8.6.39 Nearby properties in close proximity to Green Hill A include farmstead type buildings, one to the south of Newlands Road, The Acorn Educational Centre and a further farmstead with outbuildings, Walgrave Lodge to the north, again along Newlands Road. There are also several larger isolated properties dotted throughout the wider surrounding countryside.

8.6.40 There is a greater concentration of properties and housing located south of the Green Hill A within the villages of Old and Walgrave and a small residential development along Walgrave Road located directly between the two villages.

8.6.41 Pitsford Water Reservoir located 1.33km southwest from Green Hill A, provides a location for walking, cycling, fishing, sailing, water sports and birdwatching.

Registered Parks and Gardens

8.6.42 There are no Registered Parks and Gardens within Green Hill A.

8.6.43 Lamport Hall, Grade II (List Entry 1001036) is the nearest Registered Park and Garden, located approximately 2.8km west of the Green Hill A. This is the only Registered Park and Garden within 5km of the Site.

Scheduled Monuments

8.6.44 There are no Scheduled Monuments on Green Hill A and three Scheduled Monuments within the Wider 2km Study Area.

8.6.45 The closest Scheduled Monuments are within the village of Walgrave; Abandoned areas of Walgrave Medieval Village (List Entry Number: 1418583), located directly south, it also encompasses Walgrave moated site (List Entry Number:1011036) these are approximately between 500m to 1km from Green Hill A.

Listed Buildings

8.6.46 There are no Listed Buildings on Green Hill A. Within 2km there are two Grade I Listed Buildings and 36 Grade II Listed Buildings.

Conservation Areas

8.6.47 There are no Conservation Areas located on Green Hill A or within the Wider 2km Study Area. The closest Conservation Area is Scaldwell approximately 2.1km to the west.

Ancient Woodland

8.6.48 There is no Ancient Woodland on Green Hill A.

8.6.49 The nearest block of Ancient Woodland is Badsaddle Wood (Ancient and Semi-Natural Woodland), located 4.5km southeast of Green Hill A.

8.6.50 There are seven blocks of Ancient Woodland located between 2 and 5km of Green Hill A which include: Withmale Park Wood (a mix of Ancient and Semi-Natural Woodland and Ancient Replanted Woodland); Faxton Corner; Cransley Wood (Ancient and Semi-Natural Woodland); Hardwick Wood (Ancient Replanted Woodland); Sywell Wood (Ancient Replanted Woodland) and two unnamed Ancient Semi-Natural Woodland blocks.

Sites of Special Scientific Interest (SSSI)

8.6.51 There are no SSSIs on Green Hill A.

8.6.52 There are three SSSIs on the outer edge of the Wider 2km Study Area: Pitsford Reservoir located 1.33km to the southwest; Badsaddle and Withmale Park Bush Walk Woods located 1.83km to the east at the nearest point; and Birch Spinney and Mawsley Marsh located 2km to the north.

National Character Area

8.6.53 Green Hill A is located within two of the National Character Areas (NCA's) as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527), and NCA Profile: 95 Northamptonshire Uplands (NE565).

Regional Landscape Character

8.6.54 Green Hill A is located within one Landscape Character Type (LCT), LCT 5 Clay Plateau which contains one Landscape Character Area (LCA), LCA 5b Sywell Plateau, as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.55 There are a further three LCTs located within 2km and 5km of Green Hill A including;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes;
- Northamptonshire LCT 17 River Valley Floodplain; and
- Northamptonshire LCT 13 Undulating Hills and Valleys.

8.6.56 These are broken down into further LCAs between 2km and 5km and localised as:

- Northamptonshire LCA 4e Pitsford Water;
- Northamptonshire LCA 4d Hanging Houghton;
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes;
- Northamptonshire LCA 17c Brampton Valley Floodplain; and
- Northamptonshire LCA 13d Cottesbrooke and Arthingworth.

Green Space

8.6.57 The nearest Green Spaces are playing fields located in Walgrave, approximately 376m south of Green Hill A and playing fields located in Old, approximately 390m west of the Site.

Green Hill A.2

8.6.58 Green Hill A.2 is located within a rural setting of Northamptonshire, approximately 6.5km north east of Northampton. The closest settlements to Green Hill A.2 include the village of Walgrave, located approximately 900m to the west and Hannington located approximately 900m southwest of the Site. These two villages sit within the wider context of smaller villages scattered throughout the wider rural landscape, connected by local 'B' and narrow roads, connecting smaller urban nodes within the wider landscape.

8.6.59 Green Hill A.2 covers an area of approximately 65.3ha and is currently being used for agricultural purposes, predominantly arable. The Site comprises four large scale fields divided by native hedgerows with scattered hedgerow trees.

8.6.60 Roads in close proximity to Green Hill A.2 include the A43 which runs north to south, directly east of the Site and Kettering Road which joins the A43 at the northeast corner of the Site and runs directly parallel to the northern Site boundary.

8.6.61 Green Hill A.2 is located on gently rolling landform which varies between 110m to 135m AOD and roughly falls from east to west. The surrounding farmland comprises a similar pattern of rolling landform.

8.6.62 Green Hill A.2 comprises a mix of two medium, slightly irregular shaped fields and two large scale regular shaped agricultural fields, defined by extensive hedgerows and hedgerow trees. Other extensive tree planting in close proximity to Green Hill A.2 includes a woodland block which runs parallel to the southern Site Boundary, directly southeast of the Site.

8.6.63 The landscape surrounding Green Hill A.2 is similar to the agricultural farmland contained within the Site itself, delineated by low hedge lines and treed hedgerows, with the occasional scattered wooded block particularly to the south.

8.6.64 Nearby properties in close proximity to the Green Hill A.2 include farmstead type buildings along Kettering Road which includes several properties associated with New Lodge Farm, located 14m north of the Site and Bridge Field Farm located 230m west of the Site. There is also a series of buildings directly south of the Green Hill A.2 associated with Rectory Farm located west of the A43. Residential property Gibb Wood (Promise Land) is located opposite Green Hill A.2 on the far side of the A43.

8.6.65 PRoW Bridleway NN|CT|3 is located just south of Site A.2. This is a semi enclosed section of Bridleway leading south west from Kettering Road on the southern side of an established hedgerow. Eastern most section of Bridleway passes alongside a woodland which screens views out across the surrounding landscape to the south. However once beyond this, there are views available across the adjacent field towards Red House Lane.

Registered Parks and Gardens

8.6.66 There are no Registered Parks and Gardens within Green Hill A.2 or within the Outer 5km Study Area.

8.6.67 Lamport Hall, Grade II (List Entry 1001036) is the nearest Registered Park and Garden, located approximately 5.45km northwest of Green Hill A.2.

Scheduled Monuments

8.6.68 There are no Scheduled Monuments on Green Hill A.2 and two (2) Scheduled Monuments within the Wider 2km Study Area.

8.6.69 The closest Scheduled Monuments are within the village of Walgrave; Abandoned areas of Walgrave Medieval Village (List Entry Number: 1418583) and encompasses Walgrave moated site (List Entry Number:1011036) located approximately between 700m to 1.6km west of Green Hill A.2.

Listed Buildings

8.6.70 There are no Listed Buildings on the Green Hill A.2. Within 2km there are two Grade I Listed Buildings and 21 Grade II Listed Buildings.

Conservation Areas

8.6.71 There are no Conservation Areas located on the Green Hill A.2 or within the Wider 2km Study Area. The closest Conservation Area is Broughton approximately 2.3km to the northeast.

Ancient Woodland

8.6.72 There is no Ancient Woodland on the Green Hill A.2 Site.

8.6.73 The nearest block of Ancient Woodland is Badsaddle Wood (Ancient and Semi-Natural Woodland), located 308m east of the Green Hill A.2.

8.6.74 There are a further five blocks of Ancient Woodland located between 1 and 5km of Green Hill A.2 which include: Withmale Park Wood (A mix of Ancient and Semi-Natural Woodland and Ancient Replanted Woodland); Cransley Wood (Ancient and Semi-Natural Woodland); Hardwick Wood (Ancient Replanted Woodland); Sywell Wood (Ancient Replanted Woodland) and one unnamed Ancient Semi-Natural Woodland block.

Sites of Special Scientific Interest (SSSI)

8.6.75 There are no SSSIs on the Site.

8.6.76 There are three SSSIs within the 5km study area: the closest are Badsaddle and Withmale Park Bush Walk Woods located between 308m and 930m to the southeast. Pitsford Reservoir is located 2.5km southwest of Green Hill A.2, and Hardwick Lodge Meadow SSSI is located approximately 2.2km south east of A.2.

National Character Area

8.6.77 Green Hill A.2 is located within one National Character Area (NCA) as illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527).

Regional Landscape Character

8.6.78 Green Hill A.2 is located within one Landscape Character Type (LCT), LCT 5 Clay Plateau which contains one Landscape Character Area (LCA), LCA 5b Sywell Plateau, as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.79 There is one further LCT located within 2km and 5km of Green Hill A.2;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes.

8.6.80 These are broken down into further LCAs between 2km and 5km and localised as:

- Northamptonshire LCA 4e Pitsford Water; and
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes.

Green Space

8.6.81 The nearest Green Spaces are playing fields and play space located in Walgrave, approximately 1.4km west of Green Hill A.2. Hannington Allotments are also located approximately 850m to the southwest of Green Hill A.2.

Green Hill B

8.6.82 Green Hill B is located 1.3km north of the Northampton suburb of Moulton, in the rural setting of Northamptonshire. The closest settlements to Green Hill B are the small village of Holcot located approximately 850m north of the Site. Holcot sits at the outer edge of a wider context of smaller villages scattered throughout the wider rural landscape, connected by local 'B' roads. Other settlements within 2km of Green Hill B are limited to farmsteads and larger isolated properties dotted within the wider landscape and associated with the local road network.

8.6.83 Green Hill B covers an area of 64.7ha of gently undulating landform which varies between 120m to 130m AOD and generally falls from north to south. The land is currently being used for agricultural purposes, predominantly arable. The surrounding farmland comprises a similar pattern of rolling landform.

8.6.84 Green Hill B comprises a series of five medium scale regular shaped agricultural fields defined by extensive hedgerows and hedgerow trees. Boundary treatment comprises of a mix of taller hedgerows allowed to grow up to 2.5 meters and lower maintained hedgerows up to 2 meters in height. The hedgerows which define the western perimeter of Green Hill B contain a greater concentration of mature trees and provide a dense vegetative boundary. The Site also contains a large pond which is heavily screened by mature tree and shrub planting in the most eastern field parcel.

8.6.85 A PRoW crosses the most eastern field parcel from north to south diagonally, passing the edge of the pond as shown on Figure 8.13.2 **[EN010170/APP/GH6.4.8.13.2]** .

8.6.86 Tithe Farm Road is located at the entrance to Green Hill B and runs halfway into the Site in north to south direction.

8.6.87 The landscape surrounding Green Hill B is similar to the agricultural farmland contained within the Site itself, delineated by a mix of low hedge lines, outgrown and treed hedgerows, and the occasional scattered wooded block. There are five buildings within 500m of Green Hill B comprising of farmsteads, detached properties, cottages, and a converted farm building. Tithe Farm which lies adjacent to the Green Hill B, has several old farm buildings/barns which have been converted into commercial office spaces and are occupied by a number of independent businesses, a car park is also associated with the buildings but its heavily screened on the north, east and south by scattered woodland blocks. A large, detached property, Hillcrest lies approximately 300m to the northwest, situated between Holcot Road and the northern Site boundary. There are also several larger buildings located approximately 200 to 500m to the south of Green Hill B, they comprise: Rectory Farm which has a large footprint of outbuildings, Overstone Old Rectory, a mix of outbuildings and a property and several cottages and Overstone Grange. There are also several farmsteads and commercial storage yards dotted in the wider surrounding countryside towards the east, which are associated with Sywell Road.

8.6.88 Pitsford Water Reservoir is located approximately 800m north west of Green Hill B and sits approximately 30m above ordnance datum (AOD) below the Site. The reservoir provides amenity value and provisions for walking, cycling, fishing, sailing, water sports and birdwatching.

Registered Parks and Gardens

8.6.89 There are no Registered Parks and Gardens on or within 2km of Green Hill B. The closest Registered Park and Garden is Boughton Hall located approximately 3.3km to the west in the village of Boughton.

Scheduled Monuments

8.6.90 There are no Scheduled Monuments on Green Hill B.

8.6.91 The closest Scheduled Monument is beyond the Wider 2km Study Area, located south of the village of Walgrave: Abandoned areas of Walgrave Medieval Village.

Listed Buildings

8.6.92 There are no Listed Buildings on Green Hill B and 54 Listed Buildings within the Wider 2km Study Area comprising two Grade I Listed Buildings, 53 Grade II Listed Buildings.

Conservation Areas

8.6.93 Green Hill B is not located within a Conservation Area, the closest at the edge of the Wider 2km Study Area is Moulton Conservation Area located approximately 1.5km to the southwest. Located to the west within the Outer 5km Study Area is Boughton Conservation Area, located approximately 3.3km and Pitsford Conservation Area located approximately 3km west.

Ancient Woodland

8.6.94 There is no Ancient Woodland on Green Hill B.

8.6.95 The nearest block of Ancient Woodland is Sywell Wood (Ancient and Semi-Natural Woodland), located approximately 2.6km north east of Green Hill B.

8.6.96 There are three blocks of Ancient Woodland located between 2 and 5km of Green Hill B which include: Sywell Wood (Ancient Replanted Woodland); Hardwick Wood (Ancient Replanted Woodland); and Withmale Park Wood (A mix of Ancient and Semi-Natural Woodland and Ancient Replanted Woodland).

Sites of Special Scientific Interest (SSSI)

8.6.97 There are no SSSIs on the Green Hill B.

8.6.98 Located within the Wider 2km Study Area to the northwest approximately 800m from Green Hill B is Pitsford Reservoir. Located within the Outer 5km Study Area to the northeast is Hardwick Lodge Meadow which is located approximately 3.7km distance from Green Hill B and Badsaddle, Withmale Park and Bush Walk Woods at an approximate distance of 5km to the northeast.

Local Nature Reserves (LNR)

8.6.99 There are no local nature reserves on the Green Hill B.

8.6.100 On the edge of the Wider 2km Study Area to the south is Crowfields Common. Within the wider Outer 5km Study Area is Lings Wood approximately 4km and Scrub Field approximately 4.6km to the southwest.

National Character

8.6.101 Green Hill B is located within two of the National Character Areas (NCA's) as illustrated on Volume 2, Figure 8.5 **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527), and NCA Profile: 95 Northamptonshire Uplands (NE565).

Regional Landscape Character

8.6.102 Green Hill B is located within one Landscape Character Type (LCT), LCT 5 Clay Plateau which contains one Landscape Character Area (LCA), LCA 5b Sywell Plateau, as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.103 There are two LCTs located between 2km and 5km of Green Hill B including;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes; and
- Northamptonshire LCT 17 River Valley Floodplain.

8.6.104 These are broken down into further LCAs between 2km and 5km and localised as:

- Northamptonshire LCA 4b Moulton Slopes;
- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;
- Northamptonshire LCA 4e Pitsford Water;
- Northamptonshire LCA 4d Hanging Houghton; and
- Northamptonshire LCA 17c Brampton Valley Floodplain.

Green Hill C

8.6.105 Green Hill C is located 2km west of Wellingborough, in the rural setting of Northamptonshire. The closest settlement is the small village of Sywell, located approximately 1.5km southwest of the Site.

8.6.106 Green Hill C comprises of a series of medium scale, irregular agricultural fields defined by a combination of hedgerows and hedgerow trees, a block of ancient woodland to the north, Sywell Aerodrome to the west and an existing solar farm to the north.

8.6.107 Green Hill C covers an area of approximately 56.3ha and is currently being used for agricultural purposes, predominantly arable with the field south of the existing solar farm, currently fallow.

8.6.108 Green Hill C is divided into eight land parcels, bound along the southern perimeter by Sywell Road, which turns south into Wellingborough Road. The current entrance to Green Hill C is an existing gate and access track that runs northwards into the Site, which is located in close proximity of Beckworth Emporium and Garden Centre directly to the south.

8.6.109 Green Hill C is located on rolling landform with gently sloping undulation which varies between 110m to 120m AOD and roughly rise and fall in a northwest, southeast orientation.

8.6.110 The access track within Green Hill C is located along a high point within the Site at 118m AOD. The surrounding landform falls in northwest direction before rising again to the western extent of Green Hill C. The land east of the access track falls to 111m AOD to the southeastern corner of the Site.

8.6.111 Green Hill C is largely contained with treed hedgerows, along the east and southern perimeter. There are two linear blocks of woodland to the north of the Site, one consisting of a mature conifer hedgerow. The northwestern field parcel is contained within mature hedgerows and larger trees, which connect with the dense block of mature ancient woodland to the north of Green Hill C.

8.6.112 A bridleway traverses north to south in the western extent of Green Hill C and connects the ancient woodland to the north with Sywell Road as shown on Figure 8.13.3 **[EN010170/APP/GH6.4.8.13.3]**.

Registered Parks and Gardens

8.6.113 There are no Registered Parks and Gardens on or within 2km of Green Hill C. The closest Registered Park and Garden is the Great Harrowden Hall located 4.6km northeast of the Green Hill C. There are no other Registered Parks and Gardens within 5km of the Site.

Scheduled Monuments

8.6.114 There are no Scheduled Monuments on Green Hill C.

8.6.115 The closest Scheduled Monument is Earls Barton motte castle (List Entry Number: 1,009,510), located approximately 2.8km to the south of Green Hill C.

Listed Buildings

8.6.116 There are no Listed Buildings located on Green Hill C.

8.6.117 Within the combined Wider 2km Study Area of Sites C, D and E there is one Grade I Listed Building, 10 Grade II* Listed Buildings, 98 Grade II Listed Buildings which are primarily associated with the villages of Sywell and Mears Ashby.

Conservation Areas

8.6.118 There are no Conservation Areas located on Green Hill C.

8.6.119 There are several Conservation Areas within the Wider 2km Study Area, the closest are Sywell Conservation Area located 1km to the west and Mears Ashby Conservation Area located 1.1km south of Green Hill C.

Ancient Woodland

8.6.120 There is no Ancient Woodland on Green Hill C.

8.6.121 The nearest block of Ancient Woodland is Sywell Wood (Ancient Replanted Woodland), which is adjacent to the northern boundary of Green Hill C. There is only one other block of Ancient Woodland within 2km of Green Hill C, Hardwick Wood (Ancient Replanted Woodland) which is located 1.5km north of the Site.

8.6.122 There are a further two blocks of Ancient Woodland between 2km to 5km which include Withmale Park Wood (Ancient Replanted Woodland) and Badsaddle Wood (Ancient and Semi-Natural Woodland).

Sites of Special Scientific Interest (SSSI)

8.6.123 There are no SSSI's on Green Hill C. The closest SSSI is Hardwick Lodge Meadow approximately 1.3km north of the Site.

National Character Areas

8.6.124 Green Hill C is located within one National Character Areas (NCA's) as illustrated on Volume 2, Figure 8.5 **[EN010170/APP/GH6.4.8.5]**, and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527).

8.6.125 Green Hill C is located at the southeastern edge of the NCA Profile: 89 Northamptonshire Vales and borders NCA Profile: 91 Yardley Whittlewood Ridge.

Regional Landscape Character

8.6.126 Green Hill C is located within one Landscape Character Type (LCT), LCT 5 Clay Plateau which contains one Landscape Character Area (LCA), LCA 5b Sywell Plateau, as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.127 There are two further LCTs located between 2km and 5km of Green Hill C including;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes; and
- Northamptonshire LCT 18 Broad River Valley Floodplain.

8.6.128 LCAs located between 2km and 5km from Green Hill C include;

- Northamptonshire LCA 4b Moulton Slopes;
- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;

- Northamptonshire LCA 4e Pitsford Water;
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes; and
- Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill.

Green Hill D

8.6.129 Green Hill D is located approximately 240m east of Green Hill C and 1.3km west of Wellingborough, in the rural setting of Northamptonshire. The closest settlement is the village of Mears Ashby which is directly south of the Site.

8.6.130 Green Hill D comprises a distinctive linear shaped series of agricultural fields which are located between Green Hill C and E, orientated north to south. The Site covers an area of approximately 42.1ha and is currently being used for agricultural purposes, predominantly arable.

8.6.131 Green Hill D is divided into four land parcels of approximately equal size which are connected in a longitudinal arrangement and bound to the east by the neighbouring B-Road, Highfield Road, and Moonshine Gap to the north. Highfield Road links Sywell Road to the village of Mears Ashby to the south.

8.6.132 The fields can be accessed from a series of openings that have been formed along Highfield Road. Green Hill D is located on gently falling land, with a high point of 120m AOD at the corner of Sywell Road (northeast corner of the Site) which falls to 100m AOD at the southwest corner of the Site towards Mears Ashby. The fields generally fall westwards from Highfield Road by approximately 10m.

8.6.133 Green Hill D is delineated by treed hedgerows which separate each land parcel in an east to west direction. The western perimeter of the Site is more substantial in part, the treed hedgerows providing greater screening. However, the change in the elevation towards the west associated with Glebe Road which sits at similar height as Highfield Road allows mid-distant views into Green Hill D.

8.6.134 A PRoW footpath crosses Green Hill D in a north to south direction along the western boundary, which connects Sywell Road/ Moonshine Gap with the Village of Mears Ashby as shown on Figure 8.13.3 **[EN010170/APP/GH6.4.8.13.3]**.

Registered Parks and Gardens

8.6.135 There are no Registered Parks and Gardens on or within 2km of Green Hill D. The closest Registered Park and Garden is Great Harrowden Hall located 4.2km northeast of the Green Hill D. There are no other Registered Parks and Gardens within 5km of Green Hill D.

Scheduled Monuments

8.6.136 There are no Scheduled Monuments on Green Hill D.

8.6.137 The closest Scheduled Monument is Earls Barton motte castle (List Entry Number: 1,009,510), located 2.3km to the south of Green Hill D.

Listed Buildings

8.6.138 There are no Listed Buildings located on Green Hill D.

8.6.139 Within the combined Wider 2km Study Area of Green Hill C, D and E there is one Grade I Listed Building, 10 Grade II* Listed Buildings, 98 Grade II Listed Buildings which are primarily associated with the villages of Sywell and Mears Ashby.

Conservation Areas

8.6.140 There are no Conservation Areas located on Green Hill D.

There are several Conservation Areas within the Wider 2km Study Area, the nearest is Mears Ashby Conservation Area located 115m south of Green Hill D.

Country Park

8.6.141 There are no Country Parks on Green Hill D and the nearest is Sywell Country Park located 1.1km southwest of the Site.

Ancient Woodland

8.6.142 There is no Ancient Woodland on Green Hill D.

8.6.143 The nearest block of Ancient Woodland is Sywell Wood (Ancient Replanted Woodland), which is located 770m northwest of Green Hill D. There is one further block of Ancient Woodland within 2km of the Site, Hardwick Wood (Ancient Replanted Woodland) which is located 2km northwest of the Site.

8.6.144 There are a further two blocks of Ancient Woodland between 2km to 5km which include Withmale Park Wood (Ancient Replanted Woodland) and Badsaddle Wood (Ancient and Semi-Natural Woodland).

Sites of Special Scientific Interest (SSSI)

8.6.145 There are no SSSIs on Green Hill D. The closest SSSI is Hardwick Lodge Meadow approximately 1.7km north of the Site.

National Character Area

8.6.146 Green Hill D is located within one National Character Area (NCA) as illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5].** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527).

Regional Landscape Character

8.6.147 Green Hill D is located within one Landscape Character Type (LCT), LCT 5 Clay Plateau which contains one Landscape Character Area (LCA), LCA 5b Sywell Plateau, as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.148 There are two further LCTs located between 2km and 5km of Green Hill D including;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes; and
- Northamptonshire LCT 18 Broad River Valley Floodplain.

8.6.149 Additional LCAs located between 2km and 5km from Green Hill D include;

- Northamptonshire LCA 4b Moulton Slopes;
- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;

- Northamptonshire LCA 4f Kettering and Wellingborough Slopes; and
- Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill.

Green Hill E

8.6.150 Green Hill E is located 330m east of Green Hill D and 600m west of the western extent of Wellingborough, in a rural setting of Northamptonshire.

8.6.151 Green Hill E is the largest of the Sites which make up the Scheme and covers an area of 308.6ha. From north to south Green Hill E is approximately 3.18km at its longest and 1.9km at its widest point from east to west.

8.6.152 Green Hill E comprises a series of agricultural land parcels which vary from medium to small in size and are fairly regular in shape.

8.6.153 The closest settlements are the village of Mears Ashby, which is west of Green Hill E, Earls Barton located south of the Site, and Wilby located 920m east of the Site at its nearest residential property.

8.6.154 A series of A and B roads in close proximity to Green Hill E connecting the surrounding villages include Mears Ashby Road, west of the Site (B-road), the A4500 Main Road, south of the Site (A-Road) and Wilby Road which runs through the Site from east to west.

8.6.155 Approximately one third of the northern extent of Green Hill E is divided by Wilby Road, which connects the villages of Mears Ashby and Wilby. The southern portion of the Site then extends 1.95km to the south from Wilby Road until it reaches the A4500 Main Road. The western extent of Green Hill E extends to Mears Ashby Road at its widest point.

8.6.156 The northern extent of Green Hill E (north of Wilby Road) comprises 12 fields. Landform within this portion of the Site generally rises from Wilby Road in a north / northwestern direction from an average of 100m AOD up to 115m AOD. Landform also rolls within this extent of the Site in an east to west direction.

8.6.157 The fields south of Wilby Road comprises 22 fields. Landform within this portion of Green Hill E generally falls in a southerly direction from Wilby Road with a high point of 109m AOD in the northwestern field parcel. The landform slopes gently at first before becoming steeper to the southern and eastern extents of the Site. Topography falls to the eastern and southern extents of the Site at 75m AOD as well as dropping west to a water course that runs parallel to Mears Ashby Road to a low of 85m AOD. The landform then rises from east to west in the two most westerly fields, from 84m AOD at the watercourse up to 102m AOD along Mears Ashby Road.

8.6.158 Existing vegetation cover across the northern and southern portions of Green Hill E is similar, with varying treed hedgerows of differing heights and widths which delineate each field parcel as well as scattered blocks of deciduous tree planting and small wooded areas. The northern portion of Green Hill E contains many bands of dense tree planting both within the Site and along the northern boundary. These tree lines connect to several woodland blocks northeast of the Site.

8.6.159 Substantial woodland blocks associated with the southern portion of Green Hill E are located along extensive lengths of the eastern and western boundaries and include Wilby Spiney and woodland which runs parallel to a water course that runs south from Mears Ashby.

8.6.160 There are two PRoWs that cross Green Hill E, one that runs parallel to the most northern Site boundary and a second that dissects one of the most western fields, parallel to Mears Ashby Road as illustrated on Figure 8.13.3 **[EN010170/APP/GH6.4.8.13.3]**

8.6.161 The surrounding landscape setting is similar in appearance to the agricultural farmland contained within Green Hill E however this is framed by surrounding urban settlements such as Wellingborough and the northern eastern suburbs of Northampton.

Registered Parks and Gardens

8.6.162 There are no Registered Parks and Gardens on or within 2km of Green Hill E. The closest Registered Park and Garden is the Castle Ashby located 3.6km south of Green Hill E. There are no other Registered Parks and Gardens within 5km of Green Hill E.

Scheduled Monuments

8.6.163 There are no Scheduled Monuments on Green Hill E.

8.6.164]The closest Scheduled Monument is Earls Barton motte castle (List Entry Number: 1,009,510), located 860m to the south of Green Hill E.

Listed Buildings

8.6.165 There are no Listed Buildings located on Green Hill E.

8.6.166 Within the combined Wider 2km Study Area of Green Hill C, D and E there is one Grade I Listed Building, 10 Grade II* Listed Buildings, 98 Grade II Listed Buildings which are primarily associated with the villages of Mears Ashby, Wilby, and Earls Barton.

Conservation Areas

8.6.167 There are no Conservation Areas located on Green Hill E.

8.6.168 There are several Conservation Areas within the Wider 2km Study Area, the nearest is Mears Ashby Conservation Area located 45m west of Green Hill E.

Country Park

8.6.169 There are no Country Parks on Site however the nearest, Sywell Country Park, is located 360m west of Green Hill E.

Ancient Woodland

8.6.170 There is no Ancient Woodland on Green Hill E.

8.6.171 The nearest block of Ancient Woodland is Sywell Wood (Ancient Replanted Woodland), which is located 1.5km northwest of Green Hill E. There are two blocks of Ancient Woodland between 2km and 5km of Green Hill E which include Hardwick Wood (Ancient Replanted Woodland) which is located 2.9km northeast

of the Site and Withmale Park Wood (Ancient Replanted Woodland) located 4km north of the Site.

Sites of Special Scientific Interest (SSSI)

8.6.172 There are no SSSIs on Green Hill E.

8.6.173 Hardwick Lodge Meadow SSSI is located 2.5km northwest of Green Hill E. This is a large area of diverse permanent pasture with an exceptionally rich and varied grassland flora that, in turn, supports uncommon invertebrates.

8.6.174 The Upper Nene Valley Gravel Pits SSSI, located approximately 2.6km southeast of Green Hill E, and stretches over a distance of 4.6km in a southwest to northeast direction.

Ramsar Sites

8.6.175 There are no Special Protection Areas or Ramsar sitess on Green Hill E.

8.6.176 The closest Ramsar site is the Upper Nene Valley Gravel Pits Ramsar Site, located approximately 2.6km southeast of Green Hill E.

Special Protection Area (SPA)

8.6.177 There are no SPA on Green Hill E.

8.6.178 The closest SPA is the Upper Nene Valley Gravel Pits, located approximately 2.6km southeast of Green Hill E, and stretches over a distance of 4.6km in a southwest to northeast direction.

National Character Area

8.6.179 Green Hill E is located within one National Character Area (NCA) as illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527).

Regional Landscape Character

8.6.180 Green Hill E is located within two LCTs and two LCAs. These include LCT 5 Clay Plateau which contains LCA 5b Sywell Plateau, and LCT 4 Rolling Ironstone Valley Slopes which contains LCA 4c Ecton and Earls Barton Slopes as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on **Figure 8.5** Landscape Character Areas **[EN010170/APP/GH6.4.8.5].**

8.6.181 There are two further LCTs located between 2km and 5km of Green Hill E including;

- Northamptonshire LCT 12 Limestone Valley Slopes; and
- Northamptonshire LCT 18 Broad River Valley Floodplain

8.6.182 Additional LCAs located between 2km and 5km from Green Hill E include;

- Northamptonshire LCA 4b Moulton Slopes;
- Northamptonshire LCA 4f Kettering and Wellingborough Slopes;
- Northamptonshire LCA 12a Wollaston to Irchester; and
- Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill.

Green Hill F

8.6.183 Green Hill F is located within the rural setting of Northamptonshire, less than 300m west of the village of Bozeat and 740m east of village of Grendon.

8.6.184 Green Hill F is located around the village of Easton Maudit to the north, east and south of the settlement at varying distances.

8.6.185 Green Hill F comprises a series of medium scale irregular shaped agricultural fields.

8.6.186 Green Hill F is one of the larger of the nine Sites covering an area of 275.8ha and at its longest point is approximately 3.8km long from north to south and 2.5km wide from east to west.

8.6.187 The fields which make up the Site run parallel to the A509 Wollaston Road and run north to south between Grendon and Bozeat. Other roads in close proximity to the Site include the A428 Bedford Road East located 1.4km south of the Site as well as Easton Lane and Easton Way which traverse the centre of the Site east to west connecting neighbouring villages Grendon, Easton Maudit and Bozeat.

8.6.188 The landform differs greatly in height with a low point of 53 AOD to the northern extent of the Site. Topography then generally rises to the southern extent of the Site to 103m AOD. Landform undulates throughout the Site and rises to the east and west towards the A509 and Grendon.

8.6.189 Fields within the Site are delineated by native hedgerows of varying quality often with few hedgerows trees which results in a fairly open aspect when viewed from within the Site. As well as hedgerows there are few bands of denser shrub and tree planting that run centrally to the Site and border the three of the most northern fields. There is also substantial scattered tree and shrub planting associated with the restored quarry land located directly east of the Site. A combination of landform and vegetation in this location limits views of the Site to the east.

8.6.190 Woodland cover within the immediate context of the Green Hill F is primarily located in the southern extent of the Site where there are 3 large woodland blocks. Cold Oak Copse (Ancient Woodland), Horn Wood (Ancient Woodland) are located east and west of the most southerly fields within the Site. A third large block of native woodland located 500m southwest of the Site just north of the A428, Bedford Road East, provides additional screening of the Site when viewed from the south.

8.6.191 As shown on **Figure 8.13.4 [EN010170/APP/GH6.4.8.13.4]**, There is a network of PRoW located in and around the Site. These are concentrated in the northern and southern areas of the Site. A series of six PRoW traverse the northern portion of the Site from east to west and north to south. These include:

- Footpath NN|TA|4#1;
- Footpath NN|TA|1;
- Footpath NN|TA|4#3;
- Footpath NN|TA|4#2;

- Footpath NN|TD|3; and
- Footpath NN|TD|2.

8.6.192 There are two footpaths and one Bridleway which traverse the southern portion of the Site northeast to southwest and northwest to southeast. These include:

- Footpath NN|TD|5;
- Footpath NN|TD|7; and
- Bridleway NN|TD|8.

Registered Parks and Gardens

8.6.193 There are no Registered Parks and Gardens on Site. The closest Registered Park and Garden is the Castle Ashby located 750m west of the Site. Other Registered Parks and Gardens within 5km include Hinwick House located 3km northeast of the Site and Hinwick Hall located 3.4km northeast.

Scheduled Monuments

8.6.194 There are no Scheduled Monuments on the Site.

8.6.195 There are three Scheduled Monuments within the Wider 2km Study Area, the closest of which is located 25m south of the southern extent of the Site.

Listed Buildings

8.6.196 There are no Listed Buildings located on site.

8.6.197 Within the Wider 2km Study Area there are four Grade I Listed Buildings, five Grade II* Listed Buildings, 91 Grade II Listed Buildings.

Conservation Areas

8.6.198 There are no Conservation Areas located on the Site.

8.6.199 There are three Conservation Areas (Easton Maudit, Castle Ashby and Grendon) within 2km of the Site, the nearest of which, Easton Maudit is located adjacent to the eastern boundary of the Site.

Ancient Woodland

8.6.200 There is no Ancient Woodland on the Site.

8.6.201 The nearest blocks of Ancient Woodland are Horn Wood (Ancient and Semi-Natural Woodland), which is adjacent to the southeastern extent of the Site and Cold Oak Copse located approximately 300m west of the Site.

8.6.202 There are a further nine blocks of Ancient Woodland within 2km of the Site including; Cold Oak Copse (Ancient Replanted Woodland); Nun Wood (Ancient and Semi-Natural Woodland); Three Shrine Wood (Ancient and Semi-Natural Woodland); The Slipe (Ancient and Semi-Natural Woodland); Templegrave Spinney (Ancient and Semi-Natural Woodland); and four smaller Spinneys which are unnamed blocks of Ancient and Semi-Natural Woodland to the south.

Sites of Special Scientific Interest (SSSI)

8.6.203 There are no SSSIs on the Site.

8.6.204 The closest SSSI is the Bozeat Meadow, located approximately 70m east of the eastern Site boundary. The Upper Nene Valley Gravel Pits SSSI, located approximately 2.13km northwest of Green Hill F, and stretches over a distance of 4.6km in a southwest to northeast direction.

Special Protection Area (SPA)

8.6.205 There are no SPA on Green Hill F.

8.6.206 The closest SPA is the Upper Nene Valley Gravel Pits, located approximately 2.13km northwest of Green Hill F, and stretches over a distance of 4.6km in a southwest to northeast direction.

National Character Area

8.6.207 The Site is located within one National Character Area (NCA) as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 54 Yardley-Whittlewood Ridge (NE501).

8.6.208 The Site is located at the northern portion edge of the NCA Profile: 54 Yardley-Whittlewood Ridge and borders NCA Profile: 89 Northamptonshire Vales and NCA Profile: 88 Bedfordshire and Cambridgeshire Claylands, both within 2km of the Site.

Regional Landscape Character

8.6.209 The Site is located within three LCTs which contain three LCAs as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]**. These include; LCT 12 Limestone Valley Slopes, which contains LCA 12a Wollaston to Irchester; LCT 6 Undulating Claylands which contains 6c Bozeat Claylands; and LCT 8 Low Wooded Clay Ridge, which contains LCA 8b Salcey Forest and Yardley Chase.

8.6.210 Further LCTs located between 2km and 5km of the Site include;

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes;
- Northamptonshire LCT 18 Broad River Valley Floodplain;
- Bedfordshire LCT 1 Clay Farmland;
- Bedfordshire LCT 2 Wooded Wolds;
- Bedfordshire LCT 3 Limestone Valleys;
- Milton Keynes LCT 1 Wooded Wolds;
- Milton Keynes LCT 3 River Floodplains; and
- Milton Keynes LCT 2 Undulating Valley Slopes.

8.6.211 Further LCAs located between 2km and 5km from the Site include;

- Northamptonshire LCA 18d The Nene - Billing Wharf to Woodford Mill;
- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;
- Northamptonshire LCA 6b Hackleton Claylands;

- Bedfordshire LCA 2A Hinwick;
- Bedfordshire LCA 1B Riseley;
- Bedfordshire LCA 3A Harrold - Great Ouse;
- Milton Keynes LCA 1a Yardley Chase Wooded Wolds;
- Milton Keynes LCA 2a Ouse Northern Undulating Valley Slopes;
- Milton Keynes LCA 2b Ouse Southern Undulating Valley Slopes; and
- Milton Keynes LCA 3b Ouse Floodplains.

Green Hill G

8.6.212 Green Hill G is located approximately 500m northwest of the village of Lavendon and 2.4km south of the village of Bozeat, in the rural setting of Buckinghamshire.

8.6.213 The Site covers an area of approximately 170.9ha and its longest point is approximately 2km long from north to south and 1.4km wide from east to west.

8.6.214 The Site comprises rolling agricultural land which generally slopes down from north to south. The Site drops from a high point of 105m AOD in the northwest corner, down to 70 AOD in the southeastern corner. Within this there are undulations within the topography that roll in an east to west direction. These undulations result in the land feeling fairly contained with the exception of some of the more elevated locations to the north where the landscape comprises a more open aspect.

8.6.215 Fields are primarily large scale and of a regular shape with few small irregular shaped parcels divided by a mix of open ditches and native hedgerows.

8.6.216 Green Hill G is bordered to the west by A509 which connects Wellingborough, 10km north of the Site, to Olney, 2.6km southwest of the Site. The southern boundary of the site runs parallel to the A428 connecting Lavendon, 500m southeast of the site, to Yardley Hastings approximately 3.7km west of the Site. Both A roads are separated from the Site by dense native hedgerows which extend the full length of the western and southern boundaries limiting views across the Site.

8.6.217 As shown on Figure 8.13.5 **[EN010170/APP/GH6.4.8.13.5]** There is a network of PRoW located in and around the Site. These comprise of three PRoWs which cross the Site from north to south and from northwest to the southeast in a diagonal manner. These include:

- Footpath MK|Lavendon|005;
- Bridleway MK|Lavendon|002; and
- Bridleway MK|Lavendon|015#2.

8.6.218 These PRoW are sections of two wider long-distance routes which include the Three Shires Way and the Milton Keynes Boundary Walk.

8.6.219 There are three further PRoW which border the Site. These include:

- Bridleway MK|Lavendon|004;
- Bridleway MK|Lavendon|014; and
- Bridleway MK|Lavendon|002.

8.6.220 Vegetation cover across the Site consists primarily of arable fields defined by native hedgerows of mixed quality with few hedgerow trees.

8.6.221 The presence of denser planting within the Site is limited to corridors of mixed native shrubs and trees which run north to south, parallel to the both the Milton Keynes Boundary Walk and Three Shires Way Long Distance Routes.

8.6.222 Although there is limited denser vegetation within Green Hill G, there are large blocks of broadleaf woodland (Threeshire Wood, The Oaks Wood, Nun Wood, Lavendon Wood) directly north and northeast of the Site, which provide a wooded backdrop to the Site within the wider landscape setting.

Registered Parks and Gardens

8.6.223 There are no Registered Parks and Gardens on Site. The closest Registered Parks and Garden is the Historic Park and Garden to Turvey House, located 2.6km southeast of the Site. Other Registered Parks and Gardens within the 5km is Castle Ashby located 4.28km to northwest of the Site.

Listed Buildings

8.6.224 There are no Listed Buildings within the Site.

8.6.225 Within the Wider 2km Study Area there is one Grade I Listed Buildings, no Grade II* Listed Buildings, 26 Grade II Listed Buildings.

Conservation Areas

8.6.226 There are no Conservation areas within the Site.

8.6.227 The only Conservation Area within the 2km Study Area is Lavendon, located approximately 580m southeast of the Site.

Ancient Woodland

8.6.228 There are no Ancient Woodlands within the Site. The northern extent of the eastern boundary of the Site is directly bordered by two blocks of Ancient Woodland which include Three Shire Wood and Nun Wood.

8.6.229 There are a further eight blocks of Ancient Woodland within 2km of the Site. The closest of which include Barslay Spinney located 15m west of the Site, Broadlane Spinney, Nuniron Spinney and Newland Spinney located between 400 and 800m west of the site. Other larger blocks of Ancient Woodland within 2km include, the Slipe located 500m to the north, Lavendon Wood located 720m east of the Site and Snip Wood located 1.2km southeast of the Site.

Sites of Special Scientific Interest (SSSI)

8.6.230 There are no SSSIs on the Site. There are no SSSIs within the 2km study area.

8.6.231 Bozeat Meadow SSSI is the nearest SSSI located 2.9km north of Green Hill G.

National Character Area.

8.6.232 The Site is located in two National Character areas as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]**:

- 91 Yardley-Whittlewood Ridge; and
- 88 Bedfordshire and Cambridgeshire Claylands.

Regional Landscape Character

8.6.233 The Site is located within two LCTs as defined by Milton Keynes Landscape Character Assessment 2022 as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]**. These include;

- Milton Keynes LCT 1 Wooded Wolds; and
- Milton Keynes LCT 2 Undulating Valley Slopes

8.6.234 These are broken down further into LCAs and localised as:

- LCA 1a: Yardley Chase Wooded Wolds; and
- LCA 2a: Ouse Northern Undulating Valley Slopes.

8.6.235 Further LCTs located between 2km and 5km of the Site include;

- Northamptonshire LCT 6 Undulating Claylands;
- Northamptonshire LCT 8 Low Wooded Clay Ridge;
- Northamptonshire LCT 12 Limestone Valley Slopes;
- Bedfordshire LCT 1 Clay Farmland;
- Bedfordshire LCT 2 Wooded Wolds;
- Bedfordshire LCT 3 Limestone Valleys;
- Milton Keynes LCT 3 River Floodplains; and
- Milton Keynes LCT 2 Undulating Valley Slopes.

8.6.236 Further LCAs located between 2km and 5km from the Site include;

- Northamptonshire LCA 6b Hackleton Claylands;
- Northamptonshire LCA 6c Bozeat Claylands;
- Northamptonshire LCA 8b Salcey Forest and Yardley Chase;
- Northamptonshire LCA 12a Wollaston to Irchester;
- Bedfordshire LCA 1A Cranfield to Stagsden;
- Bedfordshire LCA 2A Hinwick;
- Bedfordshire LCA 2B Pavenham;
- Bedfordshire LCA 3A Harrold - Great Ouse;
- Milton Keynes LCA 3b Ouse Floodplains; and
- Milton Keynes LCA 2b Ouse Southern Undulating Valley Slopes.

Green Hill BESS

8.6.237 Green Hill BESS is located 600m to the northwest of the village of Grendon in rural Northamptonshire and is located on the agricultural land surrounding the Grendon Substation.

8.6.238 The Site is dominated by the Grendon electrical substation, which has a large footprint in the landscape. The substation is formed by a collection of primary power lines, transformers, circuit breakers, control buildings, security fencing and secondary power lines. The height of the substation is approximately 15m, the perimeter of the structure has been mitigated with mature mixed deciduous tree planting, however the structure is still partially visible, and the influence of the overhead pylons dominate that part of the skyline.

8.6.239 The Green Hill BESS as a whole is 43.27ha, this includes the existing National Grid Substation. The developable part of the Site is divided into two separate fields (as shown on Figure 8.1.4 Site Locations and Study Area Green Hill F and BESS **[EN010170/APP/GH6.4.8.1.4]**) one southeast of the substation (BESS1), a second located west of the substation (BESS2). Both fields are currently being used for agricultural purposes.

8.6.240 The Site is contained on the southwestern boundary by Station Road which connects the A45 to the north through to the village of Grendon to the east.

8.6.241 The proposed access track to the northern extent of the Site, extends from Station Road and through the yard of a neighbouring Farm, Pastures Farm, located 330m west of Grendon Substation.

8.6.242 BESS2 west of Grendon Substation is located on predominately flat land with localised undulations between an AOD of between 44 and 48 m.

8.6.243 The field BESS1, southeast of the substation has slight undulation, with a high point at the centre of the land parcel at 52m AOD which falls to 48m AOD towards the northern and eastern extents of the Site.

8.6.244 The southwestern extent of the western field BESS2 is defined by a linear block of predominately mature ash and oak tree planting, which screens views from Station Road. The field is also heavily bound by a further linear block of mature tree planting along the southeast and east boundary which screens views of the Grendon substation. The western boundary is defined by an established native hedgerow, lined by a belt of deciduous tree planting and an open ditch which adds to the enclosure of the Site.

8.6.245 The parcel to the southeast of the substation is heavily bound along the east perimeter of the Site, with a mix of hedgerow and mature deciduous trees which helps to screen the west elevation of the substation. The block of woodland continues around the perimeter of the Substation and is also bound by an open ditch.

8.6.246 The Site is also dominated by the large pylon which traverses with the overhead cables connecting to the substation and travelling southeast into the landscape, with further pylons seen towards the mid-distant views.

8.6.247 The setting of the village of Grendon is also visible from within the Site, the St Mary Parish Church tower can be seen on the hill as mid-distant views and the edge of the village is also visible at different degrees throughout the Site.

8.6.248 Surrounding the Site to the southwest, located on opposite side of the Station Road is the edge of the Registered Park and Gardens of Castle Ashby. The formal landscape grounds of the park, with distinctive arboretum type mature trees can be seen against the backdrop of an undulating grassland and parkland. The Castle Ashby House and the formal gardens are located approximately 1.6km to the southwest, elevated in the landscape at approximately 80m AOD, however the House is not visible from the Site or from the section of Station Road directly adjacent to the Site.

8.6.249 Located approximately 600m to the northwest of the Site is an open mineral and aggregate site, an open cast gravel pit and associated conveyor equipment and the storage of the aggregate piles, which are clearly visible from adjacent sections of Station Road.

8.6.250 Located to the north and northeast of the Site is the Upper Nene Valley Gravel Pits Ramsar site, coupled with the Upper Nene Valley Gravel Pits, Sites of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Local Nature Reserve (LNR) and a series of wetlands and extensive water courses.

Registered Parks and Gardens

8.6.251 There are no Registered Parks and Gardens on the Site.

8.6.252 Located within the 2km and Outer 5km Study Area and in close proximity to the Site, is the perimeter of Castle Ashby, located to the south of Station Road.

Scheduled Monuments

8.6.253 There are no Scheduled Monuments on the Site.

8.6.254 There are three Scheduled Monuments within the Wider 2km Study Area, the closest of which is a Medieval cross located 770m east of the Site.

Listed Buildings

8.6.255 There are no Listed Buildings located on the Site.

8.6.256 Within the Wider 2km Study Area there are three Grade I Listed Buildings, four Grade II* Listed Buildings, 69 Grade II Listed Buildings.

Conservation Areas

8.6.257 There are no Conservation Areas on the Site. The nearest Conservation Areas are Grendon Conservation Area, located approximately 530m southeast of the Site and Castle Ashby Conservation Area approximately 1.5km to the southwest.

8.6.258 Located within the Outer 5km Study Area is Cogenhoe Conservation Area, approximately 3km west from the Site, Brafield on the Green Conservation Area approximately 4.5km south west from Site and Denton Conservation Area approximately 3.8km towards the west of the Site. To the south of the Site are Yardley Hastings Conservation Area approximately 3.5km from Site and Easton Maudit Conservation Area approximately 2.3km from Site. To the east of the Site is Wollaston Conservation Area approximately 3.8km from Site and in a northern

direction is Great Doddington Conservation Area approximately 3.5km and Earls Barton conservation area approximately 2.5km from the Site.

Ancient Woodland

8.6.259 There is no Ancient Woodland on the Site.

8.6.260 The nearest block of Ancient Woodland is Cold Oak Copse (Ancient Replanted Woodland), which is located 3km south of the Sites. There is only one other block of Ancient Woodland within 5km of the Site, Horn Wood (Ancient and Semi-Natural Woodland) which is located 3.6km southeast of the Site.

Ramsar Sites

8.6.261 There are no Ramsar on the Site however the nearest Ramsar site is the Upper Nene Valley Gravel Pits located directly north of the Site.

Sites of Special Scientific Interest (SSSI)

8.6.262 There are no SSSI's on the Site however the nearest SSSI is the Upper Nene Valley Gravel Pits located directly north of the Site.

Special Protection Areas (SPA)

8.6.263 There are no SPAs on the Site however the nearest SPA is the Upper Nene Valley Gravel Pits located directly north of the Site.

Local Nature Reserve (LNR)

8.6.264 There are no LNR on the Site. The closest LNR is Summer Leys, located 1.9km northeast of the Site, which is linked to the Upper Nene Valley Gravel Pits Ramsar, SSSI and SPA.

National Character Area

8.6.265 The Site is located within one National Character Area (NCA) as illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and defined by Natural England as NCA Profile: 89 Northamptonshire Vales (NE527).

8.6.266 The Site is located at the southeastern edge of the NCA Profile: 89 Northamptonshire Vales and borders NCA Profile: 91 Yardley Whittlewood Ridge.

Regional Landscape Character

8.6.267 The Site is located within two LCTs as defined by Northamptonshire Council Current Landscape Character Assessment 2010 and illustrated on Figure 8.5 Landscape Character Areas **[EN010170/APP/GH6.4.8.5]**. These include:

- Northamptonshire LCT 18 Broad River Valley Floodplain; and
- Northamptonshire LCT 12 Limestone Valley Slopes.

8.6.268 These are broken down further into LCAs and localised as:

- LCA 18d The Nene - Billing Wharf to Woodford Mill; and
- LCA 12a Wollaston to Irchester.

8.6.269 Within the 2km and 5km Study Area this extends to include:

- Northamptonshire LCT 4 Rolling Ironstone Valley Slopes;
- Northamptonshire LCT 6 Undulating Claylands; and
- Northamptonshire LCT 8 Low Wooded Clay Ridge.

8.6.270 These are broken down further between 2km and 5km and localised as:

- Northamptonshire LCA 4c Ecton and Earls Barton Slopes;
- Northamptonshire LCA 6b Hackleton Claylands;
- Northamptonshire LCA 6c Bozeat Claylands;
- Northamptonshire LCA 8b Salcey Forest and Yardley Chase; and
- Northamptonshire LCA 18c The Nene - Duston Mill to Billing Wharf.

8.6.271 There are no further Environmental Designations listed on the Site or within 2km or 5km study area, all relevant designations are shown on the appropriate figures. (**Refer to Figure 8.6:** Landscape Receptors **[EN010170/APP/GH6.4.8.6]**).

Future Landscape Baseline

8.6.272 This section considers changes to the baseline conditions, described above, that might occur in the absence of the Scheme and during the time period over which the Scheme would be in place. The future baseline scenarios are set out in Chapter 2: EIA Process and Methodology **[EN010170/APP/GH6.2.2]**.

8.6.273 A future baseline is also considered within this LVIA chapter and supporting appendices. The future baseline considers factors that will change the current baseline, without the Scheme proceeding. Committed developments within the 5km Study Area for this LVIA are one factor that can influence the future baseline ('committed developments' are those with current planning permission or allocated in adopted development plans). The potential effects of the Scheme are considered against both the current baseline and the future baseline in this LVIA chapter and supporting appendices.

Existing Visual Baseline

Visual Amenity

8.6.274 General visual amenity is experienced by people and notably the views that people have and their visual amenity, can be defined as the overall pleasantness or attractiveness of a place and the views they enjoy of their surroundings. Amenity is something considered to benefit a location, contribute to its enjoyment, and thereby increase its value.

8.6.275 The visual amenity experienced by people (visual receptors) in the locality of the Site differs according to many factors. The visual receptors most susceptible to change are generally likely to include: residents at home (private viewpoints), people engaged in outdoor recreation (including use of PROWs), visitors to heritage assets and other attractions, travellers on recognised scenic routes (public viewpoints) and people at their workplace where views are an important contributor to the setting and quality of their working life. The visual receptors least susceptible to change include views experienced from places of work where workers and visitors are concentrating on their day-to-day activities, views

experienced by users of rail and main roads travelling at high speed or local roads where the focus is upon the road ahead owing to traffic conditions. For full details of visual susceptibility please refer to the LVIA methodology as set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**

8.6.276 The following section outlines visual amenity for the individual Green Hill Sites.

Visual Amenity Green Hill A

8.6.277 The following section outlines information shown on Figure 8.7.1 Visual Receptors Green Hill A and A.2 **[EN010170/APP/GH6.4.8.7.1]**.

Settlements

8.6.278 The nearest settlements are the two small villages of Walgrave and Old, located immediately to the south and southwest of the Site and located, 600m and 300m from the edge of the Site. There are a series of similar size villages dotted throughout the surrounding landscape, which contributes to the wider visual amenity. The villages of Hannington, approximately 3km to the south, Scaldwell approximately 2.3km west, Hanging Houghton and Lamport approximately 3.5km to the west. There are further smaller villages towards the edge of the study area, Pytchley approximately 4.5km east and Orlingbury approximately 5km to the west. There are larger villages, Mawsley approximately 1.5km north, Broughton approximately 2.5km northeast and Brixworth approximately 4.7km to the southwest. The edge of Pitsford Water lies approximately 1.7km to the southwest and Lamport House and Gardens lies approximately 3.5km to the west, they both greatly contribute to the visual amenity of the surrounding landscape.

Highways

8.6.279 Newland Road which extends north from Walgrave, divides Green Hill A centrally and connects to surrounding B-Roads, Old Road/Walgrave Road to the south and Broughton Road to the north. The surrounding landscape is connected by smaller B-roads which meander throughout, connecting the smaller villages. These roads are often lined with treed hedgerows intermittent woodland, offering broken views. This allows for a more intimate interaction with the landscape and contributing greatly to the visual amenity experienced by the user. As well local B-roads, the A43, Kettering Road, which runs through the landscape in a south to north direction is located 1km east of the Site.

PRoW

8.6.280 There are no PRoW that cross the Site, however there are numerous PRoW's that run throughout the wider landscape within 2km of the site.

8.6.281 Public Footpaths associated with the village of Old:

- Footpath NN|DF|8;
- Footpath NN|DF|7;
- Footpath NN|DF|9;
- Footpath NN|DF|10;
- Footpath NN|DF|3;

- Footpath NN|DA|7;
- Footpath NN|DA|6;
- Footpath NN|DF|2;
- Footpath NN|DF|11;
- Bridleway NN|DF|6;
- Footpath NN|DM|3 stretches out to the west; and
- Footpath to the south NN|DF|1 connects with NN|DF|13 and NN|DT|2 towards Walgrave.

8.6.282 PRoW associated with Walgrave:

- Footpath NN|DT|11;
- Footpath NN|DT|13;
- Footpath NN|DT|14;
- Footpath NN|DT|3;
- Footpath NN|DT|7; and
- Footpath NN|DT|6.

8.6.283 PRoW to the south of Walgrave include:

- Footpath NN|DT|5;
- Footpath NN|DT|4;
- Footpath NN|CT|2;
- Footpath NN|CT|1;
- Footpath NN|DT|9#2; and
- Footpath NN|CT|4.

8.6.284 PRoW to the west of the site include:

- Footpath NN|DF|4;
- Footpath NN|DA|7;
- Footpath NN|DA|6; and
- Byway open to all traffic NN|DF|12.

8.6.285 PRoW to the east of the site include:

- Footpath NN|DT|9#1; and
- Footpath NN|DT|8.

8.6.286 PRoW to the North of the site Include:

- Bridleway NN|DF|5;
- Bridleway NN|GD|14;

- Bridleway NN|DF|5;
- Footpath NN|GG|19;
- Bridleway NN|GG|9;
- Bridleway NN|HK|1; and
- Bridleway NN|GG|11.

Green Hill A.2

8.6.287 The following section outlines information shown on Figure 8.7.1 Visual Receptors Green Hill A and A.2 **[EN010170/APP/GH6.4.8.7.1]**.

Settlements

8.6.288 The nearest settlements to Green Hill A.2 are the two small villages of Walgrave, located 900m west and Hannington, located 950m south of the site. There are a series of similar size villages dotted throughout the surrounding landscape, which contributes to the wider visual amenity. These include the villages of Old, approximately 2.8km to the west, Broughton, located 2km north, Mawsley located approximately 2.7km to the north and Scaldwell located 4.5km west of the site.

Highways

8.6.289 The closest roads to Green Hill A.2 include Kettering Road directly north of the site and the A43 directly east. The surrounding landscape is connected by smaller B-roads which meander throughout, connecting the smaller villages such as Walgrave and Hannington. These roads are often lined with treed hedgerows intermittent woodland, offering broken views of the wider landscape.

PRoW

8.6.290 There are no PRoW that cross the site, however bridleway NN|CT|3 runs east to west directly south of the site. There are numerous PRoW's that run throughout the wider landscape within wider 2km of the site.

8.6.291 Public Footpaths north of the site include:

- Footpath NN|DT|8;
- Bridleway GD/014;
- Footpath GD/002;
- Footpath GD/003;
- Footpath GW/014; and
- Bridleway GW/018.

8.6.292 PRoW east of the site include:

- Bridleway TR/008;
- Bridleway TR/009;
- Bridleway GW/017; and
- Bridleway TR/007.

8.6.293 PRoW associated with Walgrave:

- Footpath NN|DT|9#1;1;
- Footpath NN|DT|11;
- Footpath NN|DT|13;
- Footpath NN|DT|14;
- Footpath NN|DT|3;
- Footpath NN|DT|7; and
- Footpath NN|DT|6.

8.6.294 PRoW to the south of Walgrave Include:

- Footpath NN|DT|5;
- Footpath NN|DT|4;
- Footpath NN|CT|2;
- Footpath NN|CT|1; and
- Footpath NN|CT|4.

Green Hill B

8.6.295 The following section outlines information shown on Figure 8.7.2 Visual Receptors Green Hill B **[EN010170/APP/GH6.4.8.7.2]**.

Settlements

8.6.296 The nearest settlement is the small village of Holcot located 400m north of the site. The village sits within the wider context of smaller inter-connected villages, which demonstrates visually a more intimate landscape amenity. The village of Moulton, Moulton Collage Campus, and the surrounding suburbs, approximately 1.5km to the south, marks a change in the type of visual amenity to a more urban context.

Highways

8.6.297 The site sits within a network of smaller inter-connecting B-roads which spread out in a web type formation from the village of Holcot. The roads are lined with treed hedgerows, and scattered blocks of woodland, the undulating landform offers a pleasant visual amenity to the user. The Holcot Road to the west of the site which traverses though the Pitsford Reservoir offers a greatly enhanced landscape experience and contributes greatly to the area's visual amenity. In contrast to the smaller B-roads are the A43 Kettering Road and the A508 Harborough Road dual carriageways which run north to south.

PRoW

8.6.298 The Public Footpath NN|CW|1 is the only PRoW that crosses the site and runs in a north to south direction in the most eastern field parcel.

8.6.299 PRoW south of the site within the Wider 2km Study Area include:

- Footpath NN|DG|2#2;

- Footpath NN|DG|2#1;
- Footpath NN|DG|3;
- Footpath NN|DG|4;
- Footpath NN|DD|1; and
- Footpath NN|DG|1.

8.6.300 PRoW that extend from the village of Holcot, north of the site include;

- Footpath NN|CW|2;
- Footpath NN|CW|11;
- Footpath NN|CW|10
- Footpath NN|CW|4;
- Footpath NN|CW|3#1;
- Footpath NN|CW|3#2;
- Footpath NN|DD|6#1;
- Footpath NN|CW|7; and
- Footpath NN|CT|7.

Green Hill C, D and E

8.6.301 The following section outlines information shown on Figure 8.7.3 Visual Receptors Green Hill C, D and E **[EN010170/APP/GH6.4.8.7.3]**.

Settlements

8.6.302 The nearest settlement is the small village of Mears Ashby located immediately to the west of sites D and E and the edge of the village of Earls Barton is 200m to the south. Within the wider surroundings is Sywell village 1.2km to the west. The urban edge of larger conurbations, Wellingborough 1km to the east and the outer suburbs of Northamptonshire approximately 2.5km to the west.

Highways

8.6.303 Smaller B-Roads Sywell Road and Moonshine Gap which connect the village of Sywell and the town of Wellingborough, run parallel to the southern boundary of Green Hill C and the northern boundary of Green Hill D. Similarly, Highfield Road which runs parallel to the full extent of the eastern boundary of Green Hill D, connects the village of Mears Ashby to Wellingborough. Wilby Road is the only road to run through any of the sites which make up the Scheme and dissects Green Hill E centrally, connecting Mears Ashby west of the site to Wilby located east of the site. Other roads in close proximity to the site include Mears Ashby Road which runs directly west of Green Hill E and connects Mears Ashby to Earls Barton to the south. The busier A45, Main Road runs south of Green Hill E and connects into the larger infrastructure of the A509 which skirts the western edge of Wellingborough.

PRoW

8.6.304 There are the following PRoWs that cross the sites:

- Bridleway NN|TN|7 crosses Green Hill C;
- Footpath NN|TN|3#1, crosses Green Hill D;
- Footpath NN|TU|3, crossing the north of Green Hill E; and
- Footpath NN|TN|1 crossing the west of Green Hill E.

8.6.305 PRoW within the Wider 2km Study Area north of Green Hill C include:

- Footpath NN|TN|3#2;
- Footpath NN|TG|4;
- Footpath NN|TG|5;
- Footpath NN|UL|24;
- Bridleway NN|UL|25;
- Bridleway NN|TG|9;
- Bridleway NN|TG|8; and
- Bridleway NN|TG|7.

8.6.306 PRoW within the Wider 2km Study Area east of Green Hill E:

- Footpath NN|UL|23;
- Footpath NN|TU|2;
- Footpath NN|UL|22;
- Footpath NN|TU|1; and
- Footpath NN|TB|1.

8.6.307 PRoW south of Green Hill E associated with Earls Barton include:

- Footpath NN|TC|5;
- Footpath NN|TC|10;
- Footpath NN|TC|18;
- Footpath NN|TC|4;
- Footpath NN|TC|7;
- Footpath NN|TC|6;
- Footpath NN|TC|19;
- Footpath NN|TC|1#1; and
- Footpath NN|TC|8.

8.6.308 PRoW within the Wider 2km Study Area of Green Hill, west of Earls Barton include:

- Footpath NN|TC|3#1;
- Footpath NN|TE|1; and
- Footpath NN|TE|7.

8.6.309 PRoW west of Green Hill E include:

- Footpath NN|TN|2;
- Footpath NN|TN|6,
- Footpath NN|TN|8#1;
- Footpath NN|TN|8#2;
- Footpath NN|TN|9; and
- Footpath NN|TN|11.

8.6.310 PRoW associated with Sywell within the Wider 2km Study Area of Green Hill C,D and E:

- Footpath NN|TN|4;
- Footpath NN|TT|1;
- Footpath NN|TT|4;
- Footpath NN|TT|2; and
- Footpath NN|TT|3.

Green Hill F

8.6.311 The following section outlines information shown on Figure 8.7.4 Visual Receptors Green Hill F and BESS **[EN010170/APP/GH6.4.8.7.4]**.

Settlements

8.6.312 The nearest settlement to Green Hill F is Easton Maudit.. Green Hill F surrounds Easton Maudit to the north, east and south of the village at varying distances. Other Settlements in close proximity include Bozeat located 200m to the east and Grendon located 740m to the northwest.

8.6.313 There is a series of other settlements within the Wider 2km Study Area which contributes to the wider visual amenity. These include the hamlet of Strixton, located 1.1km to the north, Yardley Hastings located 2km to the southwest, the village Castle Ashby located 1.75km to the west and Wollaston located 1.85 km north of the site.

8.6.314 As well as settlements there are several isolated properties and farmsteads scattered within the Wider 2km Study Area which are considered as part of the LVIA.

Highways

8.6.315 The site runs parallel to a section of the A509, Wollaston Road which runs north to south and connects Wollaston to Warrington and beyond. Sections of the site are directly adjacent to Wollaston Road and provide access to the site. Other roads in close proximity to the site include the A428, Bedford Road East located

1.4km south of the site as well as Easton Lane and Easton Way which traverse the centre of the site east to west connecting neighbouring villages Grendon, Easton Maudit and Bozeat.

8.6.316 Other roads within the Wider 2km Study Area are primarily associated with Grendon, including Yardley Road, Station Road, Chequers Lane, and the Main Road to Grendon, as well as those associated with Bozeat including Harrold Road and London Road.

PRoW

8.6.317 There is a series of PRoW which travel through the site. These include:

- Footpath NN|TA|4#1;
- Footpath NN|TA|1;
- Footpath NN|TA|4#3;
- Footpath NN|TA|4#2;
- Footpath NN|TD|3;
- Footpath NN|TD|2;
- Footpath NN|TD|5;
- Footpath NN|TD|7; and
- Bridleway NN|TD|8.

8.6.318 PRoW within the Wider 2km Study Area which travel towards Easton Maudit include:

- Bridleway NN|LE|26;
- Bridleway NN|TD|9; and
- Footpath NN|TD|1.

8.6.319 Associated with the village of Grendon a wide-reaching series PRoWs radiate from the village in 360 degree anticlockwise direction. PRoW within 2km of Green Hill F include:

- Footpath NN|TF|5;
- Footpath NN|TF|8#1;
- Footpath NN|TF|9;
- Footpath NN|TF|13;
- Footpath NN|TF|8#2;
- Bridleway NN|TF|12;
- Footpath NN|TF|7#2;
- Footpath NN|TF|14;
- Footpath NN|TF|11;
- Footpath NN|TF|7#1; and

- Byways open to all traffic NN|TF|15.

8.6.320 PRoW north of the site which travel towards Wollaston include:

- Byways open to all traffic NN|TS|4;
- Footpath NN|TS|1#1;
- Footpath NN|TS|2#2;
- Footpath NN|TS|2#1;
- Footpath NN|TV|7;
- Footpath NN|TV|6;
- Footpath NN|TV|18;
- Footpath NN|TS|3; and
- Footpath NN|TV|21.

8.6.321 PRoW east of the site which travel towards Bozeat include:

- Footpath NN|TA|7;
- Footpath NN|TA|18;
- Footpath NN|TA|6;
- Footpath NN|TA|9#2;
- Footpath NN|TA|9#1;
- Footpath NN|TA|19;
- Footpath NN|TA|14;
- Footpath NN|TA|3;
- Footpath NN|TA|17#2;
- Footpath NN|TA|17#1;
- Footpath NN|TA|2;
- Footpath NN|TA|12;
- Footpath NN|TA|22#2;
- Footpath NN|TA|21;
- Footpath NN|TA|22#1;
- Footpath NN|TA|15 and
- Footpath NN|TA|23.

8.6.322 PRoW south and southeast of the site within 2km Study Area include:

- Bridleway NN|TA|8;
- Footpath BF|HARROLD|10;
- Bridleway MK|Lavendon|002;

- Footpath MK|Lavendon|005;
- Footpath NN|TA|20;
- Footpath MK|Warrington|007;
- Footpath MK|Warrington|005;
- Footpath MK|Warrington|002; and
- Footpath NN|LE|24.

8.6.323 PRoW south of the site which travel towards Yardley Hastings include:

- Footpath NN|LE|1#2;
- Footpath NN|LE|1#1
- Footpath NN|LE|9;
- Footpath NN|LE|11#2;
- Footpath NN|LE|11#1; and
- Footpath NN|LE|2.

Green Hill G

8.6.324 The following section outlines information shown on Figure 8.7.5 Visual Receptors Green Hill G **[EN010170/APP/GH6.4.8.7.5]**.

Settlements

8.6.325 The nearest settlement to Green Hill G is the village of Lavendon located 500m southeast of the site. Settlements beyond 2km include Olney located approximately 2.5km to the southwest of the site and Bozeat, located approximately 2.4km to the north of the site connected by the A509.

8.6.326 As well as these settlements, there are several isolated properties and farmsteads scattered within the Wider 2km Study Area which are considered as part of the LVIA.

Highways

8.6.327 The nearest roads to Green Hill G include the A509 which traverses north to south, parallel to a large portion of the western boundary of the site and the A428 which traverses in a northwest to southeast direction parallel to the southern boundary of the site. These roads intersect at a roundabout west of the southwestern corner of the site and connect the villages of Lavendon, Yardley Hastings, Olney, Bozeat and the larger towns of Northampton and Wellingborough beyond. Other roads in close proximity to the site include Castle Road which runs from the north of Lavendon to Castle Farm and Lower Farm to the east of the site.

8.6.328 Other roads within the Wider 2km Study Area are primarily associated with the settlement of Lavendon, including Olney Road, High Street, Harold Road, Joiners Way, and The Glebe.

PRoW

8.6.329 There is a network of PRoW located in and around the site. These comprise of three PRoW which cross the site from north to south and from northwest to the southeast in a diagonal manner. These include:

- Footpath MK|Lavendon|005;
- Bridleway MK|Lavendon|002; and
- Bridleway MK|Lavendon|015#2.

8.6.330 These PRoW are sections of two wider long-distance routes: the Three Shires Way and the Milton Keynes Boundary Walk.

8.6.331 There are three further PRoW which border the site. These include:

- Bridleway MK|Lavendon|004;
- Bridleway MK|Lavendon|014; and
- Footpath MK|Lavendon|001.

8.6.332 PRoW within the Wider 2km Study Area which travel towards Lavendon include:

- Footpath MK|Lavendon|003;
- Footpath MK|Lavendon|013;
- Footpath MK|Lavendon|017;
- Footpath MK|Lavendon|010;
- Footpath MK|Lavendon|009#1;
- Footpath MK|Lavendon|008A; and
- Footpath MK|Lavendon|011.

8.6.333 Other PRoW within the 2km study area include:

- Footpath MK|Lavendon|013;
- Footpath MK|Lavendon|009#2;
- Bridleway MK|Lavendon|015#1;
- Bridleway NN|TD|8;
- Bridleway NN|TA|8;
- Bridleway NN|TA|19;
- Footpath MK|Warrington|001;
- Footpath MK|Warrington|002;
- Footpath MK|Warrington|004;
- Footpath NN|LE|24;
- Footpath MK|Warrington|005;
- Footpath MK|Warrington|007;

- Footpath NN|TA|20;
- Footpath NN|TD|5;
- Footpath BF|HARROLD|10;
- Footpath BF|HARROLD|16;
- Footpath MK|Olney|005#1;
- Footpath MK|Olney|005#2;
- Footpath MK|Olney|006#1; and
- Footpath MK|Olney|006#2.

Green Hill BESS

8.6.334 The following section outlines information shown on Figure 8.7.4 Visual Receptors Green Hill F and BESS **[EN010170/APP/GH6.4.8.7.4]**.

Settlements

8.6.335 The nearest settlement is the small village of Grendon located immediately to the southeast of the site at approximately 550m from the edge of the site. There are series of villages dotted throughout the surrounding landscape which contributes to the wider visual amenity. These villages include; Castle Ashby Village located approximately 1.7km to the southwest, Wollaston located approximately 4.0km to the west, Bozeat approximately 3.5km to the southeast, Yardley Hastings approximately 3.5km to the south, Earls Barton approximately 2.7km to the northwest, Great Doddington approximately 3.6km to the northwest, Cogenhoe approximately 3.15km to the east and smaller villages of Whiston approximately 1.5km west and Lower End approximately 850m to the east.

Highways

8.6.336 Station Road, a B-road is the closest road to the site, immediately to the southwest which connects the village of Grendon to the east and The Nene Valley Way, A45 a busier dual carriageway approximately 1.6km to the northwest. The remaining connecting roads within the surrounding landscape are predominantly smaller B-roads which weave through their way through the surrounding area, often lined with woodland or hedgerows, consisting of Whiston Road to the west, Easton Way, and Main Road to east of Grendon which links into A509 between the villages of Wollaston and Bozeat. Smaller roads and tracks associated with the Castle Ashby estate, which meander through a wooded landscape, offer visual amenity at local scale.

PRoW

8.6.337 The is one PRoW located on site, Footpath NN|TF|3 which crosses the northern field parcel BESS3 from east to west.

8.6.338 There are numerous PRoWs that run within 2km of the site. These include the following.

8.6.339 PRoW associated with the village of Grendon include;

- Footpath NN|TF|1;

- Footpath NN|TF|10;
- Footpath NN|TF|4;
- Footpath NN|TF|8#1;
- Footpath NN|TF|9;
- Footpath NN|TF|13;
- Footpath NN|TF|5;
- Footpath NN|TF|8#2;
- Footpath NN|TF|7#2; and
- Footpath NN|TF|14.

8.6.340 PRoW to the north of the BESS site include:

- Footpath NN|TC|11;
- Footpath NN|TF|17;
- Footpath NN|TF|2; and
- Bridleway NN|TF|12.

8.6.341 Further PRoWs and a bridleway are located towards the extents of the 2km buffer towards the northwest and there are PRoWs beyond Grendon to the east at the edge of the 2km buffer.

Future Landscape and Visual Baseline

8.6.342 This section considers changes to the baseline conditions, described above, that might occur in the absence of the Scheme and during the time period over which the Scheme would be in place. The future baseline scenarios are set out in Chapter 2: EIA Process and Methodology **[EN010170/APP/GH6.2.2].**

8.6.343 The 'existing baseline' year for assessment is 2025 as this is the date on which baseline studies for the project were commenced. A future baseline is also considered within this LVIA chapter and supporting appendices. The future baseline considers factors that will change the current baseline, without the Scheme proceeding. Committed developments within the 5km Study Area for this LVIA are one factor that can influence the future baseline (‘committed developments’ are those with current planning permission or allocated in adopted development plans). The potential effects of the Scheme are considered against both the current baseline and the future baseline in this LVIA chapter and supporting appendices.

8.6.344 Agricultural policy and land ownership and management will dictate how the land within the Study Areas for the Sites and Cable Corridor for the Scheme is managed and maintained. With such inherent uncertainties, an assessment of the effects of the Scheme under future climate change scenarios would yield results that are not meaningful. The assessment is therefore undertaken under the assumption that outside of those committed developments, there will not be any substantive changes in the baseline during the Scheme, and/or that the effects of the Scheme will not change during the operational phase.

8.7 LVIA Assessment Material

Zone of Theoretic Visibility

8.7.1 In order to assist with viewpoint selection and to appreciate the potential influence of the Scheme in the wider landscape, ZTV figures have been used to illustrate the area from where it may be theoretically possible to view all, or part, of the Scheme. The ZTV's produced are both Bare Earth (landform only) to illustrate a worst-case scenario (As shown on Figure series 8.8 **[EN010170/APP/GH6.4.8.8])** and augmented ZTV figures (As shown on the Figure series 8.9 **[EN010170/APP/GH6.4.8.9]**) which illustrate the effects of landform, built form and vegetation.

8.7.2 The ZTV's provide a starting point in the assessment process and therefore provide a 'worst case' illustration of theoretical visibility and assume that if any of the Scheme is visible it will be shown on the ZTV.

8.7.3 The ZTV's are produced using ArcGIS Pro 3.4.1 software, and the calculations were based on the proposed infrastructure illustrated within the Illustrative Layout Plans**,** Figures 4.1 **[EN010170/APP/GH6.4.4.1]** to 4.9.2 **[EN010170/APP/GH6.4.4.9.2]** Infrastructure heights were run within the ZTV modelling at the following heights:

- Solar array - 4.5m above ground level (AOD);
- BESS Battery Storage Height - 3.5m above ground level (AOD); and
- Substation heights:
  - Green Hill A – 6.8m
  - Green Hill B – 6.8m
  - Green Hill C – 12.5m
  - Green Hill E – 6.8m
  - Green Hill F – 6.8m
  - Green Hill G – 6.8m
  - Green Hill BESS – 12.5m

Representative Viewpoints and Photomontages

8.7.4 A suite of viewpoint photography locations have been identified through desk studies and verified through fieldwork to illustrate visual baseline conditions in and around the Scheme. Views selected are representative of different receptors to aid the description of effects on both Landscape and Visual receptors.

8.7.5 Positions of viewpoint photography were agreed in consultation with Landscape Officers from North Northamptonshire and Milton Keynes and fixed prior to verified photography being undertaken.

8.7.6 Viewpoint selection follows good practice guidance and in particular paragraphs 6.18 to 6.20 of GLVIA3. The viewpoints proposed are used to aid the description

of effects on both Landscape and Visual resources and have been utilised for visual assessment purposes.

8.7.7 The selection of viewpoints was made on the basis of the following types of publicly accessible viewpoints, as follows:

- Representative viewpoints (representative of views from a particular PRoW);
- Specific viewpoints (such as key views from a specific visitor attraction);
- Illustrative viewpoints (chosen to demonstrate a particular effect/specific issue);
- Any important sequential views, for example, along key recreational or transport routes; and
- Any additional viewpoints that have been requested by statutory consultees at via Section 42 Consultation.

8.7.8 For the purposes of this ES submission, all viewpoints have been taken from publicly accessible land during both summer and winter months to ensure a worst-case scenario is assessed and illustrated.

8.7.9 Consultation with the relevant consultees and planning authorities has played an important part in selecting the viewpoints to support the Landscape and Visual Impact Assessment (LVIA) process. This consultation process has played a role in gathering specific information about the Sites, the Cable Route Corridor and the associated views. Section 42 Public Consultation also played a role in canvassing feedback from the public on the visibility of the Scheme. This process has been a valuable tool in seeking an understanding and agreement about views and to highlight the local interests and values that may otherwise have been overlooked. This commitment and engagement has been undertaken in a genuinely open and responsive process through a series of workshops and public consultation events as set out in Section 8.2 (Consultation). One of the objectives of the consultation has been to clearly identify those matters of visibility which are important to stakeholders to inform the LVIA process.

Viewpoints

8.7.10 There are a total of 64 viewpoints covering the Study Areas for the Sites and the Cable Route Corridor. These viewpoints comprise initial viewpoints selected for the purpose of the assessment and likely to be affected by the Scheme and then additional viewpoints provided as part of the Section 42 Consultation. The locations of the viewpoints have been subject to consultation with the relevant consultees and planning authorities under Section 42 Consultation, where a total of 13 additional viewpoints have been included and photography undertaken, these are identified as Viewpoint Number NN1 – NN13. eThe viewpoint locations are shown on Figures 8.10.1 **[EN010170/APP/GH6.4.8.10.1]** to Figure 8.10.5 **[EN010170/APP/GH6.4.8.10.5]** and the Verified Photography and Photomontages are shown on Figures 8.14.1 - 8.14.NN13.

8.7.11 The following tables list the viewpoint locations that are used within the LVIA assessment. These tables should be read in conjunction with Figures 8.14.1 - 8.14.NN13.

8.7.12 These viewpoints have been identified through desk studies which have then been verified through fieldwork at differing times of the year to understand the seasonal differences between winter and summer.

8.7.13 Summer photography was undertaken during the summer months of 2024 and was used to provide photography to accompany PEIR. Following the submission of PEIR consultation was undertaken with Local Authorities and a small number of the locations of viewpoints were shifted at the request of the Local Authorities. As such, and as agreed with NNC, some of the locations used for the Winter Photography undertaken during winter 2024, does not match the exact location of the Summer Photography taken the previous summer.

Table 8.5: Viewpoint Locations

Viewpoint Reference Number	Viewpoint Title	Description of View
VP1	Lamport House and Gardens	Long distant views from Lamport House and Gardens, looking east towards Green Hill A.
VP2	Townsend Road/Old Road	View from Old Road looking north towards Green Hill A.
VP3	Junction of Broughton Road and Newlands Road	View from the junction of Broughton Road and Newlands Road looking east towards Green Hill A.
VP4	Broughton Road, Old Village	View from the western corner of Green Hill A, along Broughton Road at the edge of the village of Old looking east.
VP5	Newlands Road	View from Newland Road, looking north into Green Hill A.
VP6	Tithe Farm car park	View from Tithe Farm Car Park looking south to Green Hill B.
VP7	PROW NN|CW|1	View from PRoW looking south towards Green Hill B.
VP8	PROW NN|CW|1	View from PRoW looking north towards Green Hill B.
VP9	PROW NN|DG|2#2	View taken from a PRoW south of Green Hill B looking north.
VP10	Beckworth Emporium - Northamptonshire Round	View from the southern gated entrance adjacent to Green Hill C, opposite Beckworth Emporium and Garden Centre, looking north.
VP11	Northamptonshire Round recreational route north of Sywell Road	View Northamptonshire Round recreational route, north of Sywell Road looking east into Green Hill C.
VP12	Bridleway - NN|TN|7	View from Northamptonshire Round recreational route looking north / northeast.
VP13	Moonshine Gap - NN|TN|3#1	View taken Moonshine Gap Road and footpath looking south towards Green Hill C.
VP14	Highfield Road	View looking west from Highfield Road towards Green Hill C.

Viewpoint Reference Number	Viewpoint Title	Description of View
VP15	Highfield Footpath - NN|TN|3#1	View from the southern extent of Green Hill C looking north.
VP16	Wilby Road Near Allotments	View from gated entrance to Green Hill C, in close proximity to Allotments, looking east.
VP17	Pumping Station, Wilby Road	View from Wilby Road, in close proximity to the Pumping Station.
VP18	Mears Ashby Road	View from Mears Ashby Road, southeast of Green Hill E.
VP19	Earls Barton	Views from the northern residential settlement Earls Barton looking north towards Green Hill E
VP20	Northamptonshire Round, south of Mears Ashby	Views from Northamptonshire Round Recreational Route looking south towards Green Hill E.
VP21	Earls Barton Cemetery	View taken Earls Barton Cemetery looking north towards Green Hill C.
VP22	Pasture Farmhouse	View in proximity of Pastures Farm looking southeast towards the Green Hill BESS.
VP23	PROW NN|TF|003	View from the PROW, on an elevated bridge over the aggregate conveyor belt.
VP24	Station Road	View from Station Road looking northeast into the Green Hill BESS.
VP25	PROW NN|TF|004	View from PROW West of Grendon looking northwest towards the BESS.
VP26	PROW NN|TF|001	View from the PROW looking west towards the BESS.
VP27	PRoW NN|TF|008	View from PRoW on the eastern edge of Grendon looking east towards Green Hill F.
VP28	PRoW NN|TD|003	View from a PRoW, north of Easton Maudit looking north towards Green Hill F.
VP29	PRoW NN|TD|005	View from the junction of PRoW TD|005 and TD|007, west of Horn Wood.
VP30	Junction of NN|TA|003, NN|TA|17 and NN|TA|004	View from the junction of three PRoW, west of the A509, looking west towards Green Hill F.
VP31	PRoW NN|TA|004	View from the PROW directly north of Green Hill F looking south.
VP32	A509, Wollaston Road	View from the A509, Wollaston Road looking west.
VP33	Castle Ashby	View from the gardens of Castle Ashby Registered Park and Garden looking east.
VP34	PRoW MK|Lavendon|004	View from a Bridleway on the northern extent of the Site looking southwest.
VP35	Milton Keynes Boundary Walk Long Distance Route - PRoW MK|Lavendon|005	View from a section of the Long-Distance Route, east of Northey Farm looking south towards Green Hill G.

Viewpoint Reference Number	Viewpoint Title	Description of View
VP36	Milton Keynes Boundary Walk Long Distance Route - PRoW NN|TD|5	View from a section of the Long-Distance Route.
VP37	Junction of Milton Keynes Boundary Walk and Three Shires Way Long Distance Routes	View from the junction of two Long Distance routes and PRoW MK|Lavendon|001.
VP38	PRoW MK|Lavendon|001	View from the PROW east of Green Hill G looking west.
VP39	Three Shires Way Long Distance Route - PRoW MK|Lavendon|015 #2	View from a section of the Three Shires Way Long Distance Route just within the southern extent of Green Hill G looking north.
VP40	A428	View from the A428, looking north towards Green Hill G
VP41	Junction of PRoW MK|Lavendon|014, Mk|Lavendon|001 and MK|Lavendon|019	View from the PROW east of Green Hill G looking west.
VP42	PRoW NN|TF/005	View from the PROW east of Grendon looking east towards Green Hill G.
VP43	PRoW NN|DF|4	View from the PROW northwest of Green Hill A, looking south east.
VP44	PRoW NN|DT|8	View from the PROW between Green Hill A and Green Hill A.2.
VP45	Kettering Road	View from Kettering Road, south of Green Hill A, looking south.
VP46	PRoW NN|CT|3	View from PRoW southwest of Green Hill A.2 looking north east.
VP47	PRoW NN|TF/007	View from PRoW north of Green Hill F looking south towards Green Hill F and west towards BESS.
VP48	PRoW NN|TD/009	View from PRoW west of Green Hill F looking north east towards Green Hill F.
VP49	PRoW NN|TD/008	View from PRoW south east of Easton Maudit.
VP50	PRoW NN|TD/007	View from PRoW west of Horn Wood within Green Hill F.
VP51	Three Shires Way, PRoW MK|Lavendon|002	View from PRoW on eastern edge of Green Hill G alongside Threeshire Wood.
NN1	PRoW NN| GD/014	View from the PROW north of Green Hill A looking south.
NN2	PRoW NN|CW|1	View from the PROW south of Holcot looking south towards of Green Hill.
NN3	PRoW NN|TG/009	View from the PROW north of Green Hill C looking south.

Viewpoint Reference Number	Viewpoint Title	Description of View
NN4	PRoW NN|TU/003	View from the PROW northeast of Green Hill E looking south.
NN5	PRoW NN|TN/010	View from the PROW west of Green Hill E looking east.
NN6	PRoW NN|TC/014	View from the PROW south Earls Barton looking south towards Green Hill BESS.
NN7	Junction of PRoW NN|TF/003 and NN|TF/001	View from footpath junction southwest of Lower End looking south towards Green Hill BESS.
NN8	Junction of PRoW NN|TF/015 and NN|TF/007	View from footpath junction east of Lower End looking south towards Green Hill F.
NN9	PRoW NN|TD/002	360-degree views from footpath within Green Hill F.
NN10	Easton Lane	360-degree views from Easton Lane.
NN11	Junction of PRoW NN|TD/008 and NN|TD/005 Milton Keynes Boundary Walk Recreational Route	View south of Horn Wood looking 360 degrees towards Green Hill F.
NN12	Church of St Peter and St Paul, Easton Maudit Conservation Area	View from within the churchyard of the Church of St Peter and St Paul at Easton Maudit.
NN13	Easton Lane	View from the northern verge of Easton Lane.

Photomontages

8.7.14 A series of photomontages have been produced to show the effects of the Scheme at locations where significant effects were considered likely to occur. Locations of the required photomontages and Accurate Visual Representation (AVR) were agreed with the Landscape Officer representatives for North Northamptonshire and Milton Keynes City Council.

8.7.15 At the request of NNC, 5 viewpoints have been used to produce photomontages at Year 60 (post decommissioning) to demonstrate the long term legacy landscape. The following viewpoints have been used to produce the Year 60 photomontages: VP9, VP18, VP31, VPNN1 and VPNN13.

8.7.16 For the remainder of the viewpoints from where Photomontages have been produced, visualisations have been produced at Year 1 Winter (to demonstrate worst case) and at Year 15 Summer (to demonstrate the screening effects of the Embedded Mitigation).

8.7.17 A total of 26 AVR level 3 montages have been produced using summer and winter photography as illustrated in Figure series 8.14 **[EN010170/APP/GH6.4.8.14.1 to EN010170/APP/GH6.4.8.14.NN13]**, and as set out below within **Table 8.6**.

Table 8.6: Photomontage Locations

Viewpoint Reference Number	Viewpoint Title	Description of View
VP7	PROW NN|CW|1	View from PRoW looking south towards Green Hill B.
VP9	PROW NN|DG|2#2	View taken from a PRoW south of Green Hill B looking north.
VP12	Bridleway - NN|TN|7	View from Northamptonshire Round recreational route looking north / northeast.
VP13	Moonshine Gap - NN|TN|3#1	View taken Moonshine Gap Road and footpath looking south towards Green Hill C.
VP15	Highfield Footpath - NN|TN|3#1	View from the southern extent of Green Hill C looking north.
VP17	Pumping Station, Wilby Road	View from Wilby Road, in close proximity to the Pumping Station.
VP18	Mears Ashby Road	View from Mears Ashby Road, southeast of Green Hill E.
VP19	Earls Barton	Views from the northern residential settlement Earls Barton looking north towards Green Hill E.
VP20	Northamptonshire Round, south of Mears Ashby	Views from Northamptonshire Round Recreational Route looking south towards Green Hill E.
VP22	Pasture Farmhouse	View in proximity of Pastures Farm looking southeast towards the Green Hill BESS.
VP26	PROW NN|TF|001	View from the PROW looking west towards the BESS.
VP27	PRoW NN|TF|008	View from PRoW on the eastern edge of Grendon looking east towards Green Hill F.
VP28	PRoW NN|TD|003	View from a PRoW, north of Easton Maudit looking north towards Green Hill F.
VP29	PRoW NN|TD|005	View from the junction of PRoW TD|005 and TD|007, west of Horn Wood.
VP31	PRoW NN|TA|004	View from the PROW directly north of Green Hill F looking south.
VP35	Milton Keynes Boundary Walk Long Distance Route - PRoW MK|Lavendon|005	View from a section of the Long-Distance Route, east of Northey Farm looking south towards Green Hill G.
VP36	Milton Keynes Boundary Walk Long Distance Route - PRoW NN|TD|5	View from a section of the Long-Distance Route.
VP39	Three Shires Way Long Distance Route - PRoW MK|Lavendon|015 #2	View from a section of the Three Shires Way Long Distance Route just within the southern extent of Green Hill G looking north.
VP42	PRoW NN|TF/005	View from the PROW east of Grendon looking east towards Green Hill G.

Viewpoint Reference Number	Viewpoint Title	Description of View
VP43	PRoW NN|DF|4	View from the PROW northwest of Green Hill A, looking south east.
VP44	PRoW NN|DT|8	View from the PROW between Green Hill A and Green Hill A.2.
NN1	PRoW NN| GD/014	View from the PROW north of Green Hill A looking south.
NN2	PRoW NN|CW|1	View from the PROW south of Holcot looking south towards of Green Hill.
NN9	PRoW NN|TD/002	360-degree views from footpath within Green Hill F.
NN10	Easton Lane	360-degree views from Easton Lane.
NN13	Easton Lane	View from the northern verge of Easton Lane.

8.8 Embedded Mitigation Measures

8.8.1 Embedded Mitigation is taken into account during the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. Measures are embedded within the design of the Scheme at the outset and depend on the preliminary findings of the LVIA process. The measures are iterative and essentially look to modify the scale and layout of the Scheme and also strive to achieve to raise the bar of acceptability in terms of planning policy compliance. These measures aim to ensure a reasonable balance of viability and to meet with policy expectations.

8.8.2 The LVIA assessment process has identified the need for mitigation to avoid and reduce to a minimum any significant adverse landscape and visual impacts identified.

8.8.3 In accordance with the EIA Regulations, measures proposed to prevent/avoid, reduce and where possible offset or remedy (or compensate for) any significant adverse landscape and visual effects are described. The LVIA takes the following approach to mitigation and what is required in the process of assessment of both the landscape and visual effects. Mitigation measures are considered to fall into the categories of: Embedded mitigation, developed through the iterative design process and integrated or embedded into the project design; standard construction and operational management practices; and Additional mitigation, specifically intended to address significant residual adverse effects but not built into the Scheme.

8.8.4 These ‘embedded mitigation’ measures are secured via the DCO (for example, by specifying that each Work number can only be located on the area shown on the Works Plans **[EN010170/APP/GH2.4]**) or as part of the Scheme Description **[EN010170/APP/GH6.2.4]**.

8.8.5 Details of the strategic approach that has been adopted for the design of the Scheme are set out in **Table 8.7** below.

Table 8.7: Embedded Mitigation: Landscape Design Parameters

Consideration	Embedded Mitigation	Outcome
Planting Strategy	The approach to mitigation has been to reinforce the existing hedgerows to provide greater enclosure to the site and provide screening of the infrastructure. Embedded landscape mitigation provides reinforcement to host landscape fabric, strengthening and reinforcing existing landscape elements of the site in accordance with LCA aims and guidelines.	The new planting will provide a more varied landscape in terms of management and vegetation. Overall enhancement and strengthening of the Local Character Area with new planting and grassland reversion, where appropriate.
Existing Vegetation	Retention of existing woodland/scrub and hedgerow cover (other than where required for access). This vegetation provides a strong visual framework and potentially screens or substantially filters views at ground level towards the Scheme. Existing hedgerows are to be allowed to grow out and will be managed to a height of 4.5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to field boundaries.	Reinforcement of existing woodland/scrub and hedgerow cover with new planting. The addition of new hedgerow trees or secondary hedgerows as appropriate planted along the length of existing hedges. This new planting provides long term screening, structural benefits to the landscape and wider Green Infrastructure and habitat connectivity benefits.
Riparian Corridors	Existing water corridors have been identified, and new riparian planting has been proposed to enhance these features as they pass through the Sites.	The careful use of scattered tree and hedge planting adjacent to watercourses will reinforce the riparian character in these areas of the landscape.
Lighting	Lighting is not required within the Solar Arrays for the operational phase. Motion sensing security lighting will be provided within substations and within the BESS to be used only for maintenance and security purposes. Temporary site lighting during construction will be required to enable safe working during construction and decommissioning during hours of darkness and will be designed as far as reasonably practicable to minimise potential for light spillage outside the Sites and Cable Route Corridor, particularly towards houses, traffic and ecological habitats.	New planting along the boundary of substations and energy storage areas to filter the presence in the landscape and provide softening and screening to any light spill.

Consideration	Embedded Mitigation	Outcome
	Standard good practice measures would be employed to minimise light spill, including glare during construction, operation and decommissioning. There will be no lighting on perimeter fencing.	
Location	The location of the solar panels set back from the site boundary.	The careful use of scattered tree and hedge planting to avoid undue impacts on the open character of the area.
New Planting and Green Infrastructure	Use of Green Infrastructure publications, policy and recognised guidance at the baseline stage to establish a full understanding of the vegetation characteristics of the receiving landscape. Proximity to local ecological designations and sensitive ecological receptors has been considered and appropriate buffers incorporated into the Scheme where required.	Measures to enhance the landscape framework in keeping with landscape character are explored to soften and to continue to provide the 'filtering' effect of vegetation that is characteristic of the local landscape.
New Planting and Inherent Visual Amenity	Scheme allows for 15m to fence line from existing hedgerows allowing space for new woodland, shelterbelts or grassland margins to be established and to allow for the thickening and growth of existing vegetation.	New planting within the Sites to provide screening and habitat connectivity, particularly where transport routes and footpaths and bridleways cross the site.
New Planting and Landscape Character	Use of landscape character publications, policy and recognised guidance at the baseline stage to establish a full understanding of the important landscape characteristics of the receiving landscape.	The approach to mitigation has been to reinforce the existing hedgerows to provide greater enclosure to the Site and provide screening of the infrastructure. Proposed woodland planting would not be effective in all locations, but some areas have been suggested to ensure the long-term presence of woodland where it is in accordance with landscape character.
New Planting and Recreational Users	Retention of existing woodland/scrub and hedgerow cover along recreational routes. Public Rights of Way (PRoW) would be buffered with 15m to proposed fence lines to allow for establishment of existing hedgerows or woodland cover to each side. Proximity to major watercourses would allow 30m	New planting would screen certain views for users of the PRoWs, the bridleway network, and local roads. New native hedgerow planting to field boundaries with hedgerow trees added to further screen views. Where PRoW cross the site, space has been given (15m each side) to retain openness and allow for creation of landscaped corridors.

Consideration	Embedded Mitigation	Outcome
	set off distance to the outer edge of the solar panels.	
New Planting and Time Depth	The retention of existing woodland/scrub and hedgerow cover that helps provide local distinctiveness and cement the intrinsic landscape character. Panels would have a minimum off set of 15m from all existing hedgerows. Proximity to existing woodland has been considered with a 20m set off distance to the outer edge of infrastructure incorporated into the design of the Scheme.	New planting to reflect landscape character and policy expectations using a palette of native tree and shrub species that are appropriate to the location. Faster growing species would be used to provide quicker screening/filtering effects. Grassland reversion around settlements to respect historic integrity of former environs and introduce a less intensively managed context. Potential for grazing around settlement edges and across the Scheme.
New Planting and Wider Visual Amenity	Identification of key visual receptors and key views at the baseline stage. Proximity of residential properties with 50m (min) from boundary curtilage to outer edge of solar panels to allow marginal areas of vegetation to establish fully as screening.	The establishment of new planting along the margins of the Scheme to increase the robustness, elevation and efficacy of the planting as screening becomes more effective in the integration with the surrounding landscape.

General Offsets / Buffers

8.8.6 The following buffers outlined in **Table 8.8** have been embedded into the design of the Scheme to protect the landscape fabric of the Sites. Infrastructure associated with the Scheme is located outside of the buffers listed below with the exception of internal access tracks where exclusion from the buffers is unavoidable.

8.8.7 Buffers listed below have been used to create a set of design parameters in which above-ground infrastructure has been located. The distance listed below are a minimum set distance which have been agreed across disciplines and will be tested throughout the design process.

8.8.8 There may be occasions where buffer distances are greater due to site specific requirements for example if a PRoW is located on elevated ground with a high level of visibility.

Table 8.8: Offsets / Buffers

Criteria where offset applied	Buffer Size
Ecological offset	
All hedgerows	15m
Woodland	20m
A ditch or watercourse of any kind	8m
At least one of: • Signs of Otter or abundant evidence of Water Vole in the ditch or Watercourse • Outlier badger setts	10m
Individual Trees and groups of trees	10m (unless Arboriculture surveys indicate greater Root Protection Area (RPA) is required)
Ancient Woodland	30m
Some minor watercourses (depending on Ecological Value)	15m
Ponds (with no Great Crested Newts)	20m
At least one of: • Major watercourses • Main badger setts	30m
Ponds containing Great Crested Newts	50m
Bat roosts	High 15m Moderate 10m Low 8m
Schedule 1 bird nests (e.g. Barn Owl, hobby)	To be specified following survey information and

Criteria where offset applied	Buffer Size
	detailed within the ES where required.
Other offset	
Curtilage of Residential Properties	50m
PRoW (Public Footpath, Bridleway)	15m
Services	6m minimum
Internal offset from fence to panel	4m minimum

Phase Specific Embedded Mitigation Measures

Embedded Construction Mitigation Measures

8.8.9 Assessment is based on the construction of the array and associated infrastructure including the proposed Substations and the BESS. There are also works in connection with the onsite substations, Cable Route Corridor and in connection with electrical cabling and works to the existing National Grid substation site to facilitate connection of the Scheme to the National Grid. Other works would be undertaken in connection with fencing, gates, boundary treatment and other means of enclosure; works for the provision of security and monitoring measures such as CCTV. There would also be landscape and biodiversity mitigation works, including planting. There would also be the laying down of internal tracks and earthworks, SuDs Ponds and general drainage and irrigation infrastructure. The assessment has been undertaken in winter to assess a worst-case scenario at this construction stage.

8.8.10 Embedded Mitigation measures are aimed at reducing the construction effects, in particular the siting, design, and layout of the construction activities.

8.8.11 The following construction phase control documents are included as embedded mitigation measures:

- Outline Construction Environmental Management Plan (OCEMP), **[EN010170/APP/GH7.1];**
- Outline Landscape and Ecological Management Plan (OLEMP), **[EN010170/APP/GH7.4];**
- Outline Ecological Protection and Mitigation Strategy, **[EN010170/APP/GH7.5];**
- Outline Soil Management Plan, **[EN010170/APP/GH7.6];**
- Outline Construction Traffic Management Plan (OCTMP), **[EN010170/APP/GH7.9];**
- Outline Public Rights of Way and Permissive Access Routes Management Plan, **[EN010170/APP/GH7.10]**

Embedded Operation Mitigation Measures

8.8.12 **Operation Year 1:** Assessment is based on the presence of the solar panel areas and associated infrastructure including the energy storage, substations and Cable Route Corridor being operational and has been undertaken in winter to assess a worst-case scenario. Embedded Mitigation addresses measures to reduce the operational effects, in particular the siting, design and layout of the solar panel areas and associated infrastructure including energy storage, substation, and Cable Route Corridor. Embedded Mitigation measures such as planting have also been taken into account at this stage, although the fact that any planting would be immature at Year 1 has also been factored into the assessment. Temporary changes to hedgerow management (secured through the OLEMP **[EN010170/APP/GH7.4]**) within the site to reduce views of the Scheme has also been considered at this stage.

8.8.13 **Operation Year 15:** Assessment is based on the solar panel areas and associated infrastructure including the energy storage and substations being operational at the time and assessed in summer with vegetation in leaf, offering maximum screening potential.

8.8.14 The assessment of the effects of the Embedded Mitigation (proposed planting) has assumed a uniform rate of growth is allowed for trees, shelterbelts, and woodland mitigation planting of 0.4m every 1 year. At Year 15 this will result in new trees, shelterbelts, and woodland plantings having reached a minimum height of 7.5m. A uniform growth rate is allowed for new hedgerows of 0.4m every 1 year. This would result in hedgerows being able to be maintained at a height of 4.5m by Year 15. It is expected that alongside the regular maintenance of equipment, infrastructure such as panels and batteries will require replacement. It is not expected that an extensive replacement of all components will be required across the entirety of the Scheme during one period; instead, the programme for replacement of equipment across the Scheme should is anticipated to be staged to maintain the electrical export to the National Grid. The replacement activity would be considerably less intensive than during construction, with any environmental effects identified being appropriately mitigated with similar measures to those identified for the construction of the Scheme. Whilst Solar PV Panels typically have a lifespan of up to 40 years or more, and it has been assumed that Solar PV Panels will be replaced once during the lifetime of the Scheme. The Solar PV Panels are anticipated to be replaced over a 24 month period. The BESS could be replaced up to five times during the operational phase. Details of replacement are set out in more detail within Chapter 4 Scheme Description **[EN010170/APP/GH6.2.4]**.

8.8.15 Embedded Mitigation would also include management and maintenance of the planting (secured through the OLEMP **[EN010170/APP/GH7.4]**). The Outline Operational Traffic Management Plan (OOTMP) **[EN010170/APP/GH7.25]** would control the management of traffic associated with the Scheme during operation.

Landscape and Visual Avoidance Areas

8.8.16 As well as standard offsets / buffers identified within **Table 8.8** that have been applied across the Scheme, the following **Table 8.9** identifies those areas which were avoided to reduce Landscape and Visual Impacts.

Table 8.9: Embedded Landscape and Visual avoidance areas

Field / Location of avoidance area	LVIA Description / reasoning for avoidance
AF1	Maintains open approach into and out of the settlement of Old.
AF5 / AF7 / AF8 / A12	Ecological avoidance along watercourse.
AF10 / AF11	Inhibits panels being immediately alongside both sides of Newland Road.
AF15 (western extent)	Maintain openness and visual amenity to residential property Walgrave Lodge.
AF19 /AF21	Ecological avoidance.
A2F1 (eastern extent)	Maintain openness alongside A43.
A2F1 (southern extent)	Maintain openness and visual amenity to residential property Rectory Farm.
BF1	Ecological avoidance.
BF5 (eastern extent)	Maintain openness and visual amenity for users of PRoW (NN|CW|1).
CF1 / CF2	Avoidance in relation to airfield safety.
CF3	Ecological avoidance.
CF4	Maintain openness and visual amenity to residential property Wood Lodge Farm.
CF7 / CF10	Ecological avoidance.
DF1 (northern extents)	Maintain openness and visual amenity to residential property Highfield Lodge. Maintain openness and visual amenity to users of Sywell Road.
DF3 (eastern extents)	Maintain openness and visual amenity to residential property The Grange.
DF4	Maintains open approach into and out of the settlement of Mears Ashby. Maintain openness and visual amenity to residential property The Grange.
DF1 / DF2 / DF3 / DF4 (western extents)	Maintain openness and visual amenity for users of PRoW (NN|TN|3#1).
DF1 / DF2 / DF3 (eastern extents)	Maintains open approach into and out of the settlement of Mears Ashby.
EF9 **EF10, EF11, EF12, EF5, EF4 (southern extents)** **EF13, EF14, EF15, EF16 (northern extents)**	Maintains open approach into and out of the settlement of Mears Ashby along Wilby Road.
EF13 (western extents)	Maintains open setting of Mears Ashby.
EF34	Maintains open setting of Mears Ashby.

Field / Location of avoidance area	LVIA Description / reasoning for avoidance
EF29 / EF30	Maintains open setting to north of Mears Ashby. Array not located on open north facing slopes.
EF27 (south eastern extent)	Maintain openness and visual amenity to residential property Hockerhill Farm.
F6 / FF7 / FF8/ FF18 (northern extent) / FF11 (northern extent)	Maintain openness and visual amenity for users of PRoW crossing these sections of Green Hill F.
FF9	Ecological avoidance.
FF13 / FF14 / FF16	Maintains open setting of Easton Maudit. Inhibits panels being immediately alongside both sides of Easton Way, maintaining open approach into and out of the settlement of Easton Maudit.
FF27 / FF28	Maintain openness and visual amenity for users of PRoW (NN|TD|8). Maintains open views north across Easton Maudit.
FF30 / FF31 (eastern extents)	Avoidance in relation to airfield safety.
GF12 / GF11 / GF7 / GF8 / GF6 / GF2 (eastern extents)	Maintain openness and visual amenity for users of PRoW crossing this section of Green Hill G (MK|Lavendon|015#1, MK|Lavendon|015#2, MK|Lavendon|002).
GF8 **GF6 / GF1 (western / southern extents)**	Maintain openness and visual amenity for users of PRoW crossing this section of Green Hill G (MK|Lavendon|005).
GF13 (eastern extents)	Maintain openness and visual amenity to residential property Lower Farm.
BESS1 (north / eastern extents)	Limit encroachment of infrastructure beyond existing high voltage transmission lines.

Proposed Planting

8.8.17 The following planting typologies have been proposed across the scheme to provide visual mitigation and introduce landscape features which are characteristic of the landscape setting that link existing habitat. Proposed planting typologies are illustrated within the Landscape and Ecology Mitigation Plans Figures 4.10 to 4.20 **[EN010170/APP/GH6.4.4.10 to EN010170/APP/GH6.4.4.20]** and within the Outline Landscape and Ecological Management Plan (OLEMP) **[EN010170/APP/GH7.4]** and include:

- Green corridor & Woodland Planting;
- Enhanced Riparian Native planting;
- Hedgerow Reinforcement & Reinforced road side planting;
- Proposed Hedgerows; and
- Proposed Ponds and Wader Scrapes.

8.8.18 Details of species and density for each typology is included within the Outline Landscape and Ecological Management Plan (OLEMP) **[EN010170/APP/GH7.4]**

8.8.19 Each of the above Planting Typologies has been sub divided to provide specific Planting Reference Types as set out within the Outline Landscape and Ecological Management Plan (OLEMP) **[EN010170/APP/GH7.4]** and below within **Table 8.10.**

Table 8.10: Planting Typologies

Planting Typology	Type	Name
Green Corridor & Woodland Planting	Type 1	**Native Woodland Copse / Shelter Belt (Scrub and Tree Planting)**
	Type 2	**Dense Linear tree planting** (Without scrub planting e.g. adjacent to existing hedgerows or scrub planting)
	Type 3	**Native tree and scrub planting - Instant screening**
	Type 4	**Native scrub planting with scattered trees**
Enhanced Riparian Native Planting	Type 5	**River Corridor Planting for Ecology.** Majority ground cover with scattered scrubs and isolated trees
	Type 6	**River Corridor Planting For Flooding.** Densely planted native riparian scrub planting (No tall species)
	Type 7	**River Corridor Planting For Instant Screening** . Densely planted native riparian tree and scrub planting

Planting Typology	Type	Name
Hedgerow Reinforcement & Reinforced Road Side Vegetation	Type 8	**Existing hedge reinforced with irregularly spaced native tree planting**
	Type 9	**Existing hedgerow reinforced with densely spaced native tree planting**
	Type 10	**Existing hedgerow reinforced with densely spaced native tree planting -** Instant screening
Proposed Hedgerows	Type 11	**Proposed native species rich hedgerow with irregular spaced native hedgerow Trees**
	Type 12	**Secondary hedge native species rich hedgerow with densely spaced native hedgerow Trees** (Retain control of hedgerow)
Proposed Ponds and Wader Scrapes	Type 13	**Proposed Indicative locations for Ponds**
	Type 14	**Proposed location for cluster of wader scrapes**

8.8.20 A uniform rate of growth is allowed for trees, shelterbelts, and woodland mitigation planting of 0.4m every 1 year. At Year 15 this will result in new trees, shelterbelts, and woodland plantings having reached a minimum height of 7.5m. A uniform growth rate is allowed for new hedgerows of 0.4m every 1 year. This would result in hedgerows being able to be maintained at a height of 4.5m by Year 15. It is expected that alongside the regular maintenance of equipment, infrastructure such as panels and batteries will require replacement. It is not expected that an extensive replacement of all components will be required across the entirety of the Scheme during one period; instead, the programme for replacement of equipment across the Scheme should is anticipated to be staged to maintain the electrical export to the National Grid. The replacement activity would be considerably less intensive than during construction, with any environmental effects identified being appropriately mitigated with similar measures to those identified for the construction of the Scheme. Whilst Solar PV Panels typically have a lifespan of up to 40 years or more, and it has been assumed that Solar PV Panels will be replaced once during the lifetime of the Scheme. The Solar PV Panels are anticipated to be replaced over a 24 month period. The BESS could be replaced up to five times during the operational phase. Details of replacement are set out in more detail within Chapter 4 Scheme Description **[EN010170/APP/GH6.2.4]**.

8.8.21 The Scheme would deliver the following landscape enhancements:

Table 8.11: Landscape Enhancements

Green Corridor and Woodland Planting	Area
Green Hill A	0.6ha
Green Hill A.2	0.51ha
Green Hill B	N/A
Green Hill C	0.48ha
Green Hill D	1.83ha
Green Hill E	0.88ha
Green Hill F	5.22ha
Green Hill G	3.04ha
Green Hill BESS	1.89ha
Scheme	**14.45ha**
Enhanced Riparian Native Planting	**Area**
Green Hill A	1.9ha
Green Hill A.2	N/A
Green Hill B	N/A
Green Hill C	0.51ha
Green Hill D	1.18ha
Green Hill E	4.75ha
Green Hill F	2.31ha
Green Hill G	1.66ha
Green Hill BESS	0.51ha
Scheme	**12.81ha**
Hedgerow Reinforcement and Reinforced Roadside Vegetation	**Length**
Green Hill A	11.97km
Green Hill A.2	2.55km
Green Hill B	3.4km
Green Hill C	N/A
Green Hill D	2.3km
Green Hill E	11.44km
Green Hill F	10.18km
Green Hill G	1.3km
Green Hill BESS	N/A
Scheme	**43.13km**
Proposed Hedgerows	**Length**
Green Hill A	0.08km

Green Corridor and Woodland Planting	Area
Green Hill A.2	2.02km
Green Hill B	0.45km
Green Hill C	0.7km
Green Hill D	1.09km
Green Hill E	1.98km
Green Hill F	5.1km
Green Hill G	4.19km
Green Hill BESS	N/A
Scheme	**15.61km**
Proposed Ponds and Wader Scrapes	**Number**
Green Hill A	N/A
Green Hill A.2	N/A
Green Hill B	N/A
Green Hill C	N/A
Green Hill D	N/A
Green Hill E	2
Green Hill F	2
Green Hill G	N/A
Green Hill BESS	2
Scheme	**6**
Groundcover	**Area**
Green Hill A	162.22ha
Green Hill A.2	62.2ha
Green Hill B	60.82ha
Green Hill C	48.57ha
Green Hill D	37.83ha
Green Hill E	288.42ha
Green Hill F	254.48ha
Green Hill G	159.15ha
Green Hill BESS	5.93ha
Scheme	**1,079.6ha**

Table 8.12: Total Landscape Enhancements

Planting Typology	Area / Length/Number
Green Corridor and Woodland Planting	14.45ha
Enhanced Riparian Native Planting	12.81ha
Hedgerow Reinforcement and Reinforced Roadside Vegetation	43.14km
Proposed Hedgerows	15.61km
Proposed Ponds and Wader Scrapes	6
Groundcover	1,079.6ha

Embedded Decommissioning Mitigation Measures

8.8.22 Assessment is based on similar principles to the assessment for the construction phase, but with the Scheme being no longer operational. The Scheme is assessed in winter and assumes retention of existing vegetation and builds upon the proposed secondary mitigation that had been established as the future baseline. The Outline Decommissioning Statement **[EN010170/APP/GH7.3]** sets out the requirements for the Decommissioning.

8.8.23 At decommissioning other than the buried cabling, all infrastructure would be removed with agricultural fields returned back to agriculture. Alternatively, the cables can be removed by opening up the ground at regular interval and pulling the cable through to the extraction point, leaving the ducting and jointing bays in place, avoiding the need to open up the entire length of the cable route. The reinforced landscape however would be retained. As infrastructure is removed, there would be an overall benefit to the character of the area with landscape mitigation retained providing long term benefit towards legacy landscape.

Functionality

8.8.24 The design parameters of the Scheme have maintained some degree of design flexibility using Rochdale Envelope principles to allow the latest technology to be utilised when the Scheme is constructed, whilst ensuring that the preferred options taken forward are balanced with the environmental effects and the functionality and needs of the Scheme. The parameters assessed in the EIA are set out Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**. The key design elements relevant to the LVIA process within this environmental balance have included the following considerations:

PV Panels (fixed and tracker)

8.8.25 Flexibility for either tracker or fixed panels have been built into the EIA. The tracking solar PV modules would be aligned in north-south rows and the fixed solar panels would be aligned in east-west rows. The maximum height of the highest part of the tracking solar PV modules and its greatest inclination would be 4.5m. The maximum height of the highest part of the solar PV modules when horizontal will be 2.5m. The maximum height of the highest part of the fixed solar PV modules will be 3.5m. Foundations are most likely to be galvanised steel poles

driven into the ground. These will either be piles rammed into a pre-drilled hole, or a pillar attaching to a steel ground screw.

Conversion Units

8.8.26 Conversion Units consisting of standalone transformers, inverters, and switchgear, or integrated containerised conversion units have been considered. The DCO is retaining the flexibility to consider both options prior to construction of the Scheme due to anticipated technical advances.

Battery Energy Storage System (BESS)

8.8.27 The installation of the energy storage has been selected based on locations where a combination of existing screening and capacity for planting mitigation can reduce visual impacts. The BESS is proposed alongside the existing National Grid Substation at Grendon and within the northern section of Green Hill C alongside the existing solar development. These areas are shown on the Works Plans **[EN010170/APP/GH2.4]** and are set out in Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**.

Topic Overlaps

8.8.28 The layout of the solar panel areas within the Sites has been informed by a series of design parameters that have been discussed and agreed within the Technical Consultant Team and through stakeholder consultation and engagement to ensure consistency of approach is implemented across the Scheme and in this ES, in particular Chapter 9: Ecology and Biodiversity **[EN010170/APP/GH6.2.9]** and Chapter 12: Cultural Heritage **[EN010170/APP/GH6.2.12]**. Parameters such as offset distances were informed by discussions over functionality and need and the balance with the key environmental constraints.

8.8.29 The design parameters that are relevant to the landscape and visual mitigation matters are set out in **Table 8.7** and **Table 8.8** above. Once applied, the remaining site area was designated the “developable area” for the solar array, inverters, substation, and access roads. The design includes security fencing placed along the parameter boundary of the Sites. Areas between the fencing and the developable area were then made available for ecology and landscape mitigation or enhancement.

8.8.30 The Embedded Mitigation (landscape) has been co-ordinated with other relevant disciplines, such as Cultural Heritage and Ecology. With Ecology, the aim was to determine the key embedded and parameters and agree offsets to improve the value of the landscape and reflect appropriate local and regional aims and objectives for ecology and biodiversity. The Outline Landscape and Ecological Management Plan (OLEMP) **[EN010170/APP/GH7.4]** sets out a framework for the establishment of the planting on site for the duration of the Scheme; together with the management and monitoring of the landscape and ecological mitigation and enhancement of habitats on which this framework is based. The Outline LEMP **[EN010170/APP/GH7.4]** is secured by a requirement in the draft DCO **[EN010170/APP/GH3.1]**.

8.8.31 The Embedded Mitigation also took into account the Section 42 Consultation with Local Authorities and feedback is provided within the Consultation Report

[EN010170/APP/GH5.1] to ensure they would be considered in both the visual assessment, and the evolving proposals so that any relevant and appropriate mitigation would be applied.

8.9 Assessment of Impacts and Effects

8.9.1 This section describes the likely landscape effects at the construction, operation, and decommissioning stages of the Scheme. The construction, operational, and decommissioning effects, are considered separately and the likely significant effects set out where positive (beneficial), neutral or negative (adverse) effects are likely to arise from the Scheme. Effects deemed as moderate or greater are considered to be "significant effects", either beneficial, neutral or adverse.

8.9.2 A step-by-step approach has been undertaken to make judgements of significance, combining judgements about the nature of the receptor, summarised as its sensitivity, and the nature of the effect, summarised as its magnitude. The approach then clearly distinguishes what are considered to be the significant and non-significant effects. This approach also distinguishes between the assessment of landscape effects and the assessment of visual effects by taking each receptor in turn. A full detailed LVIA methodology is set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1**].

8.9.3 Due to the disassociated nature of the Scheme, the overall assessment of the Scheme is based upon the findings associated with each of the individual Sites. In assessing the Scheme, professional judgment is applied alongside reference to the suite of landscape and visual figures and desktop and site-based assessment. In reaching the overall assessment of effects associated with the Scheme the cumulative effects of each of the Sites and Cable Route Corridor are assessed and combined to reach an overall conclusion on where likely significant effects might occur as a result of the Scheme.

8.9.4 Taking into account the embedded mitigation measures as detailed in Section 8.8, the potential for the Scheme to generate effects was assessed using the methodology set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1**]. In the sections below, associated impacts and effects during the construction, operation and maintenance and decommissioning phases of the scheme are discussed. These assessments are based on the Illustrative Layout Plans Figures 4.1 to 4.9.2 **[EN010170/APP/GH6.4.4.1 to EN010170/APP/GH6.4.4.9.2]** and the Landscape and Ecology Mitigation Plans Figures 4.10 to 4.20 **[EN010170/APP/GH6.4.4.10 to EN010170/APP/GH6.4.4.20]**.

Identification of Receptors

8.9.5 A combination of desktop and field study was used to identify both Landscape and Visual Receptors within the Study Areas. This identified all visual receptors within the 2km Study Area, and all Landscape Receptors within the 5km Study Area. Appendix 8.2 Scoping LVIA receptor sheets **[EN010170/APP/GH6.3.8.2]** sets out all of the receptors identified within these two Study Areas. Landscape Receptors are illustrated on Figure 8.6 Landscape Receptors **[EN010170/APP/GH6.4.8.6]** and Visual Receptors on Figure 8.7 Visual Receptors **[EN010170/APP/GH6.4.8.7]**. Each receptor is given its own individual project specific code as to differentiate it from other receptors of the same name, for example, there may be more than one Mill Farm or Station Road.

8.9.6 Once these had been identified a Scoping Exercise was undertaken to identify those receptors where effects, either adverse, neutral or beneficial were considered likely to occur. This process was undertaken through a combination of desktop study using digital constraints mapping (including review of Aerial Photography **[EN010170/APP/GH6.4.8.2]**, Landform **[EN010170/APP/GH6.4.8.3]**. ZTV Bare Earth **[EN010170/APP/GH6.4.8.8]** and Augmented ZTV **[EN010170/APP/GH6.4.8.9]**, Landscape Character Areas **[EN010170/APP/GH6.4.8.5]** and on-site field assessment.

8.9.7 Following this Scoping Exercise, a number of receptors were Scoped Out of the LVIA. All landscape receptors have been considered collectively for the Sites and Study Areas, due to the interconnected relationship of landscape. It is recognised that Landscape effects upon LCT's and LCA's located on the peripheries of the Outer 5km Study Area are limited due to distance and lack of interaction with landform associated with the Scheme.

8.9.8 All of the remaining receptors were then Scoped into the LVIA. Appendix 8.2 Scoping LVIA receptor sheets **[EN010170/APP/GH6.3.8.2]** sets out all of the receptors that were Scoped into the LVIA.

8.9.9 All receptors Scoped into the LVIA then underwent an initial assessment to identify if any potential effects were likely. If through this initial assessment effects of any magnitude were deemed not likely, then the receptor was not carried forward into further assessment within the LVIA. Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** contains the initial assessment sheets and rationale for those receptors not carried forward.

8.9.10 Where effects (of any magnitude) were considered likely then receptors were carried forward to further assessment within the LVIA where an identification and evaluation of likely significant effects has been made. Those receptors carried forward for further assessment within the LVIA are set out within Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]**.

8.9.11 Summary Tables are contained within Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** that sets out the findings of the LVIA, including identifying Significant Effects.

8.9.12 This section sets out the conclusions of this assessment.

Landscape Effects

8.9.13 Significant effects have been identified to receptors set out with **Table 8.13** below as shown in bold. Please refer to Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Landscape Assessment including identification of non significant effects.

Table 8.13: Significant Landscape Effects

Landscape Receptor	Construction	Operation Year 1	Operation Year 15	Decommissioning
Landscape Fabric	Moderate / Minor Neutral	Moderate / Minor Neutral	**Moderate Beneficial (Significant)**	**Moderate Beneficial (Significant)**
Local Study Area (1km)	**Moderate Adverse (Significant)**	**Moderate Adverse (Significant)**	Moderate / Minor Adverse	Minor Adverse

Landscape Fabric

8.9.14 Moderate Beneficial effects have been identified across all Sites for the Operation Year 15 and Decommissioning stages of the Scheme on Landscape Fabric. Landscape Fabric being the individual tangible elements or features of the landscape, such as landform, woodland, hedges, tree cover, vegetation, for example which can be described and quantified.

8.9.15 The Scheme would result in:

- 22.25ha of Green Corridor and Woodland Planting;
- 12.81ha Enhanced Riparian Native Planting;
- 43.14km of Hedgerow Reinforcement and Reinforced Roadside Vegetation;
- 15.61km of Proposed Hedgerows;
- 6 proposed Ponds and Wader Scrapes; and
- 1,079.53ha of Groundcover.

8.9.16 Embedded Mitigation measures have been included within the design of the Scheme to protect the landscape fabric of the site. This includes various buffers to offset the development from existing landscape features on site to ensure their protection and permanence. The Outline Construction and Environmental Management Plan (OCEMP) **[EN010170/APP/GH7.1]** sets out how these Embedded Mitigation measures are to be secured. Details of species and density for each typology is described within the Outline Landscape and Ecology Management Plan (OLEMP) **[EN010170/APP/GH7.4]**. The OLEMP **[EN010170/APP/GH7.4]** prescribes how the mitigation measures are to be implemented and managed to ensure the effectiveness and certainty in achieving the objectives of the mitigation strategy.

8.9.17 The proposed planting as set out in the OLEMP **[EN010170/APP/GH7.4]** would lead to various Biodiversity Net Gains as outlined in Appendix 9.13 BNG **[EN010170/APP/GH6.3.9.13]**.

8.9.18 The Scheme would result in losses as outlined in Ecology **[EN010170/APP/GH6.2.9]** and Arboriculture **[EN010170/APP/GH6.2.19]**.

8.9.19 The substantial provision of new planting combined with the minimal losses to accommodate the Scheme are the driver behind the beneficial effects associated with the Landscape Fabric of the Scheme.

8.9.20 By Year 15 Embedded Mitigation planting would be established and adding to the Green Infrastructure across all of the Sites. As outlined above, the new planting would be providing extensive habitat and biodiversity benefits and making positive contribution to BNG. The embedded landscape mitigation provides reinforcement to the host landscape fabric of each site, strengthening and reinforcing existing landscape elements in accordance with the aims and guidelines of the Landscape Character Assessments.

8.9.21 At decommissioning other than the buried cabling, all infrastructure would be removed with agricultural fields returned back to agriculture. The reinforced landscape however would be retained as there is an expectation that at Year 60 that there would be an equivalent of current countryside policies in place to ensure the protection of hedgerows, woodland, trees etc. Therefore, as infrastructure is removed, there would be an overall benefit to the character of the area with landscape mitigation retained providing long term benefit towards Legacy Landscape.

8.9.22 Legacy Landscape is where, because of the development, the landscape would be left in a better condition than current day. This betterment is established as a consequence of the landscape proposals resulting in greater species variety, greater age depth, enhanced structure, resilience to pest and disease and reinforcement of local landscape character across the Sites.

Local Study Area

8.9.23 Whilst under construction the proposals would provide new landscape features that fit the key characteristics of the host character areas, whilst ensuring the array is well integrated into its context. However, locally prior to the establishment of the Embedded Mitigation, there would be an immediate change to the character of the Sites themselves and their immediate surroundings as they change from an area of arable farmland to solar infrastructure. As the upper sections of the array are constructed including the Substations, infrastructure associated with the Scheme would become more apparent within the local landscape. The infrastructure would become visible above the boundary hedgerows and local vegetation but limited to locations within the Sites themselves and the local context, predominantly from the local road and PRoW network as those adjacent sections of array are constructed within the surrounding fields.

8.9.24 However, given separation and screening provided by the structure of the existing local landscape combined with the low level nature of the proposals, this would not affect the integrity of the landscape character of the wider area. The field boundaries and the associated tree cover including adjacent woodlands would remain intact and help with visual layering of vegetation across the landscape and the integration of the Scheme within the landscape as it is constructed. Within the Local Study Area, there would be an appreciation of the ongoing construction activities associated with the Scheme and locally prior to the establishment of the Embedded Mitigation, there would be an immediate change to the character of the site and its immediate setting as it changes from an area of arable farmland to solar infrastructure. However, these effects would be limited to the site itself and its immediate setting.

8.9.25 The proposals would provide new landscape features that fit the key characteristics of the character area, whilst ensuring the array is well integrated into its context. Overall, the landscape proposals would help to link habitats and strengthen the overall character locally and maintain a sense of place. Important opportunities to bolster the local vegetation cover, buffering and connecting existing fragmented vegetation, helping to create a more resilient and biodiverse landscape.

8.9.26 At Year 1, the impacts of the proposed mitigation planting (including hedgerow reinforcement, new hedgerows and reinforced roadside planting) would be limited. The character of the Sites themselves and their immediate surroundings would be adversely affected, with the land now presenting as a large scale solar scheme. Although new vegetation would be immature, existing hedgerows would have begun to grow out at Year 1 and the varied grassland areas will have become established, starting to create valuable habitats across all the Sites. Overall, this will help to link habitats and strengthen the overall character locally and maintain a sense of place. The landscape scheme provides opportunities to bolster the local vegetation cover, buffering and connecting existing fragmented vegetation, helping to create a more resilient and biodiverse landscape.

8.9.27 By Year 15, the embedded landscape mitigation would strengthen and reinforce the landscape character of the Local Study Area, allowing the scheme to become absorbed into the receiving countryside. The Scheme provides reinforcement to the host landscape fabric of the site, strengthening and reinforcing existing landscape elements in accordance with LCA aims and guidelines. As new vegetation matures it would begin to provide enclosure to the individual Sites, screening and providing containment to the Scheme allowing it to become more absorbed into the receiving landscape. However, given the scale of the proposals, there would be an appreciation of the Scheme within its immediate surroundings which would be notably different from the character of the surrounding arable countryside.

8.9.28 The scale of the planting across the site would lead to considerable beneficial effects in the increased level of vegetation cover locally, the linking and enhancement of existing natural features and the biodiversity benefits that this will bring, creating a stronger, more resilient framework within the receiving landscape. The Scheme provides reinforcement to the host landscape fabric of the site, strengthening and reinforcing existing landscape elements in accordance with the site specific LCA aims and guidelines. Embedded landscape mitigation would strengthen and reinforce the landscape character of the Local Study Area, allowing the scheme to become absorbed into the receiving countryside.

8.9.29 As new vegetation matures it would begin to provide screening and containment to the Scheme allowing it to become absorbed into the receiving landscape. Where visible from within the wider landscape, the new planting would reinforce the well layered landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation would have established and begun to mature, creating a much stronger structure to the landscape locally, retaining and enhancing the overall character of the area.

8.9.30 At decommissioning, other than the buried cabling, all infrastructure would be removed. Reinforced landscape would have ability to absorb short term decommissioning activities. At decommissioning, agricultural fields would be returned back to agriculture. As infrastructure is removed, there would be an overall benefit to the character of the area with landscape mitigation retained providing long term benefit towards legacy landscape. Following decommissioning, the site would benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has matured to create a much stronger and robust landscape, retaining, and enhancing the overall character and providing considerable biodiversity benefits over the years. Due to the development, the landscape would be left in a better condition than current day. This betterment is established as a consequence of the landscape proposals resulting in greater species variety, greater age depth, enhanced structure, resilience to pest and disease and reinforcement of local landscape character across the Sites.

8.9.31 Although the Scheme comprises a series of independent areas of land or Sites, they are set within an extensive agricultural landscape. With large areas of land between each of the Sites, each is set apart by their associated features such as robust hedgerows, woodland and tree cover, intervening settlements and road infrastructure. These independent areas of land provide more scope for the Scheme to be offset from all key receptors such as settlement edges, individual residential properties, PRoW and transport routes which further assist with its integration and dispersion across the landscape than if the site were one composite whole.

8.9.32 The discrete areas of land in the Scheme are placed so far apart that the Scheme would not be perceived in its entirety and the solar panels are distributed ‘in and amongst’ the landscape features to assimilate them into the landscape. The provision of a solar scheme with discrete areas of land can therefore offer a more favourable approach compared to having a single large site, as it allows for a distributed and less obtrusive deployment of the solar panels. The presence of the intervening landscape also provides scope for areas of mitigation and the ability to build upon the connectivity of green infrastructure and ecology and nature conservation and retain the existing landscape pattern.

8.9.33 The Scheme has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order limits, nearby sensitive receptors and assets, information emerging from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Scheme, with the avoidance and mitigation of impacts, and provision of environmental and other enhancements, where practicable.

Visual Effects

8.9.34 Significant effects have been identified to receptors set out with **Tables 8.14** to **8.16** below as shown in bold. Please refer to Appendix 8.3 ES LVIA Assessment Sheets [**EN010170/APP/GH6.3.8.3]** for details on Visual Assessment including identification of non significant effects. Visual Receptors are shown on Figure 8.7 **[EN010170/APP/GH6.4.8.7]**.

Table 8.14: Significant Visual Effects: Private Receptors

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
New Lodge Farm, Old RG07	A	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Minor Adverse	Minor Adverse
The Grange, Mears Ashby RG26	D	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
Pollys Cottage, Newland Road, Walgrave RI11	A	**Major /Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Highfield Lodge, Highfield Road, Mears Ashby RI36	D	**Major/ Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse
Property south of Sywell Road, Mears Ashby RI38	D	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	No Effect
Wood Lodge Farm, Sywell RI39	C	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
Pastures Farm, Grendon RI64	BESS	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse
Slype Farm, Bozeat RI77	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
Easton View, Bozeat RI78	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Lower Farm, Lavendon RI93	G	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	No Effect
Northey Farm RI101	G	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse

Table 8.15: Significant Visual Effects: Transport Receptors

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
A428 Northampton Road TR015	G	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	No Effect
Kettering Road Walgrave TR033	A2	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor/ Negligible Adverse	Minor/ Negligible Adverse
Glebe Road TR065	C	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	No Effect
Moonshine Gap TR069	D	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	No Effect
Wellingborough Road (Unofficial) TR071	D	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	No Effect
Mears Ashby Road TR076	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	No Effect
Mears Ashby Road TR077	E	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	No Effect

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
Easton Lane TR080	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	No Effect
Easton Way TR081	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Yardley Road TR084	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
Newland Road Walgrave TR100	A	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Wellingborough Road TR131	C	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Highfield Road TR132	D	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Wilby Road TR155	E	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse

Table 8.16: Significant Visual Effects: Public Receptors

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
NN|TN|10 TP113	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Neutral
NN|TN|7 TP088	C	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse
NN|TD|9 TP201	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
NN|TD|8 TP208	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
MK|Lavendon|002 TP217	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
MK|Lavendon|004 TP220	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
MK|Lavendon|015#2 TP227	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
MK|Lavendon|014 TP229	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
MK|Lavendon|015#1 TP240	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
NN|DF|4 TP013	A	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
NN|DT|9#1 TP035	A2	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|CW|1 TP086	B	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor/ Negligible Adverse	Minor/ Moderate Adverse
NN|DG|2#2 TP090	B	**ModerateAdverseSignificant**	**ModerateAdverseSignificant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
NN|TU|3 TP091	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**
NN|TN|3#1 TP092	D	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|TN|1 TP114	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse
NN|TN|2 TP122	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|TF|11 TP165	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse
NN|TA|1 TP174	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor Adverse
NN|TF|5 TP175	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|TA|4#1 TP181	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse
NN|TD|2 TP184	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**
NN|TA|3 TP185	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	Minor/ Negligible Adverse
NN|TD|3 TP186	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|TD|7 TP205	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
NN|TD|5 TP206	F	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/ Minor Adverse
MK|Lavendon|005 TP215	G	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse

Cumulative Site Visual Effects

8.9.35 Please refer to Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Visual Assessment.

8.9.36 GLVIA3 defines types of cumulative visual effect as either: Combined (in the same view) or Sequential, (different developments revealed in succession as a series of sequential views.) GLVIA 3 Table 7.1 regarding Cumulative visual effects states:

"Sequential: Occurs when the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths"

Combined Effects

Table 8.17: Cumulative Site Effects: Combined

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	Decommissioning
Private Receptors					
New Lodge Farm, Old RG07 Green Hill A and Green Hill A.2	A	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Minor Adverse	Minor Adverse
The Grange, Mears Ashby RG26 Green Hill D and Green Hill E	D	**Major/Moderate Adverse Significant**	**Major/Moderate Adverse Significant**	Moderate/ Minor Adverse	Minor Adverse
Highfield Lodge, Highfield Road, Mears Ashby RI36 Green Hill C, Green Hill D and Green Hill E	D	**Major/Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse
Property south of Sywell Road, Mears Ashby RI38	D	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse	No Effect

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	Decommissioning
Green Hill C, Green Hill D and Green Hill E					
Transport Receptors					
Kettering Road Walgrave TR033 Green Hill A and Green Hill A.2	A2	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor/ Negligible Adverse	Minor/ Negligible Adverse
Glebe Road TR065 Green Hill C and Green Hill D	C	**Major/Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Minor Adverse	No Effect
Moonshine Gap TR069 Green Hill C and Green Hill D	D	**Major/Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Minor Adverse	No Effect
Highfield Road TR132 Green Hill D and Green Hill E	D	**Major/Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Minor Adverse	Minor Adverse
Public Receptors					
NN|DT|9#1 TP035 Green Hill A and A.2	A2	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse
NN|TN|3#1 TP092 Green Hill D	D	**Major/Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	Moderate/ Minor Adverse	Moderate/Minor Adverse

Sequential Effects

8.9.37 Given GLVIA3's referral to major roads, it is important to note that the Department for Transport classifies Major Roads to include motorways and all class 'A' roads. These roads usually have high traffic flows and are often the main arteries to

major destinations. Minor roads comprise 'B' and 'C' classified roads in addition to unclassified roads. Major roads locally to the Green Hill Solar Farm includes: A43, A509, A45, A4500 and the A428, with all other roads locally being classified as Minor. The focus of the Sequential Assessment should therefore be undertaken upon these Major Roads. However, none of these roads are expected to give rise for any opportunity for Sequential Visibility.

8.9.38 GLVIA3 also suggests that popular paths should also be included within Sequential assessments. Popular paths are those typically considered those to be promoted or recognised in some way such as National Trails, Recreational Routes, long distance trails or locally promoted walks.

8.9.39 The following Recreational Routes pass through the Scheme:

- The Northamptonshire Round;
- The Milton Keynes Boundary Walk; and
- The Three Shires Way.

8.9.40 These routes all utilise a combination of PRoW and Public Highway, and as such are made up of lots of individual sections of various footpaths, bridleways, roads etc. as identified below within **Table 8.18**.

Table 8.18: Sequential Visual Effects

Rec Route	Individual Section	Description
The Northamptonshire Round	NN|TN|7 (TP088) Glebe Road (TR065) TN/001 (TP114) Mears Ashby Road (TR076) TN/002 (TP122)	The Route passes through Site C following PRoW NN|TN|7 (TP088), and then south along Glebe Road and into the settlement of Mears Ashby at the north of the settlement. It exits at the south via PRoW TN/001 (TP114) where it crosses through Site E. it then continues south along Mears Ashby Road (TR076) before heading south along PRoW TN/002 (TP122)
The Milton Keynes Boundary Walk	TD/008 (TP208) TD/005 (TP206) TA/020 (TP212) MK|Warrington|007 (TP213) MK|Lavendon|005 (TP215) MK|Lavendon|002 (TP217)	This Route passes to the south of Site F following PRoW TD/008 (TP208) and TD/005 (TP206). It then follows a number of short sections of PRoW including crossing the A509 before turning south into Site G and following PRoW MK|Lavendon|005 (TP215). The Route turns north along the western edge of Threeshire Wood along PRoW MK|Lavendon|002 (TP217) where it continues north through The Oaks Wood and leaves Site G and then continues east across the countryside to the North of Lavendon
The Three Shires Way	MK|Lavendon|015#1 (TP240) MK|Lavendon|015#2 (TP227) MK|Lavendon|002 (TP217)	This Route leads north from Lavendon Grange, crosses the A428 and then enters Site G. The Route passes underneath the high voltage transmission line and continued up through Site G and alongside the western edge of Threeshire Wood before it enters The Oaks Wood and continues north across open countryside.

8.9.41 Although the Scheme comprises a series of independent areas of land or Sites, they are set within an extensive agricultural landscape. With large areas of land between each of the Sites, each is set apart by their associated features such as robust hedgerows, woodland and tree cover, intervening settlements and road infrastructure. These independent areas of land provide more scope for the Scheme to be offset from all key receptors such as settlement edges, individual residential properties, PRoW and transport routes which further assist with its integration and dispersion across the landscape than if the Site were one composite whole.

8.9.42 Whilst there would be an appreciation of an overall increase in solar infrastructure as users of these routes move through the landscape, the discrete areas of land in the Scheme are placed so far apart that the Scheme would not be perceived in its entirety and the solar panels are distributed 'in and amongst' the landscape features helping to assimilate them into the landscape.

8.9.43 Sequential Effects for users of these Recreational Routes are not considered to be any greater than those effects identified for the individual sections as set out within Appendix 8.3 ES LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]**.

Residential Visual Amenity Assessment

8.9.44 As per **Table 8.14** above, it is anticipated that the Scheme would not result in significant effects post Year 15 due to screening effects of proposed mitigation and therefore it is considered there is no requirement for an RVAA from any properties at this stage based on the methodology set out within the LVIA Methodology contained within Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**

8.10 The Cable Route Corridor

8.10.1 Runs of overhead lines between components or to connect underground cables are not proposed. All cables would be underground with no new overhead lines or associated poles required.

8.10.2 Where the cable is proposed to cross open farmland, excavations and trenching would take place to allow the cable to be placed in situ. Where the cable is proposed to pass through substantial landscape features (such as woodland), the cable would use trenchless techniques to pass underneath with no permanent above ground structures proposed. This is proposed to reduce the effects on ecology and landscape and visual receptors. During the construction period there are temporary construction compounds, which following laying of the relevant section of cable, would be removed. Overall, it is considered that any disturbance associated with the laying of the cable would be minimal, short term (as the cable works will progress along the route) and akin to the typical process involved in the laying of utility cables and not likely to result in significant effects.

Landscape Effects

8.10.3 For the construction stage, there would be the intervention of digging the trenches along the length of the Cable Route Corridor as the cable is installed. However, the effects of this would not be above that typically associated with utility installation of this nature and would be limited to a short-term duration.

8.10.4 There is a need for trenchless construction techniques at a number of locations across the Cable Route Corridor, however, this will depend on the results of the ground investigations and the final detailed design. As such the exact number of and locations themselves would be determined at detailed design stage. At certain crossing locations such as main roads and watercourses such as the River Nene, Horizontal Directional Drilling (HDD) will be required. This is addressed in the Crossing Schedule **[EN010170/APP/GH7.18]**.

8.10.5 The extent of the designated work area is dependent on the voltage of the cables where the number of circuits will affect the width of cable trenches required. The range of typical cable trench widths relating to the 132kV and 400kV cables is 0.6 to 1.1 metres. However, the width and spacing of the cable trenches may differ depending on environmental constraints, engineering requirements or if crossing third party apparatus. In addition to the trenches, land will be required in the corridor for access and soil and cable 'lay down'. Construction compounds along this route will also be required. Any existing overhead power lines will be retained, and no new overhead lines will be required.

8.10.6 In relation to the Cable Route Corridor crossing the Nene, this is a necessary part of the Scheme. Consultation has already been undertaken with NNC as well as other relevant stakeholders in regard to the crossing of the River Nene. The cable will be directionally drilled under the river and so no permanent above ground structures are proposed. During the construction period there are likely to be temporary construction compounds which will be removed on completion of construction.

8.10.7 The Cable Route Corridor has been designed to where possible avoid natural landscape features such as trees, hedgerows, ditches, woodland. Where crossing such features becomes unavoidable, the construction would utilise HDD to ensure these features are protected. Where HDD is not possible, any loss of natural features such as trees, hedgerows and woodland would be mitigated in full and in line with the species and composition of vegetation loss. Where possible and appropriate such replacements should improve the baseline scenario and include gapping up of adjacent hedgerows for instance as defined in the OLEMP **[EN010170/APP/GH7.4**].

8.10.8 In terms of construction activities, each work area will then be excavated to expose all utilities present and to co-ordinate and prepare the area for installation of the proposed ducts / pipes. Some locations may require shuttering along the trench. The works would be temporary, and activities will be planned and co-ordinated before commencement in each work area. Welfare facilities will be provided at each designated work area including canteen, toilets and a drying room, but these would be temporary buildings to be removed at the end of the construction stage.

8.10.9 The exact location of the ducts / pipes and working areas would be confined to designated locations to ensure operations are controlled are precisely associated with each working area.

8.10.10 Given the above, the construction stage of the Cable Route Corridor is considered to result in **Negligible Adverse (Not Significant)** landscape effects.

8.10.11 For the operation stage, all the cables will be underground, and no new overhead lines will be required. Following installation of the ducts / pipes each designated location will be backfilled and the ground re-instated to match the existing conditions. Given the above, the operation stage of the Cable Route Corridor is considered to result in **Negligible Neutral (Not Significant)** landscape effects.

8.10.12 For the decommissioning stage, following backfilling and ground reinstatement at the end of the Construction stage, the ducts / pipes at each location would remain in situ and not be removed. Alternatively, the cables can be removed by opening up the ground at regular interval and pulling the cable through to the extraction point, leaving the ducting and jointing bays in place, avoiding the need to open up the entire length of the cable route. Following installation, the land is returned to its original use, and this would remain throughout and beyond the decommissioning stage. Given the above, the decommissioning stage of the Cable Route Corridor is considered to result in **Negligible Neutral (Not Significant)** landscape effects.

Visual Effects

8.10.13 For the construction stage, there would be an appreciation of the digging and the presence of small-scale machinery along the length of the Cable Route Corridor as the cable is installed. However, this would not be above that typically associated with utility installation of this nature and would be limited to a short-term duration. During this time the installation would appear as standard ground level construction practices alongside an existing busy highway route or across open countryside.

8.10.14 All the cables will be underground, and no new overhead lines will be required giving rise to limited visual intrusion above ground. Below ground however, there is a need for trenchless construction techniques at a number of locations across the Cable Route Corridor, however, this will depend on the results of the ground investigations and the final detailed design. As such the number of and locations themselves would be determined at detailed design stage. At certain crossing locations such as main roads and watercourses such as the River Nene, HDD will be required. This is addressed in the Crossing Schedule **[EN010170/APP/GH7.18]**.

8.10.15 The extent of the designated work area is dependent on the voltage of the cables where the number of circuits will affect the width of cable trenches required. The range of typical cable trench widths relating to the 132kV and 400kV cables is 0.6 to 1.1 metres. However, the width and spacing of the cable trenches may differ depending on environmental constraints, engineering requirements or if crossing third party apparatus. In addition to the trenches, land will be required in the corridor for access and soil and cable ‘lay down’. Construction compounds along the Cable Route Corridor will also be required. Any existing overhead power lines will be retained.

8.10.16 In relation to the Cable Route Corridor crossing the Nene, this is a necessary part of the scheme. The cable will be directionally drilled under the river and so no permanent above ground structures are proposed or would be visible. During the construction period there are likely to be temporary construction compounds then these will be removed.

8.10.17 In terms of visible construction features, a full barrier / Heras fencing and signage will be installed around each designated work area. Each work area will then be excavated to expose all utilities present and to co-ordinate and prepare the area for installation of the proposed ducts / pipes. Any lighting required for safety purposes would be directed to avoid light spill into surrounding areas. Welfare facilities will be provided at each designated work area including canteen, toilets and a drying room and then these will be removed. Please refer to the Outline Construction and Environmental Management Plan (OCEMP) **[EN010170/APP/GH7.1]** which sets out how these mitigation measures are intended to be secured.

8.10.18 The exact location of the ducts / pipes and working areas would be confined to designated locations to ensure operations are controlled and the visual intrusion of each working area is kept to a minimum. Given the above, the construction stage of the Cable Route Corridor is considered to result in **Negligible Adverse (Not Significant)** visual effects.

8.10.19 For the operation stage, following installation of the ducts / pipes each designated location will be backfilled and the ground re-instated to match the existing conditions leaving limited visible trace of the construction works. Given the above, the operation stage of the Cable Route Corridor is considered to result in **Negligible Neutral (Not Significant)** visual effects.

8.10.20 For the decommissioning stage, following backfilling and ground reinstatement, the ducts / pipes at each location would remain in situ and not be removed. Alternatively, the cables can be removed by opening up the ground at regular interval and pulling the cable through to the extraction point, leaving the ducting and jointing bays in place, avoiding the need to open up the entire length of the cable route. Following installation, the land is returned to its original use and this would remain through the decommissioning stage with limited visible trace. Given the above, the decommissioning stage of the Cable Route Corridor is considered to result in **Negligible Neutral (Not Significant)** visual effects.

8.11 Additional Mitigation Measures

8.11.1 Mitigation for LVIA involves planting throughout the Sites which is embedded into the Scheme and secured in the design, meaning additional mitigation is not available. No additional mitigation measures for the Scheme are proposed.

8.12 Residual Effects

8.12.1 Following the implementation of the appropriate site-specific mitigation measures identified during the construction, operation and decommissioning phases, the residual effects on the following receptors are determined to be Significant. Identified significant residual effects are set out within **Table 8.21** and **Table 8.22** below:

Table 8.19: Significant Residual Landscape Effects

Landscape Receptor	Construction	Operation Year 1	Operation Year 15	Decommissioning
Landscape Fabric	Moderate / Minor Neutral	Moderate / Minor Neutral	**Moderate Beneficial (Significant)**	**Moderate Beneficial (Significant)**

8.12.2 Please refer to Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Landscape Assessment.

Table 8.20: Significant Residual Visual Effects

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	Decommissioning
NN|TU|3 TP091	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**
NN|TA|4#1 TP181	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse
NN|TD|2 TP184	F	**Major/ Moderate Adverse Significant**	**Major /Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**

8.12.3 Please refer to Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Visual Assessment.

In-combination effects

8.12.4 The in-combination effect interaction is the effect over and above the individual effects assessed in other chapters and is described as the difference between the change caused to a receptor from one effect alone and the change caused to the receptor from all effects combined.

8.12.5 Where different effect interactions are predicted to happen on single receptors, it is acknowledged that it may slightly increase the impact on the receiving receptor or local community, but it is not expected to be to a degree where together it noticeably elevates the significance of the likely effects above what is already reported in Environmental Statement. A summary of in-combination effects is within Chapter 25: Cumulative Effects and Effects Interaction **[EN010170/APP/GH6.2.25]**.

8.13 Cumulative Developments

8.13.1 A cumulative assessment has been undertaken, assessing both the cumulative landscape and visual effects of the Scheme in conjunction with other local developments. The Cumulative Developments assessment considers the additional effects resulting from the Scheme in combination with the effects resulting from other similar developments, these being other renewable projects taken together, that are listed below. In this case, the Scheme has assessed the cumulative effects as a combined set of effects as ‘Developments’ reaching an overall conclusion on where likely significant effects might occur based on the following Cumulative Developments:

Table 8.21: Cumulative Developments

ID	App Reference	Description	Distance from Project
8	Grendon Lakes Main Road Grendon Northampton NN7 1JW	Development of battery energy storage system (BESS)	Adjacent to Green Hill BESS

Landscape Effects

8.13.2 Cumulative Development 8 (CD8) is the only renewables scheme located within any of the Study Areas. It is located alongside and to the east of the existing National Grid Substation at Grendon. It occupies a discrete parcel of scrubby low lying land that is heavily enclosed by surrounding field boundary hedgerows. The low level nature of the proposals for CD8 (BESS) would allow it to be relatively well accommodated and discrete within the landscape. The Scheme and CD8 in combination would lead to an intensification of energy infrastructure in this area leading to an appreciation locally of an extension to the existing substation. The CD8 site itself would transition from an area of existing open scrub to BESS, however, the existing landscape framework would allow for the proposals to be generally well absorbed into this location. Despite the intensification locally, the receiving landscape has the ability to accommodate the Scheme and CD8 without resulting in any overall increase in the Significance of Effects.

8.13.3 From within the Wider Study Area, both the Scheme and CD8 would be well hidden and readily absorbed into its location with limited appreciation from within the surrounding arable countryside. Due to the existing containment, effects on the character of the wider area would be very limited and not wide ranging and therefore not resulting in any overall increase in the Significance of Effects.

8.13.4 From within the Outer Study Area the Scheme along with CD8 would be well hidden and readily absorbed into its location with little to no appreciation from within the surrounding arable countryside and therefore not resulting in any overall increase in the Significance of Effects.

Visual Effects

8.13.5 Intervisibility occurs with CD8 for users of PRoW NN|TF|3 (TP155). No significant effects have been identified for users of this section of Footpath in relation to the development within either BESS 1 or BESS 2, however, when viewed cumulatively with CD8 then adverse Significant effects are expected. These significant effects are derived from the proximity of CD8 to users of the Footpath rather than the visual change associated with development of BESS 1 or BESS2 Sites.

8.13.6 CD8 would be seen to the south of the PRoW and in front of the existing National Grid Substation. Views of construction activity at BESS 1 and 2 would be viewed at distance and filtered by existing intervening vegetation whereas, the construction activities associated with CD8 would be closer and more prominent to users of this PRoW. Views of the CD8 would be visible in combination with the scheme however views of the construction activity associated with the

construction of the Green Hill BESS site would be viewed at distance and filtered. Visual change in Year 1 would be the same as described at construction.

8.13.7 The combination of views of proposed infrastructure located within Green Hill BESS and Substation and of proposed infrastructure within CD8 would result in greater visual change along the PRoW than views of the Green Hill Scheme in isolation.

8.13.8 Proposed planting mitigation around the peripheries of the Green Hill BESS Site including native woodland surrounding BESS1, which would provide additional vegetative screening of the proposed infrastructure and reduce visual change associated with Green Hill BESS and substation form this Footpath. Views of BESS 1 and 2 and the Substation would be limited to the tops of taller infrastructure only due to dense proposed surrounding mitigation. CD8 would be closer and more prominent to users of this PRoW leading to adverse visual impacts on users of this section of PRoW.

Table 8.22: Significant Cumulative Visual Effects

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	Decommissioning
TP15: NN|TF|3	BESS 2	**Major (Significant)**	**Major (Significant)**	**Moderate (Significant)**	Moderate/ Minor

8.14 Summary

8.14.1 This chapter presents the findings of the Environmental Impact Assessment (EIA) concerning the potential Landscape and Visual impacts of the Scheme during the construction, operation and maintenance, and decommissioning phases.

8.14.2 The methodology for this LVIA chapter is based on the general recommendations set out in Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, LI IEMA, 2013. The guidelines are not prescriptive and set out a general approach that should be tailored to specific circumstances of the project that is being assessed. The methodology adopted for this assessment is set out in Appendix 8.1 **[EN010170/APP/GH6.3.8.1]**. The assessment process comprises broadly of three stages: baseline appraisal (including fieldwork), production of visualisations and assessment of effects, including cumulative and in-combination effects.

8.14.3 Landscape effects and visual effects are considered separately in this assessment. Landscape effects relate to both direct physical effects of the Scheme (for example loss of existing trees) and effects on wider landscape character, including perceptual effects. Visual effects relate to the effect on views and visual amenity experienced by various receptors including residents, users of PRoW, road users and recreational users.

8.14.4 Effects are identified as being either reversible or irreversible and the duration of effects is also considered. Effects are described as being either beneficial, neutral

or adverse depending on whether they are considered to have a positive or negative effect on the landscape or within views.

8.14.5 Impact assessment of any proposed development is an iterative process, with the overall aim being to avoid Environmental Impacts or, where impacts cannot be avoided completely, reducing identified impacts to acceptable levels. Based on the findings of this assessment, landscape and visual mitigation measures are designed to help integrate the Scheme into its landscape setting and mitigate any specific visual or physical effects that are identified. This LVIA chapter and supporting appendices considers the effects of mitigation measures being in place and identified residual impacts.

8.14.6 The following Study Areas have been defined based on the Scheme's Order limits as described in Chapter 3: The Development Site **[EN010170/APP/GH6.2.3]** and physical characteristics and key parameters of the proposed Scheme as described in Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**.

- The 0.5km Study Area for the Cable Route Corridor (The Cable Route Corridor Study Area);
- The 1km Study Area (The Local 1km Study Area);
- The 2km Study Area (The Wider 2km Study Area); and
- The 5km Study Area (The Outer 5km Study Area).

8.14.7 GLVIA3 states that the Study Area must be reasonable and proportionate and must ensure that the focus when defining the appropriate Study Area is on where likely significant effects upon Landscape and Visual receptors may occur, together with likely significant cumulative effects.

8.14.8 The assessment scenarios for the purposes of the EIA (and considered in this LVIA chapter and supporting appendices) are:

- Existing Baseline: 2025.
- Construction: 2027 – 2029. The entire Scheme is anticipated to be 24 months with the potential likelihood of overlapping construction works on the different Sites.
- Operation: 2029. It has been assumed for the purposes of the EIA that the Scheme will be operational by end of Q1 2029.
- Decommissioning 2089. This would be the year when decommissioning of the Scheme would commence and has been based on a typical 60-year operational lifetime for solar projects. It has therefore been assumed for the purposes of the EIA that the Scheme will be decommissioned no earlier than 2089. Decommissioning is expected to take between 12 and 24 months. A 24-month decommissioning period has been assumed for the purposes of the realistic worst-case assessment in the LVIA, unless specifically stated otherwise.
- A future year of 2044 (15 years post first operation of the Scheme) is considered for this LVIA chapter and supporting appendices i.e., 15 years after commissioning, which is the typical period for the maturation of landscape planting.

8.14.9 In accordance with the EIA Regulations, measures proposed to prevent/avoid, reduce and where possible offset or remedy (or compensate for) any significant adverse landscape and visual effects are described. The LVIA takes the following approach to mitigation and what is required in the process of assessment of both the landscape and visual effects. Mitigation measures are considered to fall into the categories of: Embedded mitigation, developed through the iterative design process and integrated or embedded into the project design; standard construction and operational management practices; and Additional mitigation, specifically intended to address significant residual adverse effects but not built into the Scheme.

8.14.10 Embedded Mitigation measures have been included within the design of the Scheme to protect the landscape fabric of the Site. This includes various buffers to offset the development from existing landscape features on Site to ensure their protection and permanence. The Outline Construction and Environmental Management Plan (OCEMP) **[EN010170/APP/GH7.1]** sets out how these Embedded Mitigation measures are to be secured. Details of species and density for each planting typology is described within the Outline Landscape and Ecology Management Plan (OLEMP) **[EN010170/APP/GH7.4]**. The OLEMP **[EN010170/APP/GH7.4]** prescribes how the mitigation measures are to be implemented and managed to ensure the effectiveness and certainty in achieving the objectives of the mitigation strategy.

8.14.11 The Scheme would result in:

- 22.25ha of Green Corridor and Woodland Planting;
- 12.81ha Enhanced Riparian Native Planting;
- 35.24km of Hedgerow Reinforcement and Reinforced Roadside Vegetation;
- 15.6km of Proposed Hedgerows;
- 6 proposed Ponds and Wader Scrapes; and
- 1,079.53ha of Groundcover.

8.14.12 Following the implementation of the appropriate site-specific mitigation measures identified during the construction, operation and decommissioning phases, the residual effects on the following receptors are determined to be Significant. Identified significant residual effects are set out within **Table 8.22** and **Table 8.23** below:

Table 8.23: Significant Residual Landscape Effects

Landscape Receptor	Construction	Operation Year 1	Operation Year 15	De-commissioning
Landscape Fabric	**Moderate / Minor Neutral**	**Moderate / Minor Neutral**	Moderate Beneficial (Significant)	Moderate Beneficial (Significant)

8.14.13 Please refer to Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Landscape Assessment.

Table 8.24: Significant Residual Visual Effects

Visual Receptor	Nearest Site	Construction	Operation Year 1	Operation Year 15	De-commissioning
NN|TU|3 TP091	E	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**
NN|TA|4#1 TP181	F	**Moderate Adverse Significant**	**Moderate Adverse Significant**	**Moderate Adverse Significant**	Minor Adverse
NN|TD|2 TP184	F	**Major /Moderate Adverse Significant**	**Major /Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**	**Major/ Moderate Adverse Significant**

8.14.14 Please refer to Appendix 8.3 LVIA Assessment Sheets **[EN010170/APP/GH6.3.8.3]** for details on Visual Assessment.

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