OAKLANDS FARM SOLAR PARK

Applicant: Oaklands Farm Solar Ltd

Environmental Statement
Chapter 5 – Landscape and Visual
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Planning Act 2008
Infrastructure Planning (Application: Prescribed Forms and Procedure) Regulations 2009 - 5(2)(a)

Chapter 5
Landscape and Visual

Introduction

5.1 This chapter considers the potential effects of the Proposed Development on the landscape and visual resources of the Site and the surrounding study area. The specific objectives of the chapter are to describe:

- The planning policy context relating to landscape and visual matters.
- The assessment methodology and significance criteria used in completing the impact assessment.
- Consultations undertaken.
- The landscape and visual baseline.
- The mitigation measures that have been designed into the Proposed Development, and further mitigation (that is not embedded into the Proposed Development) to minimise adverse effects.
- The residual effects, including direct, indirect and cumulative effects.

5.2 Landscape and visual assessments are separate, although linked, processes. This chapter considers the potential effects of the Proposed Development on:

- The landscape as a resource in its own right (caused by changes to the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape).
- Views and visual amenity as experienced by people (caused by changes in the appearance of the landscape).

5.3 The Landscape and Visual Impact Assessment (LVIA) was undertaken by chartered landscape architects at LUC. Details of professional expertise are provided in **Appendix 1.1: Statement of Expertise.**

5.4 This chapter is supported by the following figures, which are referenced throughout the text and which can be found in **Volume 2: Figures:**

- **Figure 5.1: LVIA Study Area.**
- **Figure 5.2: Site Context.**
- **Figure 5.3: Existing Topography within the Study Area.**
- **Figure 5.4a: National Character Areas.**
- **Figure 5.4b: Landscape Character Types.**
- **Figure 5.5a: PV Panels Zone of Theoretical Visibility (Bare Earth) and Viewpoints.**
- **Figure 5.5b: PV Panels Zone of Theoretical Visibility (Screened) and Viewpoints.**
- **Figure 5.5c: Substation and Battery Storage Zone of Theoretical Visibility (Bare Earth) and Viewpoints.**
- **Figure 5.5d: Substation and Battery Storage Zone of Theoretical Visibility (Screened) and Viewpoints.**
- **Figure 5.6a: Viewpoint Locations.**
- **Figure 5.6b: Viewpoint Locations (zoomed in version).**
- **Figure 5.7a: Visual Receptors Scoped in and Assessed in the LVIA.**
- **Figure 5.7b: Visual Receptors Scoped in and Assessed in the LVIA (zoomed in version).**
- **Figure 5.8: Developments included in the Cumulative Assessment.**
- **Figure 5.9: Property Locations within 0.25km.**

5.5 The following viewpoint photography and photomontages, are referenced throughout the text and can be found in **Volume 4: Visualisations:**

- **Figures 5.10a-q: Viewpoint 1 – Coton Road**
- **Figures 5.11a-p: Viewpoint 2 – Cross Britain Way**

- **Figures 5.12a-h: Viewpoint 3 – Cross Britain Way (near Walton Hill Farm)**
- **Figures 5.13a-e: Viewpoint 4 – Rosliston Road / Footpath (near Fairfield)**
- **Figures 5.14a-d: Viewpoint 5a – The Chase, Rosliston**
- **Figure 5.15a: Viewpoint 5b – Footpath west of The Chase, Rosliston**
- **Figures 5.16a-j: Viewpoint 6 – Bridleway / Footpath by Borough Fields**
- **Figures 5.17a-e: Viewpoint 7 – Footpath south of Hill Covert**
- **Figures 5.18a-d: Viewpoint 8 – Church Street (near Coton in the Elms)**
- **Figures 5.19a-c: Viewpoint 9 – Cauldwell Road / Bridleway to Manor Farm**
- **Figures 5.20a-c: Viewpoint 10 – National Forest Way (at Park Farm)**
- **Figures 5.21a-d: Viewpoint 11 – Sunnyside, Newhall**

5.6 The following appendices are also referred to throughout this chapter and can be found in **Volume 3**:

- **Appendix 5.1: Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA Methodology**
- **Appendix 5.2: Zone of Theoretical Visibility Mapping and Visualisation Methodology**
- **Appendix 5.3: Landscape Assessment Tables**
- **Appendix 5.4: Visual Assessment Tables**
- **Appendix 5.5: Residential Visual Amenity Assessment**
- **Appendix 5.6: Outline Landscape and Ecological Management Plan**

Scope of the Assessment

Effects Assessed in Full

5.7 This assessment considers physical changes to the landscape as well as changes in landscape character. It also considers visual impacts of the Proposed Development as perceived by people.

5.8 The following potential significant landscape and visual effects were identified at the scoping stage for consideration in this assessment:

- Direct effects during construction and operation on the landscape character of the Site.
- Indirect effects during construction and operation on landscape character types within the study area.
- Indirect effects during construction and operation on views experienced by people within the study area.

5.9 Potential significant cumulative landscape and visual effects were also identified at the scoping stage.

5.10 The assessment scenarios considered for this topic are as follows:

- **During construction** of the Proposed Development.
- **During operation (at Year 1)** – the Proposed Development upon completion of all elements including the implementation of mitigation planting. This ensures the worst-case scenario is considered as part of the Year 1 scenario, which assumes the mitigation planting has recently been planted and provides no or minimal filtering/ screening of the Proposed Development.
- **During operation (at Year 10)** – the Proposed Development at 10 years post-completion upon which mitigation planting will have matured sufficiently to provide mitigation to the degree which it was designed for[1].

5.11 For the 'during operation' assessment scenarios, the proposed mitigation set out in **Appendix 5.6: Outline Landscape and Ecological Management Plan** has been considered as embedded mitigation and therefore the effects reported are residual.

5.12 Through direct consultation with South Derbyshire District Council (SDDC) and Derbyshire County Council (DCC) in July 2021, it was agreed that a Residential Visual Amenity Assessment (RVAA) would also be undertaken to assess and describe the change in views likely to be experienced by residents at the closest properties to the Proposed Development. The findings of the RVAA also informed the suitable mitigation measures which are described

[1] The assessment assumes that newly planted trees will reach a height of approximately 5-7m at Year 10, although recognising that not all species or individuals will reach this height and that ultimately growth rates will vary depending on species, soils and their fertility, water availability, micro-climatic conditions, and the management regime which is adopted. The proposed mitigation measures also rely on hedgerows being maintained at a height of 3m, particularly along roads.

further in this chapter. The RVAA is contained in **Appendix 5.5: Residential Visual Amenity Assessment.**

Effects Scoped Out

5.13 On the basis of the desk based and field survey work undertaken, the professional judgement of the EIA team, and experience from other relevant projects, the following topic areas were 'scoped out' of detailed assessment, as proposed in the Scoping Report;

- Effects on landscape and visual receptors beyond 5km from the Site boundary, as at this distance it is judged that significant effects are unlikely to occur.
- Effects on landscape and visual receptors that have minimal or no theoretical visibility (as indicated by the ZTVs) and are therefore unlikely to be subject to significant effects.
- Effects on landscape and visual receptors during the decommissioning stage.
- Cumulative effects beyond 5km from the Site boundary.

5.14 Within the formal Scoping Opinion (**Appendix 2.2: Scoping Opinion**) issued by the Planning Inspectorate (PINS) in September 2021, further justification was requested by PINS for the scoping out of the effects on landscape and visual receptors beyond 5km from the Site boundary. Details regarding the extent of the Study Area and justification for its extent are explained in paragraph 5.35. Within the Scoping Opinion PINS agreed that significant landscape and visual effects from decommissioning are unlikely and therefore could be scoped out.

Planning Policy Context

5.15 The following section summaries the planning policy, legislation and other related issues which are relevant to landscape and visual matters.

International Legislation and Policy

5.16 The European Landscape Convention highlights the importance of all landscapes and encourages greater attention to care and planning in all landscapes, to manage change and ensure a forward-looking approach to management. The convention also states that all landscapes have value, regardless of formal designations.

National Policy Statements

5.17 The overarching National Policy Statement for Energy (EN1)[2] sets out the UK Government's commitment to increasing renewable generation capacity. With regards to landscape and visual matters, the NPS states that the applicant should carry out a landscape and visual assessment and report it in the ES, making reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the project. The assessment should also take account of any relevant policies based on these assessments in local development documents in England. The assessment is also expected to include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character. Visibility and conspicuousness of the project should also be assessed during construction and of the presence and operation of the project and potential impacts on views and visual amenity. It should include light pollution effects, including on local amenity and nature conservation (paragraphs 5.9.5 to 5.9.7). The NPS (paragraphs 5.9.8 and 5.9.18) also highlights that virtually all nationally significant energy infrastructure projects will have landscape and visual effects, and therefore the project needs to be designed carefully, taking into account the potential impact with the aim to minimise harm to sensitive receptors and the landscape and providing reasonable mitigation where possible and appropriate.

5.18 The November 2023 draft NPS EN-1[3] to be designated, recognises that *"there may also be beneficial landscape character impacts arising from mitigation" (paragraph 5.10.5)* and *"applicants should consider how landscapes can be enhanced using landscape management plans, as this will help to enhance environmental assets where they contribute to landscape and townscape quality" (paragraph 5.10.24).*

5.19 It also states that *"the applicant should consider landscape and visual matters in the early stages of siting and design" (paragraph 5.10.19).*

5.20 The National Policy Statement for Renewable Energy Infrastructure (EN-3)[4] applies to a number of different types of renewable energy technologies although the current NPS does not

[2] Department for Energy and Climate Change (2011) Overarching National Policy Statement for Energy (EN-1)

[3] Department for Energy Security and Net Zero (2023) Draft Overarching National Policy Statement for Energy (EN-1)

[4] Department for Energy and Climate Change (2011) National Policy Statement for Renewable Energy (EN-1)

specifically refer to solar development. However the November 2023 draft of NPS EN-3[5] to be designated does include a new section specific to solar photovoltaic generation as well as specific considerations for landscape, visual and residential amenity.

5.21 The draft to be designated states that *"with effective screening and appropriate land topography the area of a zone of visual influence could be appropriately minimised" (paragraph 2.10.95)* and that applicants *"will be expected to direct considerable effort towards minimising the landscape and visual impact of solar PV arrays" (paragraph 2.10.98).*

5.22 The draft to be designated also states that consideration should be had to the potential to mitigate landscape and visual impacts through screening with native hedges and for individual trees within boundaries to grow on to maturity. Existing hedges and established vegetation, including mature trees, should be retained wherever possible (paragraph 2.10.100).

5.23 It also states that security measures including fencing should be designed to minimise landscape and visual impact, and that projects should minimise the use of security lighting (paragraph 2.10.132- 2.10.133).

National Planning Policy Framework

5.24 The revised National Planning Policy Framework (NPPF)[6], published by the Ministry of Housing, Communities and Local Government in July 2021 and updated in December 2023, sets out the government's planning policies for England and how these are expected to be applied.

5.25 The NPPF does not include specific policies in relation to DCO applications, but as noted in paragraph 5, the NPPF may be relevant to the decision maker.

5.26 The most relevant policies in relation to landscape and visual matters are set out below.

Meeting the challenge of climate change, flooding and coastal change

5.27 Paragraph 160 states:

"To help increase the use and supply of renewable and low carbon energy and heat, plans should:

[5] Department for Energy Security and Net Zero (2023) Draft National Policy Statement for Renewable Energy Infrastructure (EN-3)

[6] Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework

a) *provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts)…"*

Conserving and enhancing the natural environment

5.28 Paragraph 180 states:

"Planning policies and decisions should contribute to and enhance the natural 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…"*

5.29 In addition to the NPPF, there is a suite of Planning Practice Guidance (PPG) that may also be relevant to the decision maker. The PPG covers a number of topic areas, including renewable and low carbon energy (which provides guidance to help local councils in developing policies for renewable and low carbon energy and identifies the planning considerations).

Local Planning Policy

5.30 The Site is located within the South Derbyshire District Council local authority area. The South Derbyshire Local Plan 2011-2028 (adopted June 2016)[7] includes policies relating to landscape character and renewable energy. The relevant policies are:

- Strategic Policy S1 – Sustainable Growth Strategy;
- Policy SD6 – Sustainable Energy and Power Generation;
- Policy BNE4 – Landscape Character and Local Distinctiveness presents criteria pertaining to effects on landscape and visual amenity resulting from proposed development;
- Policy BNE7 – Trees, Woodland and Hedgerows; and

[7] South Derbyshire District Council (2016) Adopted Local Plan

- Policy INF8 – The National Forest presents criteria which proposals for new development will be subjected to within this forested landscape.

Assessment Methodology

Guidance

5.31 This assessment is carried out in accordance with the principles contained within the following documents from the Landscape Institute and the Institute of Environmental Management and Assessment:

- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)[8].
- Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19[9].
- Visual Representation of Development Proposals Technical Guidance Note 06/19[10].
- Assessing landscape value outside national designations Technical Guidance Note 02/21[11].

Methodological Overview

5.32 The key steps in the methodology for assessing both landscape and visual effects were as follows:

- An overall Study Area of 5km radius was defined from the Site in all directions.
- The area in which the Proposed Development may be visible was established through ZTV mapping (shown on **Figures 5.5a - d**) and fieldwork.
- The landscape of the study area was analysed and landscape receptors identified.

[8] Landscape Institute and the Institute of Environmental Management and Assessment (2013): Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

[9] Landscape Institute (2019) Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19

[10] Landscape Institute (2019) Visual Representation of Development Proposals Technical Guidance Note 06/19

[11] Landscape Institute (2021) Assessing landscape value outside national designations Technical Guidance Note 02/21

- The visual baseline was recorded in terms of the different groups of people who may experience views of the Proposed Development (visual receptors), the places where they will be affected, and the nature of views and visual amenity.
- Viewpoints representing the visual receptors were selected and agreed with relevant stakeholders (see **Table 5.1**).
- The layout and design of the Proposed Development was developed and the landscape and visual impacts assessed during the EIA process to inform the design and reach design freeze.
- The significance of landscape and visual effects was judged with reference to the sensitivity of the receptor (susceptibility and value) and magnitude of change (a combination of the scale of effect, geographical extent, duration and reversibility).

5.33 Full details of the assessment methodology, including assessment of cumulative effects, are presented in **Appendix 5.1: Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA Methodology**. This was developed in consultation with SDDC and DCC. The methodologies for creating the ZTV Mapping, undertaking photography and preparing the visualisations are presented in **Appendix 5.2: Zone of Theoretical Visibility Mapping and Visualisation Methodology**. The methodology for undertaking the RVAA is set out in **Appendix 5.5: Residential Visual Amenity Assessment**.

Consultation

5.34 In undertaking the assessment, consideration has been given to the scoping responses and other consultation which has been undertaken as detailed in **Table 5.1**.

Table 5.1: Consultation Responses

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Gary Ellis - Landscape Officer, DCC July / August 2021	Early consultation prior to submission of Scoping Report (during a Teams meeting on 22/07/21 and subsequent email correspondence)	Not clear how views from residential properties will be assessed and considered.	A Residential Visual Amenity Assessment has been undertaken and is provided in **Appendix 5.5: Residential Visual Amenity Assessment**. Residential properties surrounding the Site were a key consideration during the design of the development.
		Advised to consider the DCC tranquility study to inform perceptual qualities (as part of landscape susceptibility).	The tranquility study has been considered to inform judgements on landscape susceptibility (see **Appendix 5.3: Landscape Assessment Tables**).
		Not in agreement with the criteria being considered to determine the 'value of view'.	The criteria used in the LVIA conforms with the guidance set out in GLVIA3. However, scenic quality of the view has been added to the criteria to determine the 'value of view' (see **Appendix 5.1: Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA Methodology**).

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		Advised that the Proposed Development should be considered alongside other proposed projects that could impact the overall character and appreciation of that character by people living in or passing through the wider landscape.	A list of projects to be considered in the cumulative assessment was provided by SDDC in August 2021. These are set out shown on **Figure 5.8** and have been considered in the cumulative assessment contained within **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables** and from paragraph 5.191 within this chapter.
		Additional viewpoints were suggested as follows: ■ Rosliston Road / footpath (near Fairfield); ■ Bridleway / footpath by Borough Fields; ■ Footpath by Ashleigh House Farm; ■ Footpath near Stapenhill; and	In the PEIR, **Viewpoints 8, 9, 11, 12** and **14** were from these recommended locations. However, due to the changes to the layout that occurred after statutory consultation, the viewpoint list was revised in agreement with the DCC Landscape Officer, as some of the viewpoints are no longer relevant. This includes the viewpoints along the 'Footpath by Ashleigh House Farm', 'Footpath near Stapenhill' and 'Footpath north of Lullington'. It should be noted that the viewpoint numbering has also changed since the PEIR. The

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		■ Footpath north of Lullington	viewpoint from 'Rosliston Road / Footpath (near Fairfield) is **Viewpoint 4** and the viewpoint from 'Bridleway / Footpath by Borough Fields' is **Viewpoint 6.**
Kevin Exley – (former) Planning Policy Officer, SDCC July / August 2021	Early consultation prior to submission of Scoping Report (during a Teams meeting on 22/07/21 and subsequent email correspondence)	Provided a schedule of projects to consider in the cumulative assessment.	These are set out in **Chapter 2: The EIA**, shown on **Figure 5.8** and have been considered in the cumulative assessment contained within **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables** and from paragraph 5.191 within this chapter.
		An additional viewpoint was suggested within the Sunnyside area in Newhall.	**Viewpoint 11** is from this recommended location.
Planning Inspectorate September 2021	Formal scoping opinion response	PINS do not agree with the scoping out of the following: - Effects on landscape and visual receptors beyond 5km from the	The ZTV shown on **Figure 5.5b** indicates that there will be limited visibility of the Proposed Development beyond 5km. In practice, visibility will be reduced from distances beyond 5km by the existing network of intervening field boundary vegetation (that the ZTV does

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		site. - Effects on receptors outside of the Zone of Theoretical Visibility (ZTV) - Effects on landscape character types/areas beyond 5km from the Site.	not take into consideration).
		The ZTV should be based on maximum height parameters to demonstrate that the full extent of the Proposed Development has been assessed.	The assessment considers the Proposed Development information presented in **Chapter 4: Project Description** and includes a ZTV of the proposed PV panels and another of the proposed substation and battery energy storage system (BESS) **(Figures 5.5a - d)**. The ZTVs were used as a starting point to determine the extent of the study area which was further supplemented by field work.
		Agrees with the scoping out of landscape and visual effects from	Noted.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		decommissioning.	
		Advised the assessment should provide detail regarding the layout of operational lighting and why significant effects will be unlikely and should assess effects from lighting which will be required during construction.	Consideration of the effects from lighting required during construction and operation is provided in paragraphs 5.140 - 5.141 and 5.187- 5.188 respectively.
		Advised that a Residential Visual Amenity Assessment should not be scoped out.	A Residential Visual Amenity Assessment is provided in **Appendix 5.5: Residential Visual Amenity Assessment**.
		Noted that only one viewpoint represents views from a settlement and the viewpoints included in the assessment should ensure views from residential receptors are assessed. Advised that consultation with the	Viewpoint locations were agreed with DCC and SDDC. The following viewpoints are considered to represent views from around settlements (as informed by the ZTVs and field work): ■ **Viewpoints 5a and 5b** – represents views experienced by people at the north-western edge of

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		relevant local planning authority should take place to discuss and agree final selection of viewpoints.	Rosliston. ■ **Viewpoint 8** - represents views experienced by motorists travelling along the local road network, travelling to/from Coton in the Elms. ■ **Viewpoint 11** - represents views experienced by people at the western edge of Newhall (Swadlincote). A Residential Visual Amenity Assessment is provided in **Appendix 5.5: Residential Visual Amenity Assessment** and considers views from the key properties around the Site.
		Requested that both winter and summer views are captured in order to demonstrate any seasonal changes to the landscape character.	Summer and winter photography is included from most of the viewpoints. Only winter photography has been included for Viewpoints 5b and 11, but this demonstrates the worst-case scenario in terms of potential views of the Proposed Development (i.e. when leaves are absent from vegetation and the extent of

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			filtering is reduced relative to the summer).
		Advised the assessment should assess the landscape and visual impacts of the energy battery storage facility and substation based on the applicable design requirements in the DCO and (if necessary) the applicable worst-case parameters.	The assessment considers the landscape and visual effects of the proposed BESS and the Proposed Development's substation.
		Noted a copy of the Landscape Strategy should be provided with the ES.	A Landscape Strategy Plan is illustrated in **Appendix 5.6: Outline Landscape and Ecological Management Plan**.
DCC September 2021	Formal scoping opinion response	Noted that the LVIA proposes to use guidance produced by other local authorities through England, therefore it will be important for the ES to explain to what extent these documents are	The LVIA referred to generic design guidance for solar development used by other local authorities in order to develop the aims and objectives of the layout from a landscape and visual perspective. These aims are relevant to the landscape of the Site and wider study

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		relevant to the Derbyshire Landscape.	area.
SDDC September 2021	Formal scoping opinion response	Advised that the assessment should consider any permanent landscape change and long-term landscape effects.	The LVIA provides commentary on anticipated permanent long term landscape effects (e.g. as a result of mitigation planting) in paragraphs 5.189 - 5.190.
Drakelow Parish August 2021	Formal scoping opinion response	Not in agreement with the scoping out of effects that relate to decommissioning as this is a different process from construction as the Site will be in a different condition from the condition it was in prior to construction.	The LVIA has not assessed the effects of decommissioning (as agreed with the Planning Inspectorate) as these effects are anticipated to be the same as during construction. The LVIA does however provide commentary on anticipated permanent long term landscape effects (e.g. as a result of mitigation planting) in paragraphs 5.189 - 5.190.
		Not in agreement with the scoping out of lighting effects during construction.	Consideration of the effects from lighting required during construction is provided in paragraphs 5.140 - 5.141.
Natural	Formal scoping	Requested that local landscape character areas are mapped at a scale	Local landscape character types are mapped on **Figure 5.4b.** The assessment considered the 'planting and

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
England September 2021	opinion response	appropriate to the Site as well as any relevant management plans or strategies pertaining to the area.	management guidelines' set out in DCC's *The Landscape Character of Derbyshire (2014).*
		Advised that the LVIA should include the cumulative effect of the Proposed Development with other relevant existing or proposed developments in the area including proposals currently at scoping stage.	A list of projects to be considered in the cumulative assessment was provided by SDCC in August 2021 and updated through further consultation with SDDC in February 2022, and via research by the Applicant's planners throughout 2023. These are set out in , shown on **Figure 5.8** and have been considered in the cumulative assessment contained within **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables**. This includes the proposed Energy Storage System (ESS) project at Barr Hall Farm, Drakelow, which is at scoping stage.
		The LVIA should refer to the relevant National Character Areas.	The relevant National Character Areas are referred to in paragraphs 5.67 - 5.68 and shown on **Figure 5.4a**.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Rosliston Parish Council and Walton-on-Trent Parish Council September 2021	Formal scoping opinion response	Not in agreement with the scoping out of decommissioning, the effects on private residential dwellings and the effects of night-time lighting.	The LVIA does not assess the effects of decommissioning (as agreed with the Planning Inspectorate) as these effects are anticipated to be the same as during construction. The LVIA provides commentary on anticipated permanent long term landscape effects (e.g. as a result of mitigation planting) in paragraphs 5.189 - 5.190. A Residential Visual Amenity Assessment is provided in **Appendix 5.5: Residential Visual Amenity Assessment** and considers views from the key properties around the Site. Consideration of the effects from lighting required during construction and operation is provided in paragraphs 5.140 - 5.141 and 5.187- 5.188 respectively.
		Not in agreement with the proposed viewpoints stating there are no	The LVIA includes viewpoints at the north-western edge of Rosliston (**Viewpoints 5a and 5b**). A viewpoint was

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		viewpoints within or around Rosliston or Walton-on-Trent.	not considered from Walton-on-Trent as intervening landform obscures views of the Site, as shown on the ZTV at **(Figures 5.5a – d)**.
Philip Metcalfe – Green Infrastructure & Planning Manager, The National Forest Company September 2021	Consultation post submission of Scoping Report (during a Teams meeting on 23/09/21)	Meeting with The National Forest Company to introduce them to the Proposed Development.	No specific response provided during the meeting. Further consultation was undertaken during a meeting dated 17/04/23 and through their responses to consultation on the PEIR and the Targeted Consultation.
Gary Ellis - Landscape	PEIR consultation	Where a photomontage is not produced for a particular viewpoint to show where the panels would be, it is	Visualisations have been prepared for all viewpoints considered in the LVIA. The Proposed Development has been illustrated with full photomontages (produced at

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Officer, DCC June 2022	response	suggested that the agricultural fields affected by the development should be identified in some way so that the viewer can better appreciate the full extent of any impact.	AVR3 Level) for five of the viewpoints (**Viewpoints 1, 2, 3, 5a** and **8**). The remaining viewpoints (**Viewpoints 4, 6, 7, 9, 10 and 11**) have been shown at AVR2 Level (single colour massing where visible and masked into the viewpoint). For these viewpoints, the PV panels have been modelled within the views and placed at the correct heights. Two visualisations are presented for the AVR2 Level. In the first, a dotted outline has been applied to show the extent of the Proposed Development. This is followed by another visualisation showing the areas of PV panels that are visible (where they are/ not screened by intervening vegetation, landform and/ or buildings), shown with a single colour. This approach was agreed via email on 17th March 2023. **Viewpoint 5b** is shown with a baseline photograph (taken during winter) to demonstrate that the Site is

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			mostly obscured by the intervening Redferns Wood.
		Commented that *"the landscape and visual impact assessment is refreshingly honest and concludes that there would be long-term impacts on the landscape character of the site and its immediate setting as a result of this development proposal. I would concur that this is a fair judgement given the scale and nature of the development, the rolling nature of the landscape and its general openness at the present time, and whilst I might argue that the impact on the wider landscape character type might be greater than suggested, overall I don't believe these effects would be significant."*	Noted.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		Commented that *"The LVIA goes on to state that there would also be longer term visual impacts associated with certain visual receptors (people) around the site at certain locations where views of the development would be obtained. Some of these effects at certain locations can be mitigated through reinforcing existing hedgerows, allowing some hedgerows to grow taller and through strategically placed new woodland planting but on the whole the site is surprisingly well screened from the main settlement locations by both intervening landform and vegetation. The overall approach to landscape and visual mitigation is supported and has attempted to*	Noted.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		maintain some aspects of the current character of the wider landscape".	
		Requested that the colour finish of certain components of the development is considered, and suggested dark and recessive colours are used.	Agreed via email on 17th March 2023 for Merlin grey (RAL 180 40 05/BS 18B25) to be considered for the battery storage facility and transformers, which is shown on the photomontages. It was also agreed to show an alternative colour on one of the visualisations, and so Pearl Green (RAL 6035) has been shown for one of the transformer units in **Viewpoint 1 (**see **Figure 5.10m)**.
		Requested that additional off-site planting is considered to further reinforce the overall approach to landscape and visual mitigation and enhancements to the wider landscape character. Suggested that all boundaries within the site boundary should be replanted/gapped up and	Due to constraints around land ownership, off-site planting does not form part of the proposals. Field boundaries requiring replanting/ gapping up have been identified on the landscape strategy plan in **Appendix 5.6: Outline Landscape and Ecological Management Plan.** Since the statutory consultation, additional planting has been proposed (as shown in **Appendix 5.6: Outline Landscape and Ecological Management**

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		field corners to be planted as small woodland copses.	**Plan**) including areas of woodland and scattered trees within the corners of the Site where appropriate (ensuring that blocking and enclosing the views experienced by residents is avoided).
		Commented that it was difficult to precisely locate the viewpoints due to the scale of the plans provided in the PEIR. Advised that an arrow indicating the direction of view on the plans would assist in their interpretation.	A separate viewpoint plan has been provided in the LVIA on **Figure 5.6a.** A zoomed in version is also provided on **Figure 5.6b.** A line of sight from each viewpoint has also been provided on these plans.
		Requested that underground cable connections are considered to negate the need for any additional overhead structures.	The proposed grid connection will be undergrounded and overhead structures do not form part of the proposals.
SDDC Officer	PEIR consultation	Requested that the landscape assessment also includes:	Each of these requests had been considered in the draft LVIA for the PEIR and are included in the final LVIA for

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
June 2022	response	■ National and Regional Landscape Character Assessments; ■ A visual assessment and impacts, of the construction phase of the project; ■ All viewpoint visual assessments to be summer and winter; ■ Assessments to be made from all residential properties, farmsteads, and local settlements, a valuation for all these receptors is required.	the ES. It is unclear what this comment is referring to such that no further action has been taken.
		Requested that the 13 viewpoints should be increased, given the size of the application.	17 viewpoints were considered in the draft LVIA for the PEIR so it is unclear what this comment is referring to. The number of viewpoints has decreased to 11 for the final LVIA as a result of the Proposed Development reducing in size.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		Requested for tree belts and buffer zones to field boundaries and PRoWs to be at least 5m. Suggested that pocket woodlands are proposed within the surrounding area, to give a greater screening, and longevity, and enhance the impact for wildlife.	The proposed PV panels are set back by over 5m from field boundaries and the Cross Britain / National Forest Way. Blocks of woodland are proposed across the Site (see **Appendix 5.6: Outline Landscape and Ecological Management Plan**). Due to constraints around land ownership, off-site planting does not form part of the proposals.
North West Leicestershire District Council June 2022	PEIR consultation response	Commented that the only real impact from the Proposed Development to the District would be the potential for limited distance glimpsed views to be established from those settlements in the north-western part of the District (e.g. Chilcote and Albert Village).	The ZTV shown on **Figure 5.5b** indicates that there will be no visibility from the areas around Chilcote and Albert Village.
The National Forest	PEIR consultation	Does not consider that the landscape strategy has achieved increased connectivity between existing	Since the statutory consultation, additional planting has been proposed (as shown in **Appendix 5.6: Outline Landscape and Ecological Management Plan**)

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Company June 2022	response	woodland blocks. Considers there is the opportunity for woodland planting in the 'land available for grid cable route and site access'.	including areas of woodland and scattered trees within the corners of the Site where appropriate (ensuring that blocking and enclosing the views experienced by residents is avoided), as well as new and enhanced hedgerows. The identification of suitable areas of planting has had ensure that farming activities at Park Farm and Fairfield Farm can continue and as such the land previously identified as 'land available for grid cable route and site access' cannot be planted with woodland.
		Notes that the creation of National Forest woodland does not feature in the objectives and design approach of the outline Landscape and Ecological Management Plan.	The Landscape and Ecological Management Plan (**Appendix 5.6**) states in paragraph 2.7 that the 'contribution to national strategy objectives, including the National Forest Strategy' has informed the design approach.
		Requested that full landscaping details should be provided at the submission stage, as opposed to being dealt with	Full landscaping details will be provided post-consent. A Landscape Strategy Plan is provided in **Appendix 5.6: Outline Landscape and Ecological Management**

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		by a condition of consent. Also requested that the approved landscaping scheme, or elements of it, must be provided in a phased arrangement prior to the completion of the Proposed Development, ideally in accordance with details approved as part of the application.	**Plan** illustrating the proposed landscape measures that have been designed to complement the existing landscape character of the Site and the surrounding area, and to improve integration of the Proposed Development into the landscape, minimising visual effects. Requirement 8 of the draft DCO requires a detailed Landscape and Ecological Management Plan (LEMP) for each phase of the authorised development to be submitted to and approved by the local planning authority prior to commencement of the relevant phase. The LEMP must be implemented as approved.
Derbyshire County Council March 2023	Targeted consultation response	Commented that *"The landscape and visual impacts of the scheme are likely to be reduced due to the reduction in the overall size of the development, which should be viewed as a positive*	Noted. The alternative colour - Pearl Green (RAL 6035) – has been shown has been shown for one of the transformer units in **Viewpoint 1 (**see **Figure 5.10m)**.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		change with regard to the potential environmental impacts. A number of viewpoints originally proposed have now been omitted, either because they relate to that part of the site that will now not be developed or, following site inspections, they have been assessed as having no view of the site. These changes have been considered and agreed by the County Council's Landscape Architect. In addition, the scope of the photographic material supporting the LVIA and the proposed style of the visualisations has also been agreed. This has included the colour finish of various components of the scheme including storage containers, transformers, etc.	

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		recommending that all infrastructure of this type should be shown finished in Merlin grey in all visualisations with one photomontage showing this colour and an alternative dark green colour so that the two finishes can be compared."	
National Forest Company 20/04/23	Targeted consultation response	Maintain that the landscape strategy should include significantly more woodland, with their preference for larger blocks of woodland as opposed to a number of smaller areas as has been shown. Additionally, consider that more habitat connectivity should be achieved. Pleased to note the retention of existing landscape features, however	Since the targeted consultation, additional planting has been proposed (as shown in **Appendix 5.6: Outline Landscape and Ecological Management Plan**) including areas of native scrub and new hedgerows which improve habitat connectivity across the Site.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		consider that opportunities to connect these features as opposed to being isolated and/or surrounded with panels, should be taken. Supportive of a permissive path and the ability to connect to surrounding footpath routes.	
Natural England April 2023	Targeted consultation response	Welcome the additional planting that has been set out in the Landscape Strategy Plan for Park Farm and Oaklands.	Noted.
Netherseal Parish Council March 2023	Targeted consultation response	Feel that project is still too large and will have a negative impact on the landscape within the picturesque rural area.	The effects of the Proposed Development on the landscape are considered in the LVIA. The Landscape Strategy Plan (**Appendix 5.6: Outline Landscape and Ecological Management Plan**) shows the proposed measures to help integrate the Proposed Development

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			into the landscape**.**
North West Leicestershire 20/04/234	Targeted consultation response	Limited distance glimpsed views may be established from settlements in the north-western part of the District (e.g. Chilcote and Albert Village) as a result of the proposed development.	The ZTV shown on **Figure 5.5b** indicates that there will be no visibility of the Proposed Development from the areas around Chilcote and Albert Village.
South Derbyshire District Council April 2023	Targeted consultation response	Cllr Weelton raised the following concerns: ■ The proposed development would be significantly out-of-scale with the landscape and dominate an attractive area. ■ The new 4m hedges would dramatically change the character of the open landscape area and negatively impact the footpaths,	The effects of the Proposed Development on the landscape are considered in the LVIA. The Landscape Strategy Plan (**Appendix 5.6: Outline Landscape and Ecological Management Plan**) shows the proposed measures to help integrate the Proposed Development into the landscape**.** It is proposed that existing hedgerows along Coton Road and Catton Lane are allowed to grow up to 3m (rather than 4m) where they would not interfere with visibility splays, to filter views of the Proposed

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		diminishing the experience of the area for local occupiers and the many recreational visitors. ■ 40 years is a significant period in people's lives during which the development would seriously detract from the landscape character visual amenity.	Development along these routes, where existing views of the Site are open.

Study Area

5.35 The location of the Site and the extent of the study area are shown on **Figure 5.1.** The study area was defined (and agreed through consultation with SDDC and DCC) as an area of 5km radius around the Site. Analysis of ZTV mapping was undertaken to understand the extent of theoretical visibility of the proposed PV panels, the Proposed Development's substation and BESS, and to help inform the extent of the Study Area. The ZTVs shown in **Figures 5.5b and 5.5d** take account of the potential filtering from existing woodland and buildings (see paragraph 5.83 for further description) and demonstrate that theoretical visibility will be largely confined to 5km in most directions from the Site. It is acknowledged that there is some intermittent theoretical visibility indicated beyond 5km, notably around the hamlet of Callingwood to the north-west and within the Outwoods area of Burton upon Trent to the north with the ZTV showing 'higher visibility' from these areas. However, actual visibility will be limited by hedgerows and tree belts along the B5017 at Callingwood, the vegetation associated with gardens and along streets within the Outwoods area, and the layers of intervening vegetation (e.g. field boundary hedgerows, tree groups) located between these areas and the Site. Beyond 5km it is judged that there would not be significant effects on landscape or views due to the low-lying nature of the Proposed Development type and the filtering provided by layers of intervening vegetation.

Data Sources

5.36 The following data sources have informed the assessment:

- Natural England's National Character Areas (NCA) for England[12].
- Derbyshire County Council (2014) The Landscape Character of Derbyshire (fourth edition)[13].
- Derbyshire County Council (2013) Technical Support Document 1: Areas of Multiple Environmental Sensitivity[13].
- Derbyshire County Council (2013) Technical Support Document 2: Tranquility[13].

[12] Available at: https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles

[13] Available at: https://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/landscape-character.aspx

- Derbyshire County Council (2023) Derbyshire Spatial Energy Study[14].
- CPRE (2016) England's Light Pollution and Dark Skies[15].
- Ordnance Survey (OS) Maps 1:10000, 1:25000 and 1:50000.
- OS Address Base Plus data.
- Terrain data used for ZTVs.

Field Survey

5.37 Field survey work was carried out between June and October 2021 as follows:

- 23rd June 2021: visits to the Site, viewpoints and travel around the study area to consider potential effects on landscape character and on views.
- 21st – 22nd October 2021: photography from viewpoint locations (leaves were still on vegetation at this time) and visits made to properties around the Site (where publicly accessible) to inform the RVAA, contained in **Appendix 5.5: Residential Visual Amenity Assessment**.

Assessing Significance

5.38 This assessment determines the significance of landscape and visual effects with reference to the nature of the receptor, which is commonly referred to as the sensitivity of the receptor, and the nature of the effect, which is commonly referred to as magnitude.

5.39 The methodology for assessing significance is set out in detail in **Appendix 5.1: Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA Methodology**. The principles of judging sensitivity, magnitude and level of effect are set out below.

Sensitivity

5.40 The sensitivity of a landscape receptor to change combines professional judgements on susceptibility and value, using the principles set out in **Table 5.2** (more detailed separate tables

[14] Available at: https://www.derbyshire.gov.uk/environment/planning/planning-policy/renewable-energy-study/renewable-energy-study.aspx

[15] Available at: https://www.cpre.org.uk/light-pollution-dark-skies-map/

for susceptibility and value with definitions across three levels (Low, Medium and High) are provided in **Appendix 5.1: LVIA and CLVIA Methodology**).

Table 5.2: The principle of judging landscape sensitivity

Sensitivity of Landscape Receptors			
	Higher	↔	**Lower**
Susceptibility	The landscape is less able to accommodate solar PV development without undue negative consequences to the baseline situation. Attributes that make up the character of the landscape offer very limited opportunities for the accommodation of change without key characteristics being fundamentally altered by solar PV development, leading to a different landscape character.	↔	The landscape is more able to accommodate solar PV development without undue negative consequences to the baseline situation. Attributes that make up the character of the landscape are more resilient to being changed by solar PV development.
Value	Landscapes with higher scenic quality, conservation interests, recreational value, cultural associations or rarity or uniqueness. Areas designated at a national level e.g. National Parks or AONBs with national policy level protection.	↔	Landscapes of limited aesthetic qualities, low conservation interest, little recreational value, few cultural associations or of character that is frequent/widespread. Areas or features that are not formally designated.

5.41 Visual sensitivity combines professional judgements on susceptibility and value using the principles set out in **Table 5.3** (more detailed separate tables for susceptibility and value with

definitions across three levels (Low, Medium and High) are provided in **Appendix 5.1: LVIA and CLVIA Methodology**).

Table 5.3: The principle of judging visual sensitivity

Sensitivity of visual receptors			
	Higher	↔	**Lower**
Susceptibility	Viewers whose attention or interest is focused on their surroundings including communities/individual residential receptors/people engaged in outdoor recreation/visitors to heritage assets or other attractions where views of the surrounding area are an important contributor to experience.	↔	People whose attention is not on their surroundings (and where setting is not important to the quality of working life) such as commuters/people engaged in outdoor sports/people at their place of work.
Value	Views recorded in management plans or guide books. Views associated with nationally designated landscapes; notable views from a National Trail or promoted route; or designed views (vistas) recorded in citations for historic parks, gardens/scheduled monuments etc. Views of high scenic quality.	↔	Views which are not documented or protected. Views which are more incidental, and less likely to be associated with somewhere people travel to or stop. Views of low scenic quality.

Magnitude

5.42 The nature of the effect is commonly referred to as the magnitude and is based on combining professional judgements on size and scale; geographical extent; duration and reversibility using the principles set out in **Table 5.4** and **Table 5.5**. More detailed separate

tables for size/ scale of effect across four levels (Barely perceptible, Small, Medium and Large) and overall magnitude of change across four levels (Barely perceptible, Low, Medium and High) are provided in **Appendix 5.1: LVIA and CLVIA Methodology**.

Table 5.4: The principle of judging the nature of landscape effect (landscape magnitude)

Nature of Landscape Effects (Landscape Magnitude)			
	Higher	↔	**Lower**
Size/scale	Extensive loss of landscape features (and) or elements, and/or change in, or loss of key landscape characteristics, and/or creation of new key landscape characteristics.	↔	Some loss of landscape features (and) or elements, and/or change in or loss of some secondary landscape characteristics.
Geographical extent	Larger area across which there will be a change in landscape features and/or character.	↔	Smaller area across which there will be a change in landscape features and/or character.
Duration	Changes over a longer period.	↔	Changes over a shorter period.
Reversibility	Change to features, elements or character which are not reversible.	↔	A landscape change which is reversible.

Table 5.5: The principle of judging the nature of visual effect (visual magnitude)

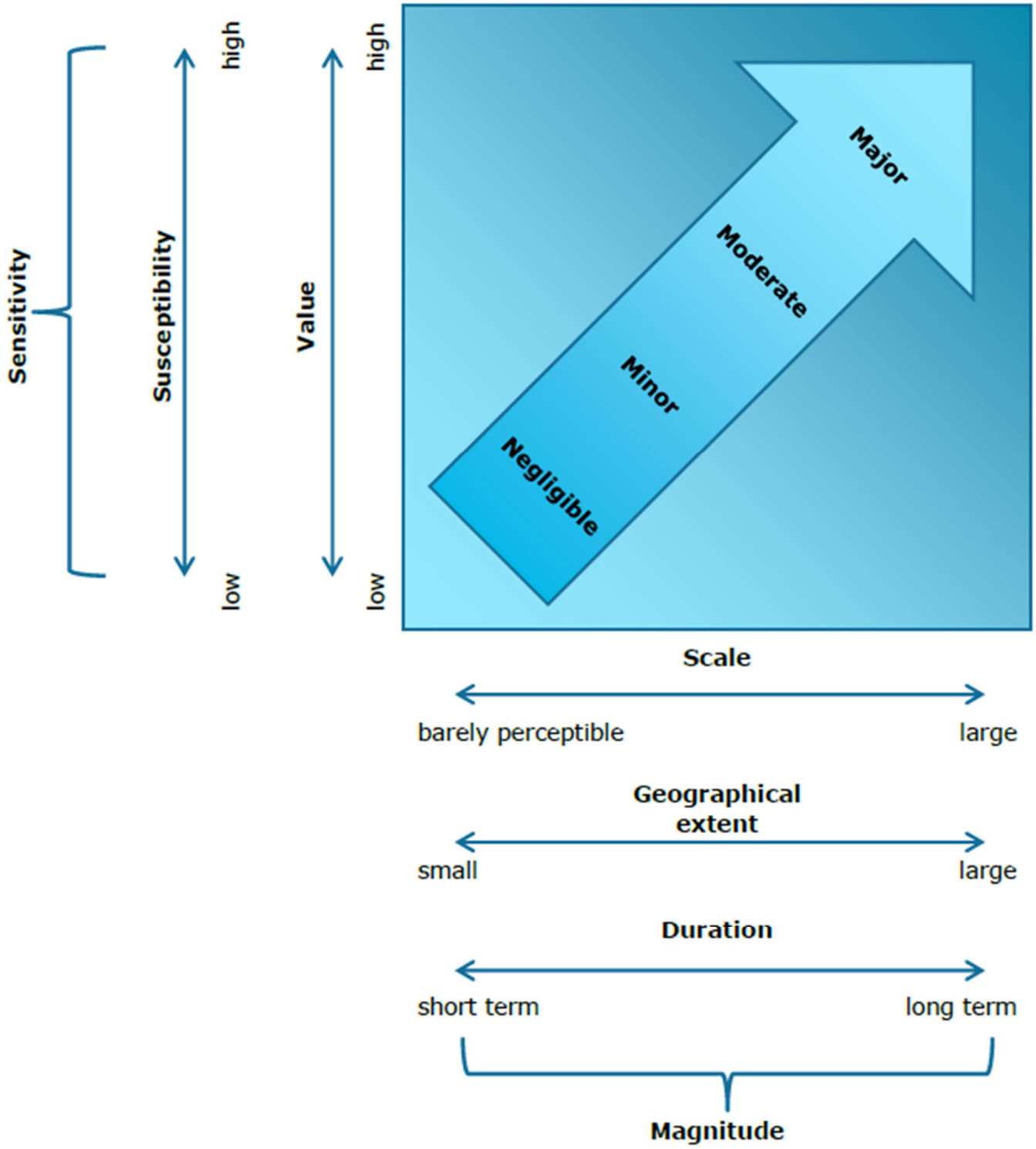
Nature of Visual Effects (Visual Magnitude)			
	Higher	↔	**Lower**
Size/scale	A large visual change resulting from the development is the most notable aspect of the view perhaps as a result of the development being in close proximity, or because a substantial part of the view is	↔	A small or some visual change resulting from the development as a minor or generally unnoticed aspect of the view perhaps as a result of the development being in the

Nature of Visual Effects (Visual Magnitude)			
	affected, or because the development introduces a new focal point and/or provides contrast with the existing view and/or changes the scenic qualities of the view.		distance, or because only a small part of the view is affected, and/or because the development does not introduce a new focal point or is in contrast with the existing view and/ does not change the scenic qualities of the view.
Geographical extent	The changes would be visible over a large area/affect a large part of the receptor/a large number of people	↔	The changes would be visible over a small area/affect a small part of the receptor/affect a few people.
Duration	Visual change experienced over 10 years or more.	↔	Visual change experienced over a short period of up to 2 years.
Reversibility	A permanent visual change which is not reversible or only partially reversible following decommissioning of the development.	↔	A temporary visual change which is reversible following the completion of construction or decommissioning of the development.

Significance

5.43 Sensitivity and magnitude are considered together, to form a judgement regarding the overall significance of effects, guided by the principles set out in **Plate 1**:

Plate 1: Principal of judging levels of effect using sensitivity and magnitude



5.44 The levels of effect are identified as negligible, minor, moderate or major, where effects of 'moderate' and above are considered to be significant in the context of the EIA Regulations.

Assessment Limitations

5.45 It is considered that there are no limitations to the assessment. There is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant environmental effects on the landscape and visual resources of the Site and the surrounding study area.

Baseline Conditions

The Site

5.46 The Site is located in the South Derbyshire District and within close proximity to the East Staffordshire and Lichfield Districts as shown on **Figure 5.1**. It mainly occupies land within four different land-holdings (as shown on **Figure 1.4: Areas of the Site**):

- Land within the Oaklands Farm area forms the southern part of the Site.
- Land within Park Farm and Fairfield Farm forms the central and northern part of the Site.
- Land within Drakelow Power Station forms the furthest northern part of the Site.

5.47 For the purpose of this assessment, the fields within the Site boundary are numbered and are referred to throughout the chapter. This numbering is shown on **Figure 5.2.**

Oaklands Farm

5.48 The southern part of the Site (as shown on **Figure 1.4**) comprises a large area of agricultural land to the south of Rosliston Road and west of Catton Lane that wraps around the north and east of the farmstead at Oaklands Farm. A small part of the Site (fields O1 and O2) extends south of Coton Road. Land use comprises medium-large scale mixed arable and pastoral fields, enclosed by low-clipped hedgerows (consisting mainly of hawthorn and blackthorn) with occasional hedgerow trees, and post and wire fencing. Small copses and ponds are an occasional feature of this landscape, sometimes coinciding with former earthworks (marl pits). An area of mixed woodland at Redferns Wood abuts the eastern edge. Land is gently rolling across the Site with some localised undulations, rising to a maximum elevation of 90m AOD in the centre of the area, and generally falling towards the Pessall Brook to the north-east. Two separate pylon lines run south to north across this part of the Site which eventually connect to the National Grid Drakelow substation at the disused Drakelow Power Station in the

north. A small section of the Cross Britain Way / National Forest Way long distance path (which runs between the villages of Walton-on-Trent and Rosliston), crosses this part of the Site (fields O21 and O22) in the north and is partly enclosed by woodland associated with the Rosliston Forestry Centre to the north-east.

Park Farm / Fairfield Farm

5.49 The northern section of the Site (as shown on **Figure 1.4**) comprises a narrow and elongated area of land north of Rosliston Road. The majority of this land is associated with Park Farm (fields P1-P5) with a section associated with Fairfield Farm (fields F1-F3). The land lies to the south-east and north-east of the farmstead at Park Farm. The land use comprises medium-large scale mixed arable and pastoral fields, enclosed by low-clipped hawthorn and blackthorn hedgerows with occasional hedgerow trees. Land rises from 59m AOD from the Pessell Brook in the west to 75m AOD (to the north-west of the Hill Covert linear wooded copse). Two driveways lined by formal avenues of trees form the north-western boundaries of the Site and both provide access to the Park Farm area from Walton Road. A relatively large block of woodland (Grove Wood) abuts this area to the east and a small band of mixed woodland runs along the northern edge of this area, along the edges of Walton Road and the adjacent site of the disused Drakelow Power Station. Two pylon lines run northwards through this part of the Site (which both extend from the Oaklands Farm area) and connect to the National Grid Drakelow substation at the disused Drakelow Power Station in the north.

Drakelow

5.50 Part of the former power station is also included within the Site boundary (as shown on **Figure 1.4**), as the Proposed Development will connect to National Grid Drakelow substation in this location. The substation is located to the north of Walton Road and separated from the edge of the road by a belt of mature woodland. Several pylons are located within this part of the Site.

The Study Area

5.51 As described earlier, and shown on **Figure 5.1**, the overall study area considered for the LVIA extends to a 5km radius from the Site in all directions. The Site and a large proportion of the study area are located within the SDDC administrative area. The East Staffordshire District Council (ESDC) administrative area is located within the north-western extents of the study

area, approximately 0.4km to the north of the Site boundary. The Lichfield District Council (LDC) administrative area is located within the south-western extents of the study area, approximately 1.6km to the south of the Site boundary.

Topography and Land Cover

5.52 The topography of the study area is illustrated on **Figure 5.3.**

5.53 The Site is located within a broad, gently rolling agricultural landscape. To the west is the low-lying Trent valley and to the east is a former coalfield area which rises up to 126m AOD. Land use across the study area mainly comprises medium-large scale fields of mixed arable and pastoral use. The River Trent flows through the west of the study area (approximately 0.4km north of the Site at its closest point), and the Trent and Mersey Canal runs to the west of this. A number of tributary brooks flow through the study area including the Pessall Brook which runs along the south-eastern edge of the Site (Oaklands Farm area) and crosses through its middle (between the two areas) before running along the north-western edge of the Site (Park Farm area). There are a number of disused gravel pits, many of which are now filled with water and restored to wetland habitats e.g. Drakelow Nature Reserve (wetlands and riverside meadow), Tucklesholme Nature reserve (reedbeds, shingles, lakes and wet grassland) and Branston Water Park local nature reserve.

5.54 The Site and study area are located within the western half of the National Forest area (as shown on **Figure 5.1**). The National Forest is a large-scale landscape restoration project to promote regeneration of the landscape following extensive coal mining in the area. The National Forest Strategy[16] sets out the priorities and shifts in key activities to deliver the National Forest to 2024, including an objective to maximise value of all types - commercial, landscape, recreational, heritage, and wildlife.

5.55 The Rosliston Forestry Centre is located in Rosliston, approximately 0.7km to the east of the Site boundary. Areas of deciduous and mixed woodland (some of which are initiatives relating to the National Forest) are located throughout the area, often on shallow hill slopes and associated with farms and settlements. The designed landscape of The National Memorial Arboretum is located in the south-west corner of the study area approximately 4km from the Site, just east of the A38.

[16] The National Forest (2014) Strategy 2014-2024.

Routes

5.56 A number of key road routes are located within the study area, including:

- A38 to the west of the Site, running north-east to south-west between Burton upon Trent and Alrewas.
- A5189 to the north of the Site, running east to west between Burton upon Trent and Stapenhill, where it then meets the A444 which runs north-west to south-east between Stapenhill and Swadlincote.
- B5016 to the west of the Site, running eastwards through Barton under Needwood in the west, before merging into a minor road at Barton Turn and continuing to Walton-on-Trent.

5.57 A network of minor roads and rural lanes connect villages, hamlets, residential properties and farmsteads throughout the study area.

5.58 Two railway lines exist within the study area. One is to the north-east of the Site, running between Burton upon Trent and Swadlincote, and the other is to the west of the Site, running between Burton upon Trent and Tamworth.

5.59 Recreational Routes located within the study area include:

- The Cross Britain Way long distance footpath (450km), which incorporates sections of other existing named walking trails along its route including the National Forest Way long distance footpath (120km). Together these routes cross the study area west to east through Barton under Needwood, Walton-on-Trent, and partly across the Site (fields O21 and O22) to Rosliston, before continuing south-easterly to Overseal.
- The Way for the Millennium long distance footpath (61km) which runs parallel with the A38 and connects Barton-under-Needwood and Burton-upon-Trent, approximately 2.5km to the north-west of the Site at its closest point.

5.60 A number of other local Public Rights of Way are located throughout the study area, often providing links between settlements and farmsteads.

Patterns of Local Communities

5.61 The pattern of settlement within the study area is typically defined by compact nucleated villages together with sprawling larger towns in the north. Local communities include:

- the suburbs of Burton upon Trent, including Branston, Stapenhill and the newly constructed development at Drakelow Park, and the western urban edge of Swadlincote, including Newhall and the village of Castle Gresley.
- nucleated compact villages of Rosliston, Walton-on-Trent, Coton in the Elms, Barton-under-Needwood, Alrewas, as well as smaller villages/hamlets of Caldwell, Linton, Lullington, Tatenhill, Edingale, Croxall, Harlaston and Haunton.

5.62 There are also numerous individual farmsteads and some isolated residential properties within the study area.

Existing Solar Farm Development

5.63 There are three operational solar farms within the study area (shown on **Figure 5.1**) as follows:

- Drakelow Solar Farm (13ha), approximately 1km north-west of the Site.
- Coton Park, Linton (5ha), approximately 3.6km east of the Site.
- Blakenhall Park Solar Farm (4ha), approximately 5km west of the Site.

Landscape Baseline

5.64 The landscape baseline is described in terms of:

- Landscape features within the Site.
- The landscape character of the Site and study area.

5.65 Reference to designated landscapes is not provided as the study area does not fall within any nationally designated landscapes (the nearest being Cannock Chase AONB approximately 16km to the west of the Site). There are also no locally designated landscapes within the study area.

Landscape Features within the Site

5.66 A detailed description of the Site is provided in paragraphs 5.46 - 5.50. In summary, the key landscape elements/ features within the Site are:

- Gently rolling topography with localised high points in both parts of the Site (topography is illustrated on **Figure 5.3**).

- Medium to large mixed arable and pastoral fields.
- Low (and often managed) hawthorn and blackthorn hedgerows with hedgerow trees.
- Isolated trees within fields and small woodland copses.
- The Pessall Brook that cuts west to east through the Site.
- The Cross Britain Way / National Forest Way long distance footpath.

Landscape Character

National Character Area

5.67 At a national level, the Site lies entirely within the Natural England National Character Area (NCA) 72 Mease/Sence Lowlands[17], as shown on **Figure 5.4a.** The key characteristics of the landscape are described as:

- *"This is a gently rolling landscape with rounded clay ridges and shallow valleys, with a more undulating landform in the north-west. This is a well-ordered agricultural landscape of open views, with a relatively tranquil character.*
- *Triassic Mercia Mudstones underlie this area and give rise to productive clay soils; outcrops of sandstone extend across the area southwards and westwards from the edge of the adjacent coalfield.*
- *Woodland cover is generally limited to scattered hedgerow trees, coverts and spinneys, and occasional groups of trees along rivers and streams.*
- *Larger-scale planting associated with The National Forest in the north of the NCA has significantly increased woodland cover and strengthened the wooded character of the landscape.*
- *The majority of the farmland has a strongly rectilinear pattern of low hedgerows and scattered hedgerow trees. On steeper ground and heavier clays, hedgerows are more substantial and hedgerow trees more frequent.*

[17] Natural England (2013) National Character Area Profile: 72: Mease/Sence Lowlands (NE421). Available at http://publications.naturalengland.org.uk/publication/5925431 [Accessed 29/09/23]

- *Extensive, open areas of arable cultivation predominate. On steeper ground and heavier clays the land is less intensively farmed, and arable and pasture are mixed. Beef and dairy farming are also common.*
- *The main river courses of the Mease and Sence are generally very open; they are nationally important for nature conservation and support internationally rare species, including the white-clawed crayfish, spined loach and bullhead fish. Willow and alder riparian vegetation is a feature along minor streams.*
- *Important habitats include neutral grasslands, wet meadows, parkland, wet woodlands, rivers and streams, all of which support characteristic and rare species.*
- *The Ashby Canal and Coventry Canal are landscape features that are important for nature conservation and recreation. They act as reminders of our cultural heritage.*
- *Landscaped parklands and fine country house estates, spired churches and historic farmsteads, areas of remnant ridge and furrow and deserted settlements contribute to the time depth and sense of history of the area.*
- *With wide verges and straight enclosure roads. Red brick buildings and spired churches are often prominent landscape features. Isolated large 19th-century red brick farmsteads are also notable.*
- *Larger modern urban development is present on the fringes of the NCA in Nuneaton, Hinckley and Burton-upon-Trent. Straight motorways and main roads cut through the area north–south and east–west."*

5.68 Three other NCAs fall within the study area as shown on **Figure 5.4a**. Small parts of the Leicestershire and South Derbyshire Coalfield NCA and the Melbourne Parklands NCA lie within the north-eastern extent of the study area, part of the Trent Valley Washlands NCA is located within the north-western extent of the study area, and a very small part of the Needwood and South Derbyshire Claylands NCA is also located within the north-western extent of the study area.

Local Landscape Character Assessment

5.69 The Landscape Character of Derbyshire[18] was first published by Derbyshire County Council in 2003 and last updated in 2014. This county level character assessment sub-divides the broad NCAs into landscape character types (LCTs). NCA 72 is sub-divided into two LCTs – the Village Estate Farmlands and Riverside Meadows. The Site is located within the Village Estate Farmlands LCT (as shown on **Figure 5.4b**) and its key characteristics include:

- *"Broad scale, gently rolling lowland landscape;*
- *Seasonally waterlogged fine loamy soils over Permo-Triassic Mudstone;*
- *Mixed farming with intensive cropping and improved permanent pasture;*
- *Broadleaf plantations and game coverts;*
- *Tree lined, pastoral stream corridors;*
- *Medium to large regular and sub-regular fields with mainly hawthorn hedgerows;*
- *Winding country lanes with wide grass verges; and*
- *Small nucleated hilltop villages often with prominent church spire."*

5.70 The management guidelines for the Village Estate Farmlands LCT are as follows:

- *"Promote linked extensions to ancient woodland by natural regeneration and planting;*
- *Re-establish and enhance physical links between existing isolated woodland and hedgerows;*
- *Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees;*
- *Conserve and renew ornamental plantations and individual parkland trees; and*
- *Refer to the National Forest Strategy and Guidance."*

5.71 The Site displays many of the key characteristics of the Village Estate Farmlands LCT, being a lowland landscape of gently rolling topography supporting a land use of mixed agriculture with medium to large fields of arable cropping and pasture bound by hawthorn (and blackthorn) hedgerows, and with the minor Pessall Brook draining the slopes.

[18] DCC (2014) Landscape Character of Derbyshire. Available at : https://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/landscape-character.aspx

5.72 Other LCTs across the study area are also shown on **Figure 5.4b**.

5.73 The theoretical intervisibility of the Proposed Development is a starting point in identifying which LCTs require further assessment and which LCTs can be scoped out because they are unlikely to experience significant landscape effects arising from the Proposed Development, supplemented by further analysis and field work. This scoping exercise is presented in **Table 5.6**.

Table 5.6: Scoping of Landscape Character Types for inclusion in the landscape assessment

Landscape Character Types	Theoretical visibility of Proposed Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
The Landscape Character of Derbyshire (Derbyshire County Council, 2014)	
Village Estate Farmlands	The Site is located within this LCT. **Considered within assessment** (see **Table A5.3.1** in **Appendix 5.3: Landscape Assessment Tables**).
Riverside Meadows	Some theoretical visibility across parts, however woodland around Drakelow will limit actual visibility. **Not considered further.**
Coalfield Village Farmlands	Some theoretical visibility indicated across the LCT. **Considered within assessment** (see **Table A5.3.2** in **Appendix 5.3: Landscape Assessment Tables**).
Estate Farmlands	Very small part of LCT within study area with some theoretical visibility, however woodland around the existing railway and built form along the A444 will limit actual visibility. **Not considered further.**
Sandstone Slopes & Heaths	Very small part of LCT within study area with no theoretical visibility. **Not considered further.**

Landscape Character Types	Theoretical visibility of Proposed Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
Update of Landscape Character (Lichfield District Council, 2019)	
Estate Farmlands	Small part of LCT within study area with some theoretical visibility, however woodland at Caton and Coton in the Elms will limit actual visibility. **Not considered further.**
River Terrace Farmlands	Small part of LCT within study area with some theoretical visibility, however woodland along the Trent Valley will limit actual visibility. **Not considered further.**
River Meadowlands	Small part of LCT within study area with some theoretical visibility, however woodland along the Trent Valley will limit actual visibility. **Not considered further.**
Lowland Village Farmlands	Very small part of LCT within study area with some theoretical visibility, however woodland along the Trent Valley will limit actual visibility. **Not considered further.**
Planning for Landscape Change (Staffordshire County Council, 2000)	
Riparian alluvial lowlands	Theoretical visibility across parts, however intervening woodland will limit actual visibility. **Not considered further.**
Terrace alluvial lowlands	Some theoretical visibility indicated across the LCT. **Considered within assessment** (see **Table A5.3.3** in **Appendix 5.3: Landscape Assessment Tables**).
Settled plateau farmlands (Estatelands	Some theoretical visibility indicated across the LCT. **Considered within assessment** (see **Table A5.3.4** in **Appendix 5.3:**

Landscape Character Types	Theoretical visibility of Proposed Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
sub-type)	**Landscape Assessment Tables**).
Surveyor-enclosed plateau farmlands	Very small part of LCT within study area with some theoretical visibility, however woodland and built form will limit actual visibility. **Not considered further.**
Settled plateau farmland slopes	Very small part of LCT within study area with very limited theoretical visibility. **Not considered further.**

5.74 As a result of the scoping exercise presented in **Table 5.6**, the Coalfield Village Farmlands, Terrace alluvial lowlands and Settled plateau farmlands LCTs are considered in the assessment in addition to the Village Estate Farmlands LCT.

5.75 The key characteristics of the Coalfield Village Farmlands LCT[19] are:

- *"Heavy, poorly draining soils over mudstone with patches of free-draining soils on sandstone ridges;*
- *Rolling plateau of sandstone and mudstone beds with coal seams;*
- *Pastoral farming with localised arable farming on better drained soils;*
- *Patches of semi-natural woodland;*
- *Scattered hedgerow trees and locally dense trees along watercourses;*
- *Scrub and secondary woodland on derelict ground and along rail and road embankments;*
- *Areas of former parkland, and common land, now enclosed and farmed;*
- *Network of small irregular lanes between larger urban roads;*

[19] As set out in *The Landscape Character of Derbyshire (Derbyshire County Council, 2014):* https://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/landscape-character.aspx

- *Red brick buildings with Staffordshire blue clay tile roofs;*
- *Expansion of villages with red brick terraces, ribbon development and housing estates; and*
- *Legacy of coal extraction."*

5.76 The key characteristics of the Terrace alluvial lowlands LCT[20] are:

- *"This is a flat landscape, predominantly of intensive arable and improved pastoral farming.*
- *The field pattern tends to be mainly large scale and regularly shaped although there are pockets of ancient, irregularly shaped fields. This difference is indistinct on the ground, however, as the lack of landform results in views through the landscape being controlled by the intactness of the hedgerows and density of the tree cover.*
- *In proximity to villages the scale reduces to a landscape of very small, irregularly shaped fields with plentiful hedgerow oaks controlling views to a maximum of one field distance. These areas are now characterised by low intensity pastoral farming and horse keeping.*
- *Throughout the arable areas the loss of stock control function has led to sculpted, gappy and overgrown thorn hedges.*
- *Scattered hedgerow oaks partially filter views through the landscape, with distant views becoming an important feature.*
- *In the few places where small woodlands are present their edges coalesce with hedgerow trees to give a strong sense of enclosure. Streams and ditches also reinforce this enclosure with lines of willows and alders.*
- *In areas where vegetable growing takes place, hedgerows have been removed, hedgerow trees are sparse and the sense of enclosure has been lost as the scale of the landscape has increased.*
- *A widely spaced network of straight roads and lanes services the scattered farmsteads and act as commuter runs for extended rural villages which still retain much of their original character. Adjacent busy roads intrude into the quietness of the area."*

5.77 The key characteristics of the Settled plateau farmlands (Estatelands sub-type) LCT[21] are:

[20] As set out in *Planning for Landscape Change (Staffordshire County Council, 2000):* https://www.staffordshire.gov.uk/environment/Environment-and-countryside/Documents/StaffordshireSPGVolume3.pdf

- *"This is a wooded pastoral landscape of steeply sloping stream valleys running off the adjacent plateau.*
- *The woodland is predominantly broadleaved and principally located in valleys or hill tops and there are areas where the woodlands visually coalesce to give a forested feel.*
- *Hedgerow trees are predominantly mixed age oak with evidence of succession and their large number contributes strongly to the wooded character of the area.*
- *The field pattern is of both medium scale ancient and planned origins.*
- *Hedgerows are largely intact, although there is evidence of some localised neglect where fences are beginning to appear.*
- *Manors with attendant parkland have a strong localised effect on the landscape.*
- *The area is well populated with hamlets and medium sized farms served by a network of both straight and winding lanes.*
- *In summary this is a peaceful well cared for landscape where the woodlands interlocking with both the fields and the landform are the dominant characteristics."*

Areas of Multiple Environmental Sensitivity

5.78 Derbyshire County Council referenced their landscape character assessment to provide a strategic overview of the environmental sensitivity of the county outside of the Peak District National Park. Areas of Multiple Environmental Sensitivity (AMES) are broad areas of landscape that are identified as being sensitive to a range of environmental datasets[22]. The Landscape Character of Derbyshire assessment is used as a spatial framework for reviewing data relating to biodiversity, historic environment and visual unity (which is an overall measure of the 'intactness' of the landscape relating primarily to field enclosure pattern, trees and woodland).

5.79 The Site does not lie within the 'Primary Sensitivity' or 'Secondary Sensitivity' categories and is therefore defined as a 'least sensitive' area. The study considers these areas to *"have the*

[21] As set out in *Planning for Landscape Change (Staffordshire County Council, 2000):* https://www.staffordshire.gov.uk/environment/Environment-and-countryside/Documents/StaffordshireSPGVolume3.pdf

[22]DCC (2013) Technical Support Document 1 : Areas of Multiple Environmental Sensitivity. Available at : https://www.derbyshire.gov.uk/site-elements/documents/pdf/environment/conservation/landscapecharacter/technical-support-document-1-ames.pdf

potential to accommodate more change, in particular, change that can help to deliver a range of environmental benefits which will provide strategic GI and bring about enhancements for landscape character and local distinctiveness. As such, these areas would benefit from a forward looking planning (restoration/creation) strategy. This does not mean that these areas are without environmental value and development proposals will still require the preparation of appropriate assessments."

Derbyshire Spatial Energy Study

5.80 The Derbyshire Spatial Renewable Energy Study[23] was published in January 2023. It was commissioned by Derbyshire County Council on behalf of Derby City Council, all the district and borough councils in Derbyshire (including SDCC), and the Peak District National Park Authority. The study provides a constraints-led approach to spatial energy opportunity assessment. It considers that a key development constraint is the impact that energy projects can have on the environment, affecting the quality and character of the landscape. As part of the study, a landscape sensitivity assessment was undertaken for each LCT within Derbyshire and considered the scale and complexity of land form; the scale and complexity of land use and field patterns; visual exposure; and development and activity. The Site lies within an area identified as being of moderate landscape sensitivity.

Landscape Value

5.81 Although there are no landscape designations covering the Site or within the study area, this does not mean that the landscape does not have value. The Landscape Institute's *TGN 02-21: Assessing landscape value outside national designations*[24], provides guidance for making judgements about the value of a landscape (outside national landscape designations). It defines landscape value as *"the relative value or importance attached to different landscapes by society on account of their landscape qualities"* which draws on, and is compatible with, the GLVIA3 definition of landscape value as well as Natural England's definition in *An Approach to*

[23] DCC (2023) Derbyshire Spatial Renewable Energy Study. Available at: https://www.derbyshire.gov.uk/environment/planning/planning-policy/renewable-energy-study/renewable-energy-study.aspx

[24] Landscape Institute (2021) TGN 02-21: Assessing landscape value outside national designations. Available at : https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/

Landscape Character Assessment[25]. *TGN 02-21* sets out a range of factors that are considered when identifying landscape value. The range of factors include natural heritage, cultural heritage, landscape condition, associations, distinctiveness, recreational, perceptual (scenic, wildness and tranquility) and functional. These factors are broadly the same as those in Box 5.1 from GLVIA3[8].

5.82 An appraisal of value for the landscape receptors is included as part of the landscape assessments in **Appendix 5.3: Landscape Assessment Tables**.

Visual Baseline

Analysis of Visibility of the Proposed Development

5.83 The ZTVs in **Figures 5.5a – d** show the theoretical visibility of the Proposed Development as follows:

- **Figure 5.5a** shows the ZTV of the solar PV panels (2.7m high), based on a bare ground model and does not take into account the effects of screening provided by buildings and/ or filtering provided by vegetation.
- **Figure 5.5b** shows the ZTV of the solar PV panels (2.7m high), with existing buildings (estimated at 8m high) and areas of existing woodland (estimated at 15m high) within the study area modelled in, to take account of potential screening/ filtering from these elements. It does not consider the potential filtering from existing hedgerows, smaller tree groups or individual trees.
- **Figure 5.5c** shows the ZTV of the Proposed Development's substation and BESS, based on a bare ground model and does not take into account the effects of screening provided by buildings and/ or filtering provided by vegetation.
- **Figure 5.5d** shows the ZTV of the Proposed Development's substation and BESS, with existing buildings (estimated at 8m high) and areas of existing woodland (estimated at 15m high) within the study area modelled in, to take account of potential screening/ filtering from

[25] C. Tudor for Natural England (2014) An Approach to Landscape Character Assessment. Available at : https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691184/landscape-character-assessment.pdf

these elements. It does not consider the potential filtering from existing hedgerows, smaller tree groups or individual trees.

5.84 Visibility of the Proposed Development was verified in the field (as described at paragraph 5.37).

5.85 There are three operational solar PV developments within the Study Area, which are listed in paragraph 5.63 and shown on **Figure 5.1**. All of these developments are included as part of the baseline for the assessment, since they are already present in views.

Key Visual Receptors

5.86 Visual effects are experienced by people (visual receptors) at different locations around the study area, at static locations (for example settlements or viewpoints) and transitional locations (such as sequential views from routes). Visual receptors are the people who will be affected by changes in views from these locations, and they are usually grouped by what they are doing at those places (for example residents, motorists, recreational users etc.).

5.87 Visual receptors considered within the assessment include:

- People within local communities[26].
- People travelling on roads.
- People using recreational routes (including footpaths and bridleways).
- People visiting areas of interest such as visitor attractions or viewpoints.

Local Communities

5.88 Theoretical visibility of the Proposed Development from local communities across the study area is shown on **Figures 5.5a – d**. Based on an analysis of theoretical visibility, **Table 5.7** provides information on which local communities have been carried forward for detailed assessment.

5.89 In order to focus on potentially significant effects, those from which there is no theoretical visibility are not considered further in this assessment. Furthermore, those with limited visibility from a longer distance and / or where views of the surrounding landscape are not important to

[26] Individual residential properties are being dealt with separately through a Residential Visual Amenity Assessment (RVAA) which is presented in **Appendix 5.5.**

its settings, and where it is unlikely that significant effects could occur, are not considered further in the assessment.

Table 5.7: Local Communities assessed

Local Community	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
Rosliston	East	0.25km	Woodland limits views from the settlement although some theoretical visibility indicated from its north-western edge. **Considered in assessment** (see **Table A5.4.1** in **Appendix 5.4: Visual Assessment Tables**).
Walton-on-Trent	West	0.6km	ZTV output indicates no theoretical visibility from this location. **Not considered further.**
Burton upon Trent	North	0.7km	Theoretical visibility across parts, however woodland around Drakelow will limit actual visibility. **Not considered further.**
Coton in the Elms	South-east	0.9km	Some theoretical visibility from the northern and western edges of this settlement. **Considered in assessment** (see **Table A5.4.2** in **Appendix 5.4: Visual Assessment Tables**).
Stapenhill	North-east	1.3km	Theoretical visibility across parts, however intervening woodland and vegetation (including along the existing

Local Community	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
			railway line to the south) will limit actual visibility. **Not considered further.**
Caldwell	East	1.9km	ZTV output indicates no theoretical visibility from this location. **Not considered further.**
Barton-under-Needwood	West	2.1km	Theoretical visibility across parts, however woodland and built form along the A38 will limit actual visibility. **Not considered further.**
Drakelow Park	North	Adjacent to northern tip of Site but 2.3km from Oaklands Farm landholding.	Very limited theoretical visibility and intervening woodland to the south will further limit actual visibility. **Not considered further.**
Lullington	South-east	3km	Theoretical visibility across parts, however woodland south of Coton in the Elms will limit actual visibility. **Not considered further.**
Linton	East	3.4km	Theoretical visibility across parts, however woodland and built form along the A38 will limit actual visibility. **Not considered further.**

Local Community	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
Tatenhill	North-west	3.6km	Theoretical visibility across parts, however woodland along the eastern edge of the settlement will limit actual visibility. **Not considered further.**
Swadlincote	North-east	3.7km	Some theoretical visibility from the south-western edge of this settlement. **Considered in assessment** (see **Table A5.4.3** in **Appendix 5.4: Visual Assessment Tables**).
Edingale	South-west	3.7km	Theoretical visibility across parts, however intervening vegetation including woodland south of Coton in the Elms will limit actual visibility. This was confirmed by SDDC Planning Officer following a site visit to this area. **Not considered further.**
Croxall	South-west	3.7km	ZTV output indicates no theoretical visibility from this location. **Not considered further.**
Alrewas	South-west	4.7km	Theoretical visibility across parts, however woodland along the Trent Valley will limit actual visibility. **Not considered further.**
Harlaston	South-west	4.8km	Theoretical visibility across parts, however intervening woodland to the

Local Community	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
			north will limit actual visibility. **Not considered further.**
Haunton	South	4.9km	ZTV output indicates no theoretical visibility from this location. **Not considered further.**

Routes

5.90 Visibility from a route is rarely uniform along its entire length. This is because views of the surrounding landscape change as one moves along a route depending on the surrounding landform, the presence of built form, structures, tree cover and vegetation situated along a route. Routes across the study area include a hierarchy of roads and recreational routes (promoted long distance footpaths and local public rights of way). Theoretical visibility of the Proposed Development from these routes is illustrated by **Figures 5.5a – d**.

5.91 Based on an analysis of theoretical visibility and potential views, **Table 5.8** provides information on which routes are carried forward for detailed assessment. Where there is limited theoretical visibility, or where actual visibility from a route is likely to be limited due to localised screening/ filtering, these routes are not considered further in this LVIA, as the likelihood for significant effects is limited. In light of this and due to the transitory nature of receptors typically using roads, those beyond 2.5km are scoped out of the assessment.

Table 5.8: Routes assessed

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
Roads (within 2.5km of the Site)			
Coton Road / Church Street (between Walton-on-Trent	South, South-east and	Partly runs through the	Frequent theoretical visibility along much of the route.

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
and Coton in the Elms)	South-west	Site	**Considered in assessment** (see **Table A5.4.4** in **Appendix 5.4: Visual Assessment Tables**).
Rosliston Road (between Walton-on-Trent and Rosliston)	East and West	Partly runs through the Site	Frequent theoretical visibility along much of the route. **Considered in assessment** (see **Table A5.4.5** in **Appendix 5.4: Visual Assessment Tables**).
Main Street / Walton Road (between Walton-on-Trent and Stapenhill)	North, North-east and North-west	Partly runs through the Site	ZTV output indicates no theoretical visibility from along this route. **Not considered further.**
Catton Lane (between Rosliston and Church Street, Coton in the Elms)	South-east	Adjacent to the Site	Frequent theoretical visibility along much of the route. **Considered in assessment** (see **Table A5.4.6** in **Appendix 5.4: Visual Assessment Tables**).
Unnamed road (between Walton-on-Trent and Church Street, Coton in the Elms)	South, South-west and West	Adjacent to the Site	Some theoretical visibility from a small part of the road adjacent to the Site. **Considered in assessment** (see **Table A5.4.7** in **Appendix 5.4: Visual**

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Assessment Tables).
Cadley Lane / Caldwell Road / Unnamed road (between Swadlincote and Walton Road)	North-east	0.4-3.6km	ZTV output indicates no theoretical visibility from along this route. **Not considered further.**
Burton Road / Rosliston Road (between Rosliston and Stapenhill)	East, North-east	0.5-1.4km	ZTV output indicates no theoretical visibility from along this route. **Not considered further.**
Coton Lane (between Rosliston and Coton in the Elms)	South-east	0.9-1.2km	Very limited theoretical visibility along the route. **Not considered further.**
Main Street (between Cadley Lane and Caldwell)	East	0.9-1.3km	Theoretical visibility indicated along the route, however given the oblique and incidental nature of views, as well as potential filtering by vegetation, significant visual effects are considered unlikely. **Not considered further.**
Linton Road (between Rosliston and Cauldwell Road)	East	0.9-1.7km	Theoretical visibility across part of the route, however woodland will limit actual visibility.

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Not considered further.
Cauldwell Road (between Rosliston and Linton)	East	1-2.5km	Theoretical visibility across part of the route, however given the oblique and incidental nature of views, as well as potential filtering by vegetation, significant visual effects are considered unlikely. **Not considered further.**
Lullington Road (between Rosliston and Lullington)	South-east	1.2-2.5km	Theoretical visibility across part of the route, however woodland will limit actual visibility. **Not considered further.**
Sandy Lane (between Caldwell and Cadley Lane)	East	1.4-2km	Theoretical visibility indicated along the route, however given the oblique and incidental nature of views, as well as potential filtering by vegetation, significant visual effects are considered unlikely. **Not considered further.**
Unnamed road between Coton in the Elms and	South-east	1.4-2.5km	Theoretical visibility across part of the route, however

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
Lullington			woodland will limit actual visibility. **Not considered further.**
Coalpit Lane (between Coton in the Elms and Lullington Road)	South-east	1.5-2.5km	Very limited theoretical visibility along the route. **Not considered further.**
Recreational Routes that cross through the Site			
Cross Britain Way / National Forest Way long distance footpath	East and West	Partly runs through the Site	Frequent theoretical visibility. **Considered in assessment** (see **Table A5.4.8** in **Appendix 5.4: Visual Assessment Tables**).
Recreational Routes (within 5km)			
Users of PRoWs within 2.5km of the Site (located north of the Cross Britain Way / National Forest Way route)	North-east and North-west	Various	Frequent theoretical visibility. **Considered in assessment** (see **Table A5.4.9** in **Appendix 5.4: Visual Assessment Tables**).
Users of ProWs within 2.5km of the Site (located south of the Cross Britain Way / National Forest Way	South-east and South-west	Various	Frequent theoretical visibility. **Considered in assessment** (see **Table A5.4.10** in **Appendix 5.4: Visual**

Route	Direction from the Site	Distance from the Site	Theoretical Visibility of the Proposed Development (ZTV coverage)
route)			**Assessment Tables**).
Users of ProWs 2.5-5km from the Site (located north of the Cross Britain Way / National Forest Way route)	North-east and North-west	Various	Some theoretical visibility. **Considered in assessment** (see **Table A5.4.11** in **Appendix 5.4: Visual Assessment Tables**).
Users of ProWs 2.5-5km from the Site (located south of the Cross Britain Way / National Forest Way route)	South-east and South-west	Various	Very limited theoretical visibility indicated. **Not considered further.**

Visitor Attractions

5.92 The Rosliston Forestry Centre is located 0.7km to the east of the Site. Given the nature of this visitor attraction, views towards the Site are very limited by vegetation and are therefore not considered further. Catton Hall Estate and The National Memorial Arboretum are located approximately 2km and 4km to the south-west of the Site respectively, and have very limited theoretical visibility, and therefore have not been considered further. The limited views/ visibility from these visitor attractions was confirmed through site visits.

Selection of Representative Viewpoints to Inform Assessment of Visual Receptors

5.93 This section sets out the representative viewpoints that are used to inform the assessment of visual effects brought about by the Proposed Development upon the visual receptors. The viewpoint list is a representative selection of locations agreed with the relevant statutory consultees (see **Table 5.1**). It is not an exhaustive list of locations from which the Proposed Development will be visible.

5.94 A total of 11 representative viewpoints were selected through desk study, field work and consultation with statutory consultees. The viewpoints are all publicly accessible as advocated by GLVIA3 and include:

- locations selected to represent the experience of different types of receptor.
- locations at different distances to provide a representative range of viewing angles and distances (i.e. short, medium and long distance views).
- locations which illustrate key cumulative interactions with other existing, consented and/or proposed schemes (i.e. either in combined or successive views).
- locations which represent a range of viewing experiences (i.e. static views and points along sequential routes).
- illustrative viewpoints chosen specifically to demonstrate a particular visual effect or specific issue (which could include restricted visibility in particular locations).

5.95 The representative viewpoints considered in the assessment of visual effects are listed in **Table 5.9** below and their locations are shown on **Figures 5.5a-d**, **Figures 5.6a-b and Figures 5.7a-b.** The viewpoints were originally agreed with SDDC and DCC in July/ August 2021 for the PEIR. The list was then revised and agreed with DCC in March 2023, following changes to the extent of the Proposed Development.

Table 5.9: Representative Viewpoints

Viewpoint No.	Name	Easting	Northing	Approximate Distance and Direction to Site	Reason for Selection
1	Coton Road	422801	316247	Within the site	Represents views experienced by motorists travelling along the local road network.
2	Cross Britain Way	423333	317068	Within the site	Represents views experienced by users of the long-distance footpath.
3	Cross Britain Way (near	422499	317512	200m	Represents views experienced by users of

Viewpoint No.	Name	Easting	Northing	Approximate Distance and Direction to Site	Reason for Selection
	Walton Hill Farm)			Looking south-east towards the Site	the long-distance footpath.
4	Rosliston Road / Footpath (near Fairfield)	422981	317687	260m Looking south towards the Site	Represents views experienced by motorists travelling along the local road network.
5a	The Chase, Rosliston	424096	316871	270m Looking west towards the Site	Represents views experienced by people at the north-western edge of Rosliston
5b	Footpath west of The Chase, Rosliston	424077	316904	210m Looking west towards the Site	Represents views experienced by users of the local public right of way network.
6	Bridleway / Footpath by Borough Fields	422087	316349	380m Looking north-east towards the Site	Represents views experienced by users of the local public right of way network.
7	Footpath south of Hill Covert	424026	318148	410m Looking south-west towards the Site	Represents views experienced by users of the local public right of way network.
8	Church Street	423965	315541	640m	Represents views

Viewpoint No.	Name	Easting	Northing	Approximate Distance and Direction to Site	Reason for Selection
	(near Coton in the Elms)			Looking north-west towards the Site	experienced by motorists travelling along the local road network, travelling to/from Coton in the Elms.
9	Cauldwell Road / Bridleway to Manor Farm	426561	316812	2.5km Looking west towards the Site	Represents views experienced by motorists travelling along the local road network / users of the local public right of way network.
10	National Forest Way (at Park Farm)	426766	315252	3km Looking north-west towards the Site	Represents views experienced by users of the long-distance footpath.
11	Sunnyside, Newhall	428349	321235	4.7km Looking south-west towards the Site	Represents views experienced by people at the western edge of Newhall.

Visual Receptors Taken Forwards for Assessment

5.96 The list of visual receptors that are assessed in this LVIA are set out in **Table 5.10** below and shown on **Figures 5.7a-b**. The assessment of visual receptors is set out in **Appendix 5.4: Visual Assessment Tables**.

Table 5.10: Visual Receptors

Visual Receptor Group	Visual Receptor	Representative Viewpoint
Local Communities		
Local Communities (within 2.5km of the Site)	Rosliston	VP 5a: The Chase, Rosliston VP 5b: Footpath west of The Chase, Rosliston
	Coton in the Elms	Near to VP 8: Church Street (near Coton in the Elms)
Local Communities (2.5 – 5km of the Site)	Swadlincote	VP 11: Sunnyside, Newhall
Routes		
Road Users (within 2.5km of the Site)	Coton Road / Church Street (between Walton-on-Trent and Coton in the Elms)	VP 1: Coton Road VP 8: Church Street (near Coton in the Elms)
	Rosliston Road (between Walton-on-Trent and Rosliston)	VP 4: Rosliston Road / Footpath (near Fairfield)
	Catton Lane (between Rosliston and Church Street, Coton in the Elms)	No representative viewpoint but views/ visibility analysed using online mapping tools and confirmed through ground truthing during field work.
	Unnamed road (between Walton-on-Trent and Church	No representative viewpoint but views/ visibility analysed using

Visual Receptor Group	Visual Receptor	Representative Viewpoint
	Street, Coton in the Elms)	online mapping tools and confirmed through ground truthing during field work.
Users of Recreational Routes that cross through the Site	Cross Britain Way / National Forest Way long distance footpath	VP 2: Cross Britain Way VP 3: Cross Britain Way (near Walton Hill Farm) VP 10: National Forest Way (at Park Farm)
Users of Recreational Routes (within 5km of the Site)	Users of PRoWs to the north of the Cross Britain Way / National Forest Way route and within 2.5km of the Site	VP 4: Rosliston Road / Footpath (near Fairfield) VP 5b: Footpath west of The Chase, Rosliston VP 7: Footpath south of Hill Covert VP 9: Cauldwell Road / Bridleway to Manor Farm
	Users of PRoWs to the south of the Cross Britain Way / National Forest Way route and within 2.5km of the Site	VP 6: Bridleway / Footpath by Borough Fields VP 8: Church Street (near Coton in the Elms
	Users of PRoWs to the north of the Cross Britain Way / National Forest Way and within 2.5 – 5km of the Site	VP 11: Sunnyside, Newhall

Future Baseline in the Absence of the Proposed Development

5.97 In the absence of the Proposed Development, it is likely that land within the Site would continue under the same agricultural land use, albeit influenced by a number of ongoing forces for change such as variations in land management, drier summers and wetter winters as a result of climate change.

5.98 It is anticipated that the study area will continue to be influenced by the initiatives of the National Forest, including further large-scale tree planting. Derbyshire County Council's *Technical Support Document 3 (2nd Edition): Monitoring Landscape Change 2003-2021*[27] demonstrates how planting as part of the National Forest has changed landscape character and visual amenity to date, including around Rosliston (page 49).

Implications of Climate Change

5.99 Climate change can be viewed as having been a highly influential factor in the development of today's landscapes and it is widely accepted that mainly due to anthropogenic activities and the burning of fossil fuels, climates are changing. The summary of the relevant climate change projections using the UK Climate Change Projections 2018 (UKCP18) are:

- Temperatures are projected to increase, particularly in summer.
- Winter rainfall is projected to increase and summer rainfall is most likely to decrease.
- Heavy rain days (rainfall greater than 25mm) are projected to increase, particularly in winter.
- Near surface wind speeds are expected to increase in the second half of the 21st century with winter months experiencing more significant effects of winds; however, the increase in wind speeds is projected to be modest.
- An increase in frequency of winter storms over the UK.

5.100 Whilst there appears to be no certainty what the impacts of such climatic changes will be in the future, it is clear that these changes will affect the landscape, including the landscape of

[27] DCC (2003) Technical Support Document 3 (2nd Edition): Monitoring Landscape Change 2003-2021. Available at : https://www.derbyshire.gov.uk/site-elements/documents/pdf/environment/conservation/landscapecharacter/technical-support-document-3-monitoring-landscape-change.pdf

the study area. The alterations in climate and conditions means the composition of vegetation and habitats is likely to alter, causing variations in landscape character over the 40 year life time of the Proposed Development. Landscape and ecological enhancements from part of the Proposed Development will increase the resilience of landscape features. These enhancements are detailed in **Appendix 5.6: Outline Landscape and Ecological Management Plan**, and include the retention and enhancement of grassland, creation and enhancement of hedgerows, creation of woodland habitat and tree planting, including in areas along the riparian corridor in the north of Oaklands Farm; and creation of meadows along the field margins and in more open areas. These measures will improve the landscape and ecological connectivity across the Site and the wider area.

Design Considerations and Embedded Mitigation

Design Considerations

5.101 The layout of the Proposed Development was developed as part of an iterative assessment and design process. An overview of the design evolution is provided in **Chapter 3: Site Selection and Design Strategy**.

5.102 The aim from a landscape and visual perspective was to:

- Integrate the Proposed Development into the landscape and preserve the key qualities of landscape character.
- Preserve field patterns within the Site by setting PV panels back from the edges of fields.
- Avoid losses of valued woodland and tree cover as much as possible.
- Avoid or minimise adverse effects on views from settlements (in particular Rosliston).
- Avoid or minimise adverse effects on views from nearby residential properties by applying suitable offsets from property boundaries to ensure that the Proposed Development is not dominant or overwhelming in main views. A 100m buffer was considered for each property in the early stages of the design process, and this was increased to up to 150m for some of the properties that will experience direct views of PV panels.
- Utilise existing tracks where possible and for new tracks to follow field boundaries and to minimise crossing through highly visible slopes where possible (such as fields O5, O7 and O8).

- Locate the substation and BESS near to the centre of the Oaklands Farm landholding, in a flatter area that is free of on-site constraints, near existing and proposed tracks, and away from residential properties to avoid or minimise adverse effects on their views.
- Integrate ancillary components into the agricultural landscape through careful selection of material and finishes, as follows:
  - The 2.1m high fencing around the PV array will be deer fencing (wooden poles with steel wire mesh) and agricultural in appearance to help integrate more sympathetically into the landscape.
  - The BESS and transformers will be coloured a dark and recessive colour such as Merlin grey (RAL 180 40 05/BS 18B25), to help integrate more sympathetically into the landscape. This is shown on the visualisations where visible. An alternative colour - Pearl Green (RAL 6035) – is shown for one of the transformer units in **Viewpoint 1** (see **Figure 5.10m**) as it was agreed with the DCC landscape officer to show an alternative colour on one of the visualisations.
  - Permanent access tracks will be surfaced with locally sourced stone chippings which responds to the local vernacular (the adjacent grassland will be allowed to extend across the edges, reducing the extent of the visibility of tracks in the landscape).
- Minimise the effects from lighting by limiting the operational lighting proposed to alarm lights on transformer stations that are only activated in case of theft.
- Maintain the recreational value of the Site by minimising visual intrusion along the Cross Britain Way / National Forest Way long distance footpath and to avoid changing or diverting its route.
- To mitigate adverse effects with new planting that is in character with the landscape of the Site and its surroundings, and is in accordance with the aims of The National Forest.

Embedded Mitigation

Construction Phase

5.103 To minimise impacts arising from construction, the construction of the Proposed Development will follow an agreed Construction and Environmental Management Plan (see **Appendix 4.3)**, which includes arrangements for implementation of various aspects of the

works such as turf, vegetation and soil removal, storage and replacement. The CEMP also sets out restoration of landscape earthworks, soils and surface vegetation once the construction phase is complete.

5.104 Mitigation measures for the construction period will include:

- Restoration of any areas which are disturbed during construction, as well as those areas used as a construction compound, to be undertaken immediately following completion of the Proposed Development.
- Existing trees and hedgerows will be retained as far as possible and protected in accordance with best practice (BS 5837) during the construction period.
- The panels will be installed using methods to reduce the extent of excavation and concreting required, by piling the supporting structures into the ground.
- Materials and machinery will be stored tidily during the works. Machinery will not be left in place for longer than required for construction purposes, in order to minimise its impact in views.
- Lighting of temporary construction compounds will be restricted to agreed working hours and that which is necessary for security.

Operational Phase

5.105 The landscape measures illustrated in **Appendix 5.6: Outline Landscape and Ecological Management Plan** are designed to complement the existing landscape character of the Site and the surrounding area. They also aim to improve integration of the Proposed Development into the landscape and to minimise visual effects upon the visual receptors identified (including surrounding residential properties). The proposed planting will, in time, bring additional amenity and biodiversity value to the local area, and comprise native species recommended in DCC's *The Landscape Character of Derbyshire (2014).*

Assessment of Construction Effects

5.106 The assessment of construction effects is based on the project description as outlined in **Chapter 4: Project Description**. The residual effects will remain the same as those reported below.

Source of Effects during Construction

5.107 During the proposed 16 month construction phase, there will be potential short-term landscape and visual effects arising from the presence of partially constructed infrastructure and the undertaking of construction activities on the Site (as described in **Chapter 4: Project Description**).

5.108 The changes arising during the construction of the Proposed Development will be primarily associated with:

- Clearance of vegetation and landcover (grassland, arable fields, small sections of hedgerow, a small number of trees and an area of woodland at the Drakelow Power Station site) – see **Chapter 6: Ecology** for further information) in the location of the temporary construction compounds, the Proposed Development's substation and energy storage areas, tracks and solar PV panel areas.
- The removal of hedgerows to accommodate visibility splays for construction and maintenance vehicles at the access points along Coton Road (between fields O1 and O2 south of the road and between fields O4 and O5 north of the road). This will affect approximately 120m of the hedgerow that runs along field O2 and 60m of the hedgerow that runs along field O5.
- Provision of two temporary construction compounds (in fields O1 and O4) including associated activity and storage of materials.
- Provision of one temporary delivery compound (within the Park Farm farmyard) including associated activity and storage of materials.
- Works to upgrade existing tracks on site and the construction of new internal access tracks – including vehicle movements along these routes.
- Construction vehicles travelling along Walton Road, Coton Road and Rosliston Road to access and exit.
- The installation of 2.7m high PV panels (supported by piled posts), associated transformer units, perimeter and interior deer fencing (2.1m high steel mesh fixed to wooden poles) and CCTV cameras.

- The installation of security fencing along Coton Road, comprising 2.1m high wire mesh fixed to steel posts, lockable security gates at the access points along Coton Road, and security portacabin within field O5.
- The installation of screening (such as opaque netting) attached to the security fencing along the northern edge of Coton Road (and southern edge of fields O4 and O5) and attached to the deer fence at the south-eastern corner of field O1), to mitigate glint and glare hazards on road users. The screening will be removed once new hedgerow planting has matured along these sections.
- Construction of the Proposed Development's substation and control building in field O12.
- The installation by crane of equipment associated with the BESS (in field O12) including 78 battery containers and 13 Power Conversion System (PCS) units.
- The installation of steel palisade fencing (up to 3m high) around the Proposed Development's substation and BESS compound.
- The installation of 132kV underground grid cabling between the Proposed Development's substation and the National Grid Drakelow substation (approximately 3km in length).
- The installation of low and medium voltage underground cabling to connect the output from the solar PV panels and BESS to the transformer units and then to the Proposed Development's substation.
- Temporary lighting at construction compounds comprising either 4-6 light towers (up to 4m in height) in each compound or spotlights mounted on container/welfare units, with just the entry points, walkways and front of storage facilities lit (the whole compound will not be lit up) for one-hour periods prior to the start and end of the working day.
- Temporary lighting overnight comprising downward facing lighting mounted on top of storage containers where materials or equipment is stored.
- Movement and activity of construction vehicles and machinery (including Telehandler, tracked and wheel loaders, Digger, Crane, Pilling machine and Dumper) on the Site.
- Site restoration after completion of the works including the implementation of proposed planting.

Predicted Construction Effects

5.109 The following section provides a summary of the effects identified during construction and should be read in conjunction with the detailed assessments in **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables.**

Landscape Effects during Construction

5.110 The majority of the effects which will occur during the construction phase will be limited to the Site and the immediate surrounding vicinity, from which construction activities may be perceptible.

The Site

5.111 Construction activities (as set out in paragraph 5.108) will result in direct landscape effects on the Site. There will be a large scale of landscape effect on the area directly affected by the works, resulting in a change from an undeveloped agricultural landscape to a construction site. This will include the implementation of PV panels, transformers and fencing; the construction of the tracks (including access), the substation, control building and battery storage area near to the centre of the Oaklands Farm landholding (field O12), the temporary construction compounds in fields O1 and O4; and the excavations associated with the underground grid cabling between the Proposed Development's substation and the existing substation at the disused Drakelow Power Station. Changes will include the removal and alteration of existing landscape elements including arable and pastoral landcover; limited removal of vegetation (see **Chapter 6: Ecology** for further information); some subtle changes to the topography; the introduction of partially constructed infrastructure; transport and storage of materials; and additional movement and activity through construction vehicles and plant.

5.112 The construction works are expected to last approximately 16 months, so will be short-term[28] and temporary. Re-establishment of vegetation will take approximately three to five years, depending on the vegetation and soils, and will likely persist into the operation phase. The level of reversibility will be varied, from fully reversible changes associated with construction plant and activity that will cease at the end of the construction period, to partially reversible changes (e.g. land undergoing excavations will be restored but not to the exact

[28] Short term is considered to be up to 2 years (see **Appendix 5.1: LVIA and CLVIA Methodology**).

original condition), to non-reversible changes (such as loss of vegetation along the route of new/widened tracks).

5.113 The overall magnitude of change to the landscape character within the Site (which takes into consideration the scale of landscape effect, geographical extent, duration and reversibility) is assessed to be **high** due to the large scale of landscape effect over a limited geographical extent (the Site) for a temporary duration. Since the Site is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), the overall level of effect on the Site during construction is assessed to be **major (significant) adverse.**

Landscape Outside the Site

5.114 The construction activities (as set out in paragraph 5.108) will affect the perceptual character of the landscape around the Site, with the scale of landscape effect declining with distance from the construction works. In practice, visibility of the construction activities will be reduced by the mature vegetation which surrounds the Site including the existing network of field boundary vegetation, where it is retained.

5.115 It is judged that there will be a large change in perceptual character of the landscape within the immediate setting of the construction works (up to approximately 0.5km from the Proposed Development). The Village Estate Farmlands is the only LCT to fall within 0.5km as shown on **Figure 5.4b.** The large change to the perceptual character of the Village Estate Farmlands LCT in the immediate setting of the construction works (i.e. a small geographical extent) will result in an overall **high** magnitude of change for a temporary duration. The Village Estate Farmlands LCT is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), and therefore the overall level of effect on the Village Estate Farmlands LCT within 0.5km of the construction works is assessed to be **major (significant) adverse**.

5.116 The scale of landscape effect will reduce with distance from the construction works, and in terms of the wider effects on the Village Estate Farmlands LCT there will be a small change to the perceptual character beyond 0.5km, extending to approximately 1km from the construction works. The small change to the perceptual character of the wider Village Estate Farmlands LCT (i.e. a medium geographical extent) will result in an overall **low** magnitude of

change for a temporary duration. The Village Estate Farmlands LCT is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), and therefore the overall level of effect during construction on the wider Village Estate Farmlands LCT (up to approximately 1km from the construction works) is assessed to be **minor (not significant) adverse.**

5.117 The Coalfield Village farmlands LCT, Terrace alluvial lowlands LCT and Settled plateau farmlands (Estatelands sub-type) are all located beyond 2.5km from the Site. Views of construction activity from these LCTs, will be limited as a result of the screening/ filtering from intervening features, and any available views will be glimpsed through intervening vegetation. The scale of landscape effect (and magnitude of change) from these LCTs is assessed to be **barely perceptible**, and so the overall level of effect during construction is assessed to be **negligible (not significant).**

Visual Effects during Construction

5.118 During the construction phase the most visible aspects will be the movement of construction vehicles across the Site and part constructed components of the Proposed Development. However, other aspects such as construction traffic on the minor road network around the Site, construction of tracks, construction of the Proposed Development's substation and BESS, construction of temporary compounds and construction of the underground grid connection will be visible from local areas around the Site. These effects will change throughout the construction period as components are gradually constructed.

5.119 The construction works are expected to last approximately 16 months, so will be short-term[29] and temporary. Re-establishment of vegetation will take approximately three to five years, depending on the vegetation and soils, and will likely persist into the operation phase. The level of reversibility will be varied, from fully reversible changes associated with construction plant and activity that will cease at the end of the construction period, to partially reversible changes (e.g. land undergoing excavations will be restored but not to the exact original condition), to non-reversible changes (such as loss of vegetation along the route of new/widened tracks).

[29] Short term is considered to be up to 2 years (see **Appendix 5.1: LVIA and CLVIA Methodology**).

Local Communities (within 2.5km of the Site)

Rosliston

5.120 From the local community of Rosliston, there will be views (some filtered by vegetation) beyond intervening vegetation of construction vehicles moving along the skyline and above the tree line from some parts of the village (particularly from its north-western edge), as well as construction activities relating to the implementation of PV panels and tracks within fields O8 and O10 affecting the sense of rural character. These construction works will be seen at a distance of approximately 0.6km. Visibility of construction activities closer to the receptor (i.e. towards the bottom of the sloping fields) will be more limited by the dense vegetation of Redferns Wood which will provide filtering of views in winter and increased filtering in summer. It is judged that the scale of visual effect at construction within views from the most elevated edge of the settlement at Coppice View and The Chase (in the north-west) is assessed to be medium.

5.121 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** due to the medium scale of visual effect over a small geographical extent (i.e. from the north-western edge of the settlement) for a temporary duration. Since the local community of Rosliston is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **moderate (significant) adverse** from the most elevated edge of the settlement (at Coppice View and The Chase).

Coton in the Elms

5.122 From the local community of Coton in the Elms, there will be occasional glimpsed views (from the north-western edge of the settlement) of construction vehicles moving around the Site and construction activities relating to the implementation of PV panels, tracks and fencing within the south-eastern part of the Site (Oaklands Farm landholding), affecting the sense of rural character. These limited glimpses of construction activity will be seen at a distance of approximately 1km in winter views, whereas in summer views, construction activity will be filtered further by intervening layers of in-leaf vegetation (including field boundary hedgerows and mature trees, Thompsons Wood, and a small woodland copse to the south-east of the Site). It is judged that the scale of visual effect at construction within winter views from along the north-western edge of the settlement is no more than small.

5.123 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **low** due to the small scale of visual effect over a small geographical extent (i.e. from the north-western extents of the settlement) for a temporary duration. Since the local community of Coton in the Elms is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **low (not significant) adverse.**

Local Communities (2.5-5km from the Site)

Swadlincote

5.124 From the local community of Swadlincote, the visibility of construction activities will be limited; mainly obscured by buildings within the settlement. Layers of intervening vegetation in the form of woodlands and field boundaries (including tall hedgerow trees) will also provide partial filtering of views during winter, and increased filtering during summer when trees are in leaf. There will however be some distant glimpsed views of construction vehicles moving across parts of the Site (within the Park Farm landholding) when viewed from the south-western edge of the settlement near Castle Gresley and from the elevated Sunnyside area of Newhall in the north-west of the settlement. There will also be limited views of other construction activities (relating to the implementation of PV panels, tracks and fencing within the Oaklands Farm landholding) when viewed from Sunnyside. However, these construction activities will be seen at a distance of 3.5-5km and backclothed by wooded skylines. It is judged that the scale of visual effect (and magnitude of visual change) at construction within views from the settlement is **barely perceptible**, and so the overall level of effect is assessed to be **negligible (not significant).**

Road Users (within 2.5km of the Site)

Coton Road / Church Street (between Walton-on-Trent and Coton in the Elms)

5.125 From Coton Road / Church Street (between Walton-on-Trent and Coton in the Elms), vehicles will be seen moving in close proximity to the receptor (including along the road itself), affecting rural transitory views from some parts of the route, particularly from Coton Road where hedgerows lining the road are low, defunct or will be removed. The removal of hedgerows will be required to accommodate visibility splays for construction and maintenance vehicles at the

access points along Coton Road (between fields O1 and O2 south of the road and between fields O4 and O5 north of the road). This will affect approximately 120m of the hedgerow that runs along field O2 and 60m of the hedgerow that runs along field O5. Construction activities relating to the implementation of PV panels, transformers, fencing and tracks will also be visible (including within the adjacent fields of O1-O5, O6, O15 and O16), although existing roadside hedgerows along the edge of fields O1, O3, O15 and O16 will provide partial filtering of views during winter, and increased filtering during summer when in leaf. It is judged that the scale of visual effect at construction will vary from different parts of the route, but from along Coton Road it is large. The scale of visual effect at construction will reduce with distance from the Proposed Development, and from Church Street oblique views of construction activity will often be glimpsed and intermittent between intervening vegetation.

5.126 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **high** due to the large scale of visual effect over a medium geographical extent (i.e. from along stretches of Coton Road but not from Church Street) for a temporary duration. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **major (significant) adverse** from along Coton Road.

Rosliston Road (between Walton-on-Trent and Rosliston)

5.127 From Rosliston Road (between Walton-on-Trent and Rosliston), vehicles will be seen moving along the skyline and in close proximity to the receptor, affecting rural transitory views from some parts of the route, particularly from the most elevated part of the road (west of Ashtree Farm) where low hedgerows provide limited filtering and within the open view by the lay-by near the eastern end. Construction activities relating to the implementation of PV panels, transformers, fencing and tracks across elevated parts of the Site (within the Oaklands Farm landholding) will also be visible at a distance of between 0.3 and 1.5km, although existing hedgerows along the road will provide partial filtering of views during winter and increased filtering during summer when in leaf. There will also be more distant views of cranes lifting equipment for the battery storage into place. The underground grid cabling will cross underneath the road so there will be near views of machinery and excavation from a small section of the road (just west of Corner Farm). At this point the temporary construction access

track will also be implemented which will cross the road and result in a small amount of hedgerow removal (approximately 6m along the southern edge of field F1 and 6m along the northern edge of field O24). It is judged that the scale of visual effect at construction will vary from different parts of the route, depending on elevation and the containment provided by vegetation, but overall is medium. The scale of visual effect at construction will reduce with distance from the Proposed Development.

5.128 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** due to the medium scale of visual effect over a medium geographical extent (i.e. intermittently to the stretch of road between the most elevated part of the road, west of Ashtree Farm in the west, and the approach to Rosliston in the east) for a temporary duration. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **moderate (significant) adverse.**

Catton Lane (between Rosliston and Church Street)

5.129 From Catton Lane (between Rosliston and Church Street), vehicles will be seen moving in close proximity to the receptor, affecting rural transitory views from most of the route, as hedgerows lining the north-western edge of the road are low or defunct. Construction activities relating to the implementation of PV panels, transformers, fencing and tracks will also be clearly visible (including within the adjacent fields of O3 and O7). It is judged that the scale of visual effect at construction is large but will reduce with distance from the Proposed Development. From the north-eastern extent of the road views of construction activity will often be glimpsed and intermittent between intervening vegetation associated with Thompsons Wood.

5.130 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **high** due to the large scale of visual effect over a large geographical extent (i.e. from along the majority of the route) for a temporary duration. Since the receptor is assessed to have a **low** visual sensitivity, as a result of a medium visual susceptibility and a low value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **moderate (significant) adverse.**

Unnamed road (between Walton-on-Trent and Church Street)

5.131 From the unnamed road (between Walton-on-Trent and Church Street), vehicles will be seen moving in close proximity to the receptor (including along the road itself), affecting rural transitory views from a small part of the route between Catton Farm Cottages and Lads Grave Cottage. Construction activities relating to the implementation of PV panels, transformers, fencing and tracks within field O1 will also be visible, although the existing hedgerow along the road will provide partial filtering of views during winter, and increased filtering during summer when in leaf. It is judged that the scale of visual effect at construction will vary from different parts of the route, but between Catton Farm Cottages and Lads Grave Cottage it is medium.

5.132 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** due to the medium scale of visual effect over a small geographical extent (i.e. between Catton Farm Cottages and Lads Grave Cottage) for a temporary duration. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **moderate (significant) adverse.**

Users of Recreational Routes that Cross Through the Site

Cross Britain Way/ National Forest Way long distance footpath

5.133 From the Cross Britain Way/ National Forest Way long distance footpath, vehicles will be seen moving along the skyline and in close proximity to the receptor, affecting the rural views experienced along the route. There will be clear open views towards all construction activity occurring within the middle of the Site (including the implementation of PV panels, transformers, tracks and fencing); some of which will be close to the receptors and will affect rural views. There will also be views of construction activity associated with the substation and of cranes lifting equipment for the battery storage into place in field O12. There will be direct open views of these construction activities along the section of the route between Walton-on-Trent and Rosliston (including the small part that crosses through the Site) in both summer and winter views. From the more elevated part of the route (near Walton Hill Farm) views of construction activities will also extend further across the Oaklands Farm landholding as well as towards the Park Farm landholding where there may be glimpses of machinery and excavations associated with the underground grid cabling. It is judged that the scale of visual effect at construction is

large for this section of the route but will reduce with distance from the Proposed Development. Beyond the section between Walton-on-Trent and Rosliston, visibility will be limited from along the route by intervening features. This includes the woodlands around Park Farm and at the Rosliston Forestry Centre which filter views seen from the eastern extent of the route. Views from the west will be mostly screened by intervening topography, buildings within the settlements of Barton-under-Needwood and Walton-on-Trent, as well as large industrial/commercial elements along the A38, and occasional woodland blocks.

5.134 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **high** due to the large scale of visual effect over a small geographical extent (i.e. from a localised section of the route between Walton-on-Trent and Rosliston) for a temporary duration. Since the receptor is assessed to have a **high** visual sensitivity, as a result of a high visual susceptibility and a high value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **major (significant) adverse** from along the section of the route between Walton-on-Trent and Rosliston**.**

Users of Recreational Routes (within 5km)

ProWs within 2.5km of the Site (located north of the Cross Britain Way/ National Forest Way route)

5.135 From ProWs within 2.5km of the Site (located north of the Cross Britain Way/ National Forest Way route), there will be some intermittent views towards construction activity (including movement from vehicles, and the implementation of PV panels, transformers, tracks, fencing, substation and battery storage area), affecting rural views from sections of footpaths within approximately 0.7km to the east and west of the Site. This includes footpaths SD48/1/1 and SD16/5/1 where the scale of visual effect at construction is assessed to be small. The construction activities relating to the installation of the underground grid cabling will also be seen from the northern and southern extents of footpath SD16/5/1 at a distance of approximately 0.4km, including the excavations required to bury the cables, as well as construction activities associated with the access track that will cross the Park Farm landholding. More distant views towards the Site from footpaths and bridleways beyond this distance to the north-east and east (e.g. footpath SD11/4/1), will be obscured by intervening vegetation and landform.

5.136 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **low** due to the small scale of visual effect over a small geographical extent (i.e. intermittently to the short sections of footpaths within 0.7km of the Site including footpaths SD48/1/1 and SD16/5/1e) for a temporary duration. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **minor (not significant) adverse.**

ProWs within 2.5km of the Site (located south of the Cross Britain Way/ National Forest Way route)

5.137 From ProWs within 2.5km of the Site (located south of the Cross Britain Way/ National Forest Way route), there will be some clear open views towards construction activity (including movement from vehicles, and the implementation of PV panels, transformers, tracks and fencing), affecting the rural views experienced from parts of footpaths SD13/1/1 and SD13/4/1 where users will be in close proximity to the Site. Beyond the immediate surroundings of the Site, more distant views of construction activity will be afforded from sections of footpaths and a bridleway within approximately 0.7km to the south-east and south-west of the Site; however, layers of intervening vegetation and the buildings within Oaklands Farm will partially filter/ screen views. It is judged that the scale of visual effect at construction will vary from different parts of the route, depending on elevation and vegetation coverage, but overall is medium.

5.138 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** due to the medium scale of visual effect over a small geographical extent (i.e. intermittently to the short sections of footpaths within 0.7km of the Site) for a temporary duration. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect is assessed to be **moderate (significant) adverse.**

ProWs to the north of the Cross Britain Way/National Forest Way and within 2.5-5km of the Site

5.139 From ProWs to the north of the Cross Britain Way/National Forest Way and within 2.5-5km of the Site, the visibility of construction activities will be limited; as layers of intervening

vegetation in the form of woodlands and field boundaries will provide partial filtering of views during winter, and increased filtering during summer when trees are in leaf. There will however be some distant glimpsed views of construction vehicles moving across parts of the Site (within the Park Farm landholding) and other construction activities (relating to the implementation of PV panels, tracks and fencing within the Oaklands Farm landholding) when viewed from elevated local footpaths near the Sunnyside area of Newhall in the north-west of Swadlincote. However, these construction activities will be seen at a distance of almost 5km and backclothed by wooded skylines. It is judged that the scale of visual effect (and magnitude of visual change) at construction within views from these footpaths is assessed to be **barely perceptible**, and so the overall level of effect is assessed to be **negligible (not significant).**

Lighting Effects during Construction

5.140 Lighting will be kept to a minimum as far as possible during construction, and where used will be directed into the works area, away from nearby properties. The lighting during construction will occur within parts of the construction compounds for a one-hour period before sunrise and a one-hour period after sunset. Overnight security lighting will comprise downward facing lighting mounted on top of storage containers where materials or equipment is stored to control and limit light spill.

5.141 The lighting effects during construction would be limited for users of the Cross Britain Way / National Forest Way long distance footpath and other ProW in proximity to the Site due to the time of day that the lighting would be used (as there would be limited people using ProWs during the hours of darkness). For other receptors in proximity to the temporary lighting within construction compounds (i.e. motorists using the unnamed road between Walton-on-Trent and Church Street), the scale of visual effect is assessed to be no more than small. Given the infrequent and intermittent nature of the lighting and the short-term nature of the construction phase combined with its isolation to specific locations (i.e. a small geographical extent), the magnitude of visual change is assessed to be no more than **low**. Since motorists using the unnamed road between Walton-on-Trent and Church Street are assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect from the presence of temporary lighting during construction is assessed to be no more than **minor (not significant) adverse.** There will also not be any significant effects for other

receptors located further away from the temporary lighting as the change in view will be barely perceptible or may go unnoticed.

Assessment of Operational Effects

5.142 The assessment of operational effects is based on the project description as outlined in **Chapter 4: Project Description**.

5.143 As all landscape and visual related mitigation has been designed into the Proposed Development, the effects reported are residual.

Source of Effects during Operation

5.144 The main effects of the Proposed Development on landscape and visual amenity once it is built and is operational will be as a result of:

- The presence of new 2.7m high PV panels, associated transformer units, perimeter and interior deer fencing (2.1m high steel mesh fixed to wooden poles) and CCTV cameras, present for 40 years.
- The presence of security fencing along Coton Road, comprising 2.1m high wire mesh fixed to steel posts, lockable security gates at the access points along Coton Road, and security portacabin within field O5.
- The presence of screening (such as opaque netting) attached to the security fencing along the northern edge of Coton Road (and southern edge of fields O4 and O5) and attached to the deer fence at the south-eastern corner of field O1), to mitigate glint and glare hazards on road users. The screening will be removed once new hedgerow planting has matured along these sections and so will have been removed by Year 10.
- The presence of a new substation and control building (with components ranging in heights of between 5 – 10.2m and including two transformers, busbars, welfare units, storage containers, statcom units, a 132KV harmonic filter compound and CCTV cameras) in field O12, enclosed by up to 3m high palisade fencing with lockable double-leaf access gates.
- The presence of a BESS accommodating 78 battery containers (each with a height of 2.52m sat on concrete piles or blocks, raised to a maximum of 0.6m above ground level), 13 PCS units (each with a height of 2.9m sat on concrete piles or blocks, raised to a

maximum of 0.6m above ground level) and an auxiliary transformer (3m high) in field O12, enclosed by up to 3m high palisade fencing with lockable double-leaf access gates.

- Presence of new and upgraded tracks (construction tracks up to 6m wide passing places and O&M tracks 3.5-6m wide) surfaced with locally sourced crushed stone.
- Access tracks and gates to enable access into the Site off Rosliston Road, Catton Lane and Coton Road.
- The presence of new planting (see **Appendix 5.6: Outline Landscape and Ecological Management Plan** for detail).
- The new permissive path linking the Cross Britain Way / National Forest Way long distance path with Coton in The Elms FP 1 (SD13/1/1). It will cross the Site (Oaklands Farm landholding) to offer a new safe walking link from Lads Grave in the south of the Site to Rosliston and Walton-on-Trent via the Cross Britain Way / National Forest Way long distance path, which will remain open throughout the 40-year life of the Proposed Development. The proposed route of the permissive path is shown in **Appendix 5.6: Outline Landscape and Ecological Management Plan.**
- The occasional movement of maintenance vehicles.

Predicted Operational Effects

5.145 The following section provides a summary of the effects identified during operation and should be read in conjunction with the detailed assessments in **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables.**

~~5.145~~5.146 The reduction in levels of landscape and visual effects between Years 1 and 10 (as set out in the following section) is primarily because the planting that is proposed as mitigation will have become established and will be closer to maturity by Year 10. It is also due to the proposed change in management of existing hedgerows, to allow them to grow taller. These proposed mitigation measures will make the landscape more resilient to the change brought upon it by the proposed PV panels, tracks and ancillary structures. In some sense the measures will reduce the susceptibility of the landscape, increasing its ability to accommodate the change through the reinforcement of the landscape structure by planting, which will also increase the screening/ filtering of views. As such, the size, scale and geographical extent of the effects associated with the proposed PV panels, tracks and ancillary structures gradually diminishes.

Landscape Effects during Operation

~~5.146~~5.147 **Appendix 5.3: Landscape Assessment Tables** contains detailed assessments for the effects upon the Site and landscape character within the study area. A summary, setting out the likely effects as a result of the Proposed Development, is provided below.

The Site

~~5.147~~5.148 In areas directly affected/ hosting the Proposed Development, there will be a large scale of landscape effect to the character of the Site as a result of changes to the fabric and some of its key features from the introduction of new energy generating infrastructure. This will include slight changes to the topography (to accommodate the Proposed Development's substation and battery storage area as well as underground cabling) and limited loss of vegetation. Generally, the existing field pattern within the Site will be retained although will become slightly altered in places by fencing around the panels (in areas where they do not extend up to the edge of field boundaries) and from some of the tracks (although these generally follow existing field boundaries). The gently rolling landform will be retained as PV panels follow the contours and therefore unlikely to notably alter the skyline in views from the wider landscape. As the PV panels are to be mounted on posts, the underlying landcover will be restored to grass through reseeding (to be grazed by sheep) and areas free from PV panels will be seeded for species rich meadow grassland to establish.

~~5.148~~5.149 The layout is designed to avoid impact on trees, woodland and the Cross Britain Way / National Forest Way long distance path as much as possible. Additional planting will also be implemented but will be yet to establish, including new hedgerows (including to replace those removed along Coton Road), areas of woodland and scattered trees, along with the strengthening of existing hedgerows by infilling gaps and enhancing with trees. The management of existing hedgerows along roads within and along the Site boundary will allow them to grow taller (up to 3m in height). These measures are illustrated in **Appendix 5.6: Outline Landscape and Ecological Management Plan.**

~~5.149~~5.150 The Proposed Development is expected to remain operational for 40 years, so will be long-term[30], and partially reversible as the PV panels, fencing, the Proposed Development's substation and energy storage will be dismantled and removed from the Site once the

[30] Long term is considered to be over 10 years (see **Appendix 5.1: LVIA and CLVIA Methodology**).

operational period has ceased. The tracks will either be left in situ providing a continuation of improved access for farmers or removed depending on the requirement of the landowner at the time.

5.1505.151 The overall magnitude of change to the landscape character within the Site (which takes into consideration the scale of landscape effect, geographical extent, duration and reversibility) is assessed to be **high** due to the large scale of landscape effect over a limited geographical extent (the Site) for a long-term. Since the Site is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), the overall level of effect on the Site at operation is assessed to be **major (significant) adverse**.

5.152 At Year 10 the planting will have established and will be closer to maturity, resulting in some positive effects on the landscape character of the Site in terms of landcover. The proposals include the planting of scrub, and trees along the Pessall Brook where it flows in the north of the Oaklands Farm landholding. This would help enhance the 'tree lined, pastoral stream corridor' that is identified as a key characteristic of the Village Estate Farmland LCT *[page 10.4 of Part One: Landscape Character Description: 10. Mease/ Sence Lowlands[31]]*, and would align with its management guideline of enhancing 'the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees' *[page 10.6 of Part One: Landscape Character Description: 10. Mease/ Sence Lowlands[3131]]*. The proposals also include scattered trees in the north and south of the landholding, helping to reinforce the estate character. The description of the LCT *[4th paragraph in the 'Summary' on page 10.5 of Part One: Landscape Character Description: 10. Mease/ Sence Lowlands[31]]* acknowledges that hedgerow trees are sparse throughout the landscape and are in decline due to the intensification of agriculture, and so the proposed enhancement and strengthening of existing hedgerows, along with newly planted hedgerows (with trees), will restore these features. Whilst not a defining feature of the Village Estate Farmland in the past, the LCT recognises *[4th paragraph in the 'Summary' on page 10.5 of Part One: Landscape Character Description: 10. Mease/ Sence Lowlands[31]]* that woodland cover is increasing due to the National Forest initiative. The proposed woodland, the enhanced/ strengthened existing hedgerows and the newly planted hedgerows will help to 'Re-establish and enhance physical links between existing

[31] The Landscape Character of Derbyshire (fourth edition, March 2014), Derbyshire County Council. Available at: https://www.derbyshire.gov.uk/site-elements/documents/pdf/environment/conservation/landscapecharacter/part-1.10-mease-sence-lowlands.pdf

isolated woodland and hedgerows' – another management guideline of the Village Estate Farmland LCT *[page 10.6 of Part One: Landscape Character Description: 10. Mease/ Sence Lowlands[31]].*

5.153 Overall, the proposed measures will provide some benefits (to be considered alongside the adverse effects of the project) to the landscape character of the Site and the Village Estate Farmland LCT in the longer term, contributing towards achieving its management guidelines. Once mature, the planting will also reduce the level of effect upon the perceptual qualities of the landscape by helping to soften the impact of the proposed development, helping to integrate it into the existing landscape framework, whilst filtering some of the views of the PV panels and ancillary structures when viewed from the surrounding landscape. As a result, the adverse effects brought upon the landscape by the proposed development will be gradually reduced by the planting over time, until a point when it reaches maturity. As such, the impacts will gradually reduce in magnitude until around Year 10, when the magnitude of effect will reduce to **medium**, resulting in an overall **moderate (significant) adverse** level of effect at Year 10 for the Site.

5.154 There will still be significant effects upon the landscape character of the Site (and the Village Estate Farmlands) at Year 10 given the nature of the Proposed Development, but by this point, it is judged that the mitigation proposed will be sufficiently well established so as to reduce the level of effects. It is noted that deciduous planting is leafless in winter and so the effectiveness of vegetation as a means of mitigation varies seasonally. Views that may be completely screened by foliage in high summer could be partly filtered by a tracery of branches in winter, for example.

~~**5.151**~~**5.155** ~~The magnitude of effect will reduce to **medium**, resulting in an overall **moderate (significant) adverse** level of effect at Year 10 for the Site.~~ It is anticipated that there will be changes to the landscape character due to further woodland planting as part of the initiatives associated with the National Forest, building upon the changes that have already happened. Whilst it is acknowledged that this is not guaranteed, if it is the case then the planting as part of the Proposed Development is expected to be congruous with the landscape character at Year 10.

Landscape Outside the Site

~~**5.152**~~**5.156** The presence of the operational components (as set out in paragraph 5.144) will affect the perceptual character of the landscape around the Site, with the scale of landscape

effect declining with distance from the Proposed Development. The PV panels will be theoretically visible from parts of the area within around 3km of the Site boundary. The substation/battery storage components will be visible from up to around 2km from their proposed location. In practice, visibility will be reduced by the mature vegetation which surrounds the Site including the existing network of field boundary vegetation, where it is retained and enhanced. There will be some loss of rural setting afforded to villages surrounding the Site. This will slightly reduce the distinction between arriving at and leaving a settlement. The sense of tranquility of the landscape, and dark skies away from populations will largely remain (although with some human activity on the Site from occasional maintenance operations). It is judged that there will be a large change in perceptual character of the landscape within the immediate setting of the Proposed Development (up to approximately 0.5km from the Proposed Development).

~~5.153~~5.157 The Village Estate Farmlands is the only LCT to fall within 0.5km as shown on **Figure 5.4b.** The large change to the perceptual character of the Village Estate Farmlands LCT in the immediate setting of the Proposed Development (i.e. a small geographical extent) over a long term will result in an overall **high** magnitude of change. The Village Estate Farmlands LCT is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), and therefore the overall level of effect on the Village Estate Farmlands LCT within 0.5km of the Proposed Development during operation is assessed to be **major (significant) adverse** at Year 1, reducing to **moderate (significant) adverse** at Year 10.

~~5.154~~5.158 The scale of landscape effect will reduce with distance from the Proposed Development, and in terms of the wider effects on the Village Estate Farmlands LCT there will be a small change to the perceptual character beyond 0.5km, extending to approximately 1km from the Proposed Development. The small change to the perceptual character of the wider Village Estate Farmlands LCT (i.e. a medium geographical extent) will result in an overall **low** magnitude of change for a temporary duration. The Village Estate Farmlands LCT is assessed to have a **medium** sensitivity, as a result of a medium landscape susceptibility and low landscape value (see detailed assessment in **Appendix 5.3: Landscape Assessment Tables**), and therefore the overall level of effect during operation on the wider Village Estate Farmlands LCT (up to approximately 1km from the Proposed Development) is assessed to be **minor (not significant) adverse** at Years 1 and 10.

~~5.155~~5.159 The Coalfield Village farmlands LCT, Terrace alluvial lowlands LCT and Settled plateau farmlands (Estatelands sub-type) are all located beyond 2.5km from the Site. Views of the Proposed Development from these LCTs, will be limited as a result of the screening/ filtering from intervening features, and any available views will be glimpsed through intervening vegetation. The scale of landscape effect (and magnitude of change) from these LCTs is assessed to be **barely perceptible**, and so the overall level of effect is assessed to be **negligible (not significant)** at Years 1 and 10**.**

Visual Effects during Operation

~~5.156~~5.160 **Appendix 5.4: Visual Assessment Tables** contains detailed assessments for the visual receptors that are considered in the LVIA. A summary, setting out the likely effects as a result of the Proposed Development, is provided in this section.

~~5.157~~5.161 The Proposed Development is expected to remain operational for 40 years, so will be long-term[32], and partially reversible as the PV panels, fencing, the Proposed Development's substation and energy storage can be dismantled and removed from the Site once the operational period has ceased. The tracks will either be left in situ or removed depending on the requirement of the landowner at the time.

Local Communities (within 2.5km of the Site)

Rosliston

~~5.158~~5.162 From the local community of Rosliston, the PV panels and short lengths of track within fields O8 and O10, will be seen beyond intervening vegetation and above the tree line from the north-western edge of the settlement introducing further manmade structures into a view where existing electricity pylons already form prominent features on the skyline. The pastoral field (O9) between fields O8 and O10, which is partly visible above the tree line in the foreground, will remain free from PV panels and be retained as a rural feature within views, helping to visually break up the Proposed Development on the skyline as shown on the visualisation for **Viewpoint 7.** The nature of the views will vary depending on the receptors position and elevation within the settlement but will generally be open from Coppice View and The Chase (in the north-west). Views of PV panels located on lower lying ground will be filtered

[32] Long term is considered to be over 10 years (see **Appendix 5.1: LVIA and CLVIA Methodology**).

in summer and in winter by the dense vegetation of Redferns Wood. Views will be glimpsed/oblique when travelling along the roads that pass through the settlement (including the cul-de-sacs off Burton Road/Catton Lane). The scale of visual effect during operation (at Year 1) is assessed to be medium from the most elevated edge of the settlement (at Coppice View and The Chase), as the Proposed Development will create a distinct new element and a clearly perceptible change in views experienced by residents that contribute to the landscape setting of the settlement.

5.1595.163 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** at Year 1 from Coppice View and The Chase due to the medium scale of visual effect over a small geographical extent (i.e. from the north-western edge of the settlement) for a long-term. Since this local community of Rosliston is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect from Coppice View and The Chase at Year 1 is judged to be **moderate (significant) adverse.**

5.1605.164 The **medium** magnitude of visual change and the **moderate (significant) adverse** overall level of effect from Coppice View and The Chase will remain at Year 10, as although proposed planting across the Site and its boundaries will have established and be close to maturity, the extent of the Proposed Development visible above the existing foreground vegetation will not change due to its elevation within views. This assumes that the existing trees within Redferns Wood have already reached maturity, and that the level of filtering of views that they already provide will not alter.

Coton in the Elms

5.1615.165 From the local community of Coton in the Elms, there will be limited glimpses through the gaps in vegetation of PV panels, fencing and short lengths of track within the south-eastern part of the Site (Oaklands Farm landholding) in winter views, seen at a distance of approximately 1km. The scale of visual effect during operation (at Year 1) within winter views is judged to be no more than small, as the introduction of the Proposed Development will result in a small change to the rural views that are experienced by residents and that contribute to the landscape setting of the settlement.

~~5.162~~5.166 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **low** at Year 1 due to the small scale of visual effect over a small geographical extent (i.e. from the north-western edge of the settlement) for a long-term. Since this local community of Coton in the Elms is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect at Year 1 is assessed to be **minor (not significant) adverse.**

~~5.163~~5.167 At Year 10 the planting will have established and will be close to maturity. This will include the enhancement of existing field boundaries within the Site as well as a change in the management of the existing hedgerow along the south-eastern boundary (Catton Lane) by allowing it to grow taller (up to 3m in height) which would provide further filtering to the Proposed Development. The magnitude of visual change will therefore reduce to being **barely perceptible**, and the overall level of effect at Year 10 will reduce to **negligible (not significant)**.

Local Communities (2.5-5km from the Site)

Swadlincote

~~5.164~~5.168 From the local community of Swadlincote, there will be limited distant views of PV panels from the elevated Sunnyside area of Newhall in the north-west of the settlement, glimpsed through intervening vegetation and backclothed by wooded skylines. The scale of visual effect (and magnitude of visual change) during operation (at Years 1 and 10) is assessed to be **barely perceptible** as the change in views is likely to go unnoticed, and so the overall level of effect (at Years 1 and 10) is assessed to be **negligible (not significant).**

Road Users (within 2.5km of the Site)

Coton Road/ Church Street (between Walton-on-Trent and Coton in the Elms)

~~5.165~~5.169 For motorists travelling along Coton Road/ Church Street (between Walton-on-Trent and Coton in the Elms), there will be views of PV panels (with the front, back and side of the panels seen depending on the viewing position), transformers, fencing and tracks within fields O1-O5, O6, O15 and O16, affecting rural transitory views. The Proposed Development would occupy a large extent of the views afforded from Coton Road where existing hedgerows are low, defunct or will be removed. The Proposed Development would mostly be seen in oblique views

although with some direct views occurring from the section of road that passes through the Site as the development will surround the receptor. Proposed planting along the edge of Coton Road will be implemented (including hedgerows to replace those removed) but will not yet be effective in providing visual mitigation. The scale of visual effect during operation (at Year 1) is judged to be large where vegetation or the buildings at Oaklands Farm do not filter/ screen the view, given the close proximity of the Proposed Development to the receptor and its large extent within available views. The scale of visual effect will reduce with distance from the Proposed Development and where vegetation provides intervening elements within views e.g. along Church Street where the Proposed Development will be partially filtered by intervening vegetation in winter and summer views.

5.1665.170 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **high** at Year 1 along stretches of Coton Road due to the large scale of visual effect over a medium geographical extent (i.e. from along stretches of Coton Road but not from Church Street) for a long-term. Since this receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect along it at Year 1 is assessed to be **major (significant) adverse.**

5.171 At Year 10 the planting along Coton Road will have established and be close to maturity. The overall magnitude of visual change will reduce to **medium,** and therefore the overall level of effect will reduce to **moderate (significant) adverse.** The specific measures responsible for reducing the overall level of effect upon the users of the road are:

- the planting of a new hedgerow along the edge of field O2 (replacing an existing hedgerow that will be removed to accommodate a visibility splay), and to be maintained at a height of 3m;
- the planting of a new hedgerow along the southern edge of field O4 and a small part of field O5 (restoring defunct hedgerows), and to be maintained at a height of 3m;
- the retention of existing hedgerows along the edge of field O1 and partly along the edges of fields O2 and O5, that will be allowed to grow taller and maintained at a height of 3m;

- the strengthening of the existing retained hedgerow along the edge of field O3 by infilling gaps with new planting (to be maintained at a height of 3m) and incorporating hedgerow trees estimated to reach a height of 5-7m by Year 10; and
- the planting of scattered trees in the south of field O3, estimated to reach a height of 5-7m by Year 10.

5.172 At the heights stated above, the proposed hedgerow planting and existing retained hedgerows along the edges of the road will filter the views of the Proposed Development. Views will be more strongly filtered in the summer months when the hedgerows and hedgerow trees are in leaf, with the planting largely obscuring the Proposed Development. Filtering will be reduced in winter, as branches lose their leaves. As a result, the adverse visual effects experienced by the road users will be gradually reduced over time by the mitigation measures, and which is why the magnitude of visual change will reduce at Year 10.

5.173 There will still be a significant adverse effect at Year 10 for users of Coton Road/ Church Street between Walton-on-Trent and Coton in the Elms, as the presence of the PV panels will still partly be apparent across the rolling farmland from intermittent sections of the road, altering its character, and there will be brief oblique views of the security gates at the junctions between fields O1 and O2, and between fields O4 and O5. Although the new planting will filter views and soften the impact of the Proposed Development it will also bring a change to the existing open nature of views (particularly given the proximity of the mitigation measures to the road users). Maintaining hedges at taller heights will alter the experience for people living in or passing through the landscape in the places where the hedges are currently lower, enabling views across the tops of them.

~~**5.167** This will include restored sections of hedgerow where previously defunct (i.e. along the southern edge of field O4 and part of field O5), replacement hedgerow along the edge of field O2 and part of field O5, as well as a change in the management of the existing hedgerows along the road by allowing them to grow taller (up to 3m in height) which would provide further filtering of the Proposed Development. Field margins will also be reseeded with species rich grassland and scattered trees in the south of field O3 will assist in filtering views. Although the new planting will filter views and soften the impact of the Proposed Development it will also bring a change to the existing open nature of views and the presence of the PV panels will still partly be apparent across the rolling farmland, altering its character. At Year 10 the overall~~

~~magnitude of visual change will reduce to **medium,** and therefore the overall level of effect will reduce to **moderate (significant) adverse.**~~

Rosliston Road (between Walton-on-Trent and Rosliston)

~~5.168~~5.174 For motorists travelling along Rosliston Road (between Walton-on-Trent and Rosliston), there will be some open views of PV panels (with the back and side of the panels seen depending on the viewing position), transformers, fencing and tracks across elevated parts of the Site (Oaklands Farm landholding), affecting rural transitory views. The Proposed Development would be relatively prominent; with PV panels appearing on the skyline (at a distance of between 0.3 and 1.5km) when viewed from some parts of the road (including views south from the eastern extent of the road and views south-east from the most elevated part of the road west of Ashtree Farm) where existing hedgerows are low. From other parts of the road there will be oblique and incidental views, or no view where landform and vegetation provide filtering (such as from the western extent of the road). There will also be views from Fairfield Farm which sits slightly above the road (0.2km to the north of it), but the separation from the Proposed Development and intervening layers of vegetation will limit the impact on the views from this property. Proposed planting will be implemented but will not yet be effective in providing visual mitigation. The scale of visual effect during operation (at Year 1) is assessed to be medium where vegetation or buildings along the road do not filter/ screen the view, as there will be a clearly perceptible change in views with the Proposed Development creating a distinct new element. The scale of visual effect will reduce with distance from the Proposed Development and where vegetation provides intervening elements within views.

~~5.169~~5.175 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** at Year 1 due to the medium scale of visual effect over a medium geographical extent (i.e. intermittently to the stretch of road between the most elevated part of the road, west of Ashtree Farm in the west, and the approach to Rosliston in the east) for a long-term. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect along it at Year 1 is assessed to be **moderate (significant) adverse.**

~~5.170~~5.176 At Year 10 the proposed planting within the Site and along its boundaries will have established and be close to maturity. This will include the enhancement of field boundaries,

woodland planting and scattered trees to the south of Corner Farm. Whilst the new planting will filter views and soften the impact of the Proposed Development to some degree, the extent of the Proposed Development visible will not change much due to its elevation within views. Therefore, the **medium** magnitude of visual change and the **moderate (significant) adverse** overall level of effect will remain at Year 10.

Catton Lane (between Rosliston and Church Street)

5.1715.177 For motorists travelling along Catton Lane (between Rosliston and Church Street), there will be clear views of PV panels (with the front, back and side of the panels seen depending on the viewing position), transformers, fencing and tracks within fields O3 and O7, affecting rural transitory views. The Proposed Development would occupy a large extent of the oblique views afforded from Catton Lane, introducing further manmade structures into a view where electricity pylons form prominent features on the skyline. Proposed planting along the edge of Catton Lane will be implemented but will not yet be effective in providing visual mitigation. The scale of visual effect during operation (at Year 1) is judged to be **large**, given the close proximity of the Proposed Development to the receptor and its large extent within available views. The scale of visual effect will reduce with distance from the Proposed Development and where vegetation provides intervening elements within views e.g. along the north-eastern extent of the road where the Proposed Development will be partially filtered by intervening vegetation in summer and winter views.

5.1725.178 The overall magnitude of change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **high** at Year 1 due to the large scale of visual effect over a large geographical extent (i.e. from along the majority of the route) for a long-term. Since the receptor is assessed to have a **low** visual sensitivity, as a result of a medium visual susceptibility and a low value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect along it at Year 1 is assessed to be **moderate (significant) adverse.**

5.1735.179 At Year 10 the planting along Catton Lane will have established and be close to maturity. This will include restored sections of hedgerow where previously defunct (i.e. along the southern edge of field O3) as well as a change in the management of the existing hedgerows along the road by allowing them to grow taller (up to 3m in height) which would provide further filtering of the Proposed Development. Field margins will also be reseeded with species rich

grassland and scattered trees in the south of field O3 will assist in filtering views. Although the new planting will filter views and soften the impact of the Proposed Development it will also bring a change to the existing open nature of views and the presence of the PV panels will still partly be apparent across the rolling farmland, altering its character. At Year 10 the overall magnitude of visual change will reduce to **medium,** but the overall level of effect will remain as **moderate (significant) adverse.**

Unnamed road (between Walton-on-Trent and Church Street)

5.1745.180 For motorists travelling along a small part of the unnamed road (between Walton-on-Trent and Church Street), there will be views of PV panels (with the front and side of the panels seen depending on the viewing position), transformers, fencing and tracks within field O1, affecting rural transitory views. The Proposed Development will be seen in direct and oblique views from the section of road between Catton Farm Cottages and Lads Grave Cottage. Proposed planting along the edge of the road will be implemented but will not yet be effective in providing visual mitigation. Overall, it is considered that there will be a clearly perceptible change in views from a small section of road during operation (Year 1), creating a distinct new element in the view i.e. a medium scale of visual effect. Elsewhere along the road the Proposed Development will largely be obscured by intervening topography and vegetation.

5.1755.181 The overall magnitude of change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is assessed to be **medium** at Year 1 due to the medium scale of visual effect over a small geographical extent (i.e. between Catton Farm Cottages and Lads Grave Cottage) for a long-term. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a medium visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect along it at Year 1 is assessed to be **moderate (significant) adverse.**

5.182 At Year 10 the planting along the unnamed road will have established and be close to maturity. The overall magnitude of visual change will reduce to **small,** and therefore the overall level of effect will reduce to **minor (not significant) adverse.** The specific measures responsible for reducing the overall level of effect upon the users of the road are:

- the strengthening of the existing retained hedgerow along the edge of field O1 by infilling gaps with new planting (to be maintained at a height of 3m) and incorporating hedgerow trees, estimated to reach a height of 5-7m by Year 10; and

- the planting of a new hedgerow along the south-eastern edge of field O1 (restoring a short section of defunct hedgerow), to be maintained at a height of 3m.

5.183 At the heights stated above, the proposed hedgerow planting and existing retained hedgerow along the edge of the road will filter the views of the Proposed Development. Views will be more strongly filtered in the summer months when the hedgerows and hedgerow trees are in leaf, with the planting largely obscuring the Proposed Development. Filtering will be reduced in winter, as branches lose their leaves. As a result, the adverse visual effects experienced by the road users will be gradually reduced over time by the mitigation measures, and which is why the magnitude of visual change will reduce at Year 10. ~~This will include restored section of hedgerow where previously defunct (i.e. along the south-eastern edge of field O1) as well as a change in the management of the existing hedgerows along the road by allowing them to grow taller (up to 3m in height) which would provide further filtering of the Proposed Development. Field margins will also be reseeded with species rich grassland.~~ The new planting will filter views and soften the impact of the Proposed Development but will also bring a change to the existing open nature of views.

~~**5.176 At Year 10 the overall magnitude of visual change will reduce to** small, **and therefore the overall level of effect will reduce to** minor (not significant) adverse.~~

Users of Recreational Routes within 2.5km of the Site

Cross Britain Way / National Forest Way long distance footpath

~~**5.177**~~**5.184** For users of the Cross Britain Way / National Forest Way long distance footpath, the Proposed Development will be clearly seen within rural views from along the section of the route between Walton-on-Trent and Rosliston (including the small part that crosses through the Site) and will surround the receptor in places as they engage in outdoor recreation. The PV panels, transformers, tracks and fencing, will all be visible in direct views experienced from along the route (as shown on the visualisations for **Viewpoints 2 and 5**). There will be some views of the Proposed Development's substation and battery storage area, although partly obscured by intervening landform (as shown in the visualisation for **Viewpoint 2**) or filtered by intervening vegetation (as shown in the visualisation for **Viewpoint 5**). Proposed planting within the Site will be implemented but will not yet be effective in providing visual mitigation. The scale of visual effect during operation (Year 1) is judged to be large, given the proximity of the Proposed

Development to the receptor and its extent within available views. Visibility will be limited beyond this section of the route due to the filtering/ screening provided by vegetation, buildings and topography.

~~5.178~~5.185 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is judged to be **high** at Year 1 due to the large scale of visual effect over a small geographical extent (i.e. from a localised section of the route between Walton-on-Trent and Rosliston) for a long-term. Since the receptor is assessed to have a **high** visual sensitivity, as a result of a high visual susceptibility and a high value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect along it at Year 1 is assessed to be **major (significant) adverse.**

5.186 At Year 10 the proposed planting within the Site will have established and be close to maturity. The overall magnitude of visual change will reduce to **medium,** and therefore the overall level of effect will reduce to **moderate (significant) adverse.** The specific measures responsible for reducing the overall level of effect upon the users of the long distance footpath are:

- the planting of a new hedgerow along the northern edge of the route (along the south-western and south-eastern edges of field O22), to be maintained at a height of 3m;
- the planting of new woodland trees and understorey along the northern edge of the route within field O20 estimated to reach a height of 5-7m by Year 10;
- the strengthening of the existing retained hedgerow across the site (including hedgerows immediately south of the route) by infilling gaps with new planting and incorporating hedgerow trees estimated to reach a height of 5-7m by Year 10; and
- the reseeding of field margins with a species rich grassland and wildflower meadow mix.

5.187 The proposed hedgerow planting along the northern edge of the route and the strengthened hedgerows immediately south will filter the views of the Proposed Development once the planting has matured to the heights stated above. The woodland planting in field O20 will filter oblique views experienced from the long distance footpath towards the Proposed Development along the north-eastern edge of field O23, while the species rich grassland will add interest to the views. Views will be more strongly filtered in the summer months when the hedgerows and trees are in leaf. Therefore, the adverse visual effects experienced by users of

the long distance footpath will be reduced over time by the proposed mitigation measures, and which is why the magnitude of visual change will reduce at Year 10.

~~5.179~~5.188 Although ~~T~~the new planting will filter views and soften the impact of the Proposed Development,~~.~~ there will still be a significant adverse effect at Year 10 for users of the long distance footpath, as the Proposed Development will still partly be apparent given its proximity to the receptor. ~~This will include a new hedgerow and woodland along the northern edge of the route where it crosses through the Site to partially filter views of PV panels, enhancement to existing field boundaries within the Site and the reseeding of field margins with species rich grassland. The new planting will filter views and soften the impact of the Proposed Development. At Year 10 the overall magnitude of visual change will reduce to **medium,** and therefore the overall level of effect will reduce to **moderate (significant) adverse.**~~

PRoWs within 2.5km of the Site (located north of the Cross Britain Way/ National Forest Way route)

~~5.180~~5.189 For users of ProWs within 2.5km of the Site (located north of the Cross Britain Way/ National Forest Way route), there will be intermittent views of PV panels, transformers, tracks, fencing, the Proposed Development's substation and battery storage area from sections of footpaths within approximately 0.7km to the east and west of the Site, i.e. SD48/1/1 and SD16/5/1, introducing further manmade structures into a view where electricity pylons form prominent features on the skyline from some of the views. However, intervening vegetation will provide partial filtering of the Proposed Development when seen during winter, and increased filtering during summer when in leaf, with views mainly being glimpsed and oblique in nature. Within the area of the Site accommodating the underground grid cabling (i.e. fields F1- F3 and P1-P5), the ground will be restored (with the grid connection cables buried) but may leave scars in the early years that would be visible from the northern and southern extent of footpath SD16/5/1. From these footpaths the scale of visual effect during operation (at Year 1) is judged to be small, as the introduction of the Proposed Development will result in a small change to the rural views that are experienced by people as they engage in outdoor recreation. The scale of visual effect will reduce with distance from the Proposed Development and where vegetation provides intervening elements within views.

~~5.181~~5.190 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is judged to be **low** at Year 1 due to

the small scale of visual effect over a small geographical extent (i.e. intermittently to the short sections of footpaths within 0.7km of the Site including footpaths SD48/1/1 and SD16/5/1e) for a long-term. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect at Year 1 is assessed to be **minor (not significant) adverse.**

5.1825.191 The **low** magnitude of visual change and the **minor (not significant) adverse** overall level of effect will remain at Year 10, as although proposed planting across the Site and its boundaries will have established and be close to maturity, the extent of the Proposed Development visible above existing foreground vegetation will not change when viewed from some sections of footpaths due to its elevation within views. This assumes that the existing trees within Redferns Wood will have already reached maturity and therefore not provide further filtering of the Proposed Development within views from footpaths to the east of the Site.

PRoWs within 2.5km of the Site (located south of the Cross Britain Way/ National Forest Way route)

5.1835.192 For users of ProWs within 2.5km of the Site (located south of the Cross Britain Way/ National Forest Way route), there will be intermittent views of PV panels, transformers, tracks and fencing from sections of footpaths within approximately 0.7km to the south-east and south-west of the Site, introducing further manmade structures into a view where electricity pylons form prominent features on the skyline from some of the views. However, layers of intervening vegetation will provide partial filtering of the Proposed Development when seen during winter, and increased filtering during summer when in leaf, with views mainly being glimpsed and oblique in nature. From footpath SD48/7/2, views of the Proposed Development will form a small part of the panoramic views afforded to users from this route (which mostly focus across the Trent Valley to the north and west). There will however be some open views with parts of the Proposed Development in close proximity to the receptor when seen from small sections of footpaths SD13/1/1 and SD13/4/1. Given the proximity of the Proposed Development to the receptor in some places and its extent within available views, the scale of visual effect during operation (Year 1) is judged to be medium.

5.1845.193 The overall magnitude of visual change (which takes into consideration the scale of visual effect, geographical extent, duration and reversibility) is judged to be **medium** at Year 1

due to the medium scale of visual effect over a small geographical extent (i.e. intermittently to the short sections of footpaths within 0.7km of the Site) for a long-term. Since the receptor is assessed to have a **medium** visual sensitivity, as a result of a high visual susceptibility and a medium value of the views (see detailed assessment in **Appendix 5.4: Visual Assessment Tables**), the overall level of effect at Year 1 is assessed to be **moderate (significant) adverse.**

5.194 At Year 10 the planting will have established and will be close to maturity. The overall magnitude of visual change will reduce to **low,** and therefore the overall level of effect will reduce to **minor (not significant) adverse.** The specific measures responsible for reducing the overall level of effect upon the users of the PRoWs are:

- the strengthening of the existing retained hedgerows across the Site (including hedgerows immediately south of the route) by infilling gaps with new planting and incorporating hedgerow trees estimated to reach a height of 5-7m by Year 10; and
- the retention of the existing hedgerow along the south-eastern boundary of the Site (Catton Lane), and allowing this to grow taller, maintaining it at a height of 3m.

5.195 At the heights stated above, the strengthened hedgerows across the Site and existing retained hedgerow along Catton Lane will help filter the views of the Proposed Development, including when viewed from footpaths SD13/1/1 and SD13/4/1 (where the Proposed Development will be most noticeable without mitigation in place). Views will be more strongly filtered in the summer months when the hedgerows and trees are in leaf. In winter the opposite will be true. As a result, the adverse visual effects experienced by users of the footpaths will be reduced over time by the proposed mitigation measures, and which is why the magnitude of visual change will reduce at Year 10.

~~**5.185** This will include the enhancement of existing field boundaries within the Site as well as a change in the management of the existing hedgerow along the south-eastern boundary (Catton Lane) by allowing it to grow taller (up to 3m in height) which would provide further filtering to the Proposed Development when viewed from footpaths SD13/1/1 and SD13/4/1. The magnitude of visual change will therefore reduce to being **low** at Year 10, and therefore the overall level of effect will reduce to **minor (not significant) adverse.**~~

PRoWs to the north of the Cross Britain Way/National Forest Way and within 2.5-5km of the Site

5.1865.196 For users of PRoWs to the north of the Cross Britain Way/National Forest Way and within 2.5-5km of the Site, there will be limited distant views of PV panels from elevated footpaths near the elevated Sunnyside area of Newhall in the north-west of Swadlincote, glimpsed through intervening vegetation and backclothed by wooded skylines. The scale of visual effect (and magnitude of visual change) during operation (at Years 1 and 10) is assessed to be **barely perceptible** as the change in views is likely to go unnoticed, and so the overall level of effect (at Years 1 and 10) is assessed to be **negligible (not significant).**

Lighting Effects during Operation

5.1875.197 No operational lighting is being proposed other than downward facing security and safety lighting at access points and on the main operational area in the centre of the Site. This lighting will only be active during times of unplanned maintenance or emergency, and will be motion-sensitive so it remains off unless needed. As an anti-theft measure, there will be alarm lights on all transformer stations that are only activated in case of theft. If the lights become activated, blue or yellow (depending on selected model) flashes will illuminate.

5.1885.198 The lighting effects during operation would be limited for users of the Cross Britain Way / National Forest Way long distance footpath and other PRoW in proximity to the Site due to the time of day that the lighting would be activated (as there would be limited people using PRoWs during the hours of darkness and thefts are more likely to occur at night). Given the infrequent and intermittent nature of the security lighting and its isolation to specific locations, the presence of the security lighting during operation will be **barely perceptible** or may go unnoticed for other receptors located further away from the temporary lighting, and so will not result in any significant effects.

Permanent Long Term Landscape Effects Beyond Decommissioning

5.1895.199 The LVIA has not assessed the effects of decommissioning (as agreed with the Planning Inspectorate (see **Table 5.1**)) as these effects are anticipated to be the same as during construction. However, it is acknowledged that there will be some long-term effects on

landscape character as a result of the planting and mitigation measures proposed (see **Appendix 5.6: Outline Landscape and Ecological Management Plan**).

~~5.190~~5.200 It is difficult to predict the future land use of the Site following decommissioning of the Proposed Development; however, the planting will have been in place for many years since reaching full maturity. Some hedgerows will be taller than they are in the existing baseline as a result of being strengthened/ reinforced and through changes in their management by allowing them to grow out. There will also be an increased coverage of trees across the Site, and new areas of woodland planting which will result in some subtle changes to the existing local landscape character, as low hedgerows and few trees are currently characteristic of the Village Estate Farmlands LCT. It is acknowledged that the initiatives of the National Forest has resulted in an increased coverage of vegetation including within the immediate surrounds of the Site and it is likely that there will be continual changes to the landscape character due to further planting as part of the initiatives as previously discussed in paragraphs 5.67 and 5.98. However, the planting has been incorporated into the design from an early stage to provide visual buffers from key receptors and views whilst the Proposed Development is present within the landscape, and in the long term to enhance the form of the landscape and levels of biodiversity through native species that are found within the landscape of the Site and its surrounds. Overall, the planting will contribute positively to the landscape, respecting local distinctiveness and bringing benefits to amenity, wildlife and climate change.

Cumulative Effects

Cumulative Baseline

~~5.191~~5.201 Existing solar PV developments were assessed as part of the LVIA baseline (these are listed in paragraph 5.63 and shown on **Figure 5.1**). A list of projects to be considered in the Cumulative LVIA (CLVIA) was provided by SDCC in August 2021 and updated through further consultation with SDDC in February 2022, and via research by the Applicant's planners throughout 2023. These are set out in **Table 5.11** below and shown on **Figure 5.8**. These are projects that could impact on the overall character and the appreciation of that character by people living in or passing through the wider landscape. The projects considered are those in planning (i.e. a planning application has been submitted and consented or is being determined), along with those at pre-application and applications stages (on a proportionate basis). Projects

outside of the 5km study area have not been considered in the CLVIA, as it is judged that significant cumulative effects will not occur as visual interaction between projects beyond 5km and the Proposed Development will be very limited.

Table 5.11: Cumulative projects included in the CLVIA

Cumulative Development Location	Status	Planning Reference	Distance and Direction from Site	Description
In Planning				
Land to the north-west of Barn Farm and to the south of Walton Road and the Former Drakelow Power Station	Permitted	DMPA/2023/0170	Adjacent to the northern edge of the Site	The installation of battery energy storage, substation, transformer stations, site access, internal access track, security measures, access gates, and biodiversity enhancements.
Drakelow C Power Station, Walton Road, Drakelow	Under construction	CW9/0420/7	0.4km to the north-west of the Site	Permission for the construction and operation of an 18MW Renewable Energy Centre and associated infrastructure.
Land to the north of the Royle Farm Business Park, Caldwell Road, Burton-on-Trent	Permitted	DMPA/2021/1221	1.5km to the north-east of the Site	The installation of a Battery Storage Facility with associated infrastructure and access, grid connection consisting of the erection of a

Cumulative Development Location	Status	Planning Reference	Distance and Direction from Site	Description
				substations, control buildings, communications cabinets, battery transformers, proposed boundary treatment and installation of CCTV with associated works.
Breach Farm, Cadley Lane, Caldwell, Swadlincote, DE12 6RJ	Permitted	DMPA/2020/0542 (and the original permission ref. 9/2018/0223)	2.7km to the north-east of the Site	The variation of condition 5 of permission ref. 9/2018/0223 (relating to the construction of a 40MW energy storage scheme with 1 no. building (sui-generis use) to provide back up electricity services to the grid for a period of 25 years from the date of commission of the battery storage scheme).
Land adjacent to Willshee's Waste and Recycling Limited, Keith Willshee Way,	Application	CW9/1022/22	2.9km to the north-east of the Site	The proposed construction and operation of the Swadlincote Resource Recovery Park (SRRP)

Cumulative Development Location	Status	Planning Reference	Distance and Direction from Site	Description
Swadlincote, DE11 9EN				comprising an Energy Recovery Facility (ERF) and Aggregate Recovery Facility (ARF) together with ancillary infrastructure including grid connection cable and works, private electrical wire provision, substation, CHP off-take provision, internal vehicular circulation and yard areas, weighbridges, car parking, new access road, temporary construction compound and laydown area, security fencing and gates, drainage, landscaping and off-site habitat compensation.
Land off Mount Road, Castle Gresley, South Derbyshire	Permitted	DMPA/2021/1698	4.3km to the east of the Site	An energy storage facility, together with associated equipment, infrastructure and ancillary works.
At Scoping				

Cumulative Development Location	Status	Planning Reference	Distance and Direction from Site	Description
Land at Barr Hall Farm, Drakelow, South Derbyshire	Screening Opinion Issued – not EIA	DMOT/2023/0621	0.4km to the west of the Site	Screening Opinion request under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 in relation to proposed development of an Energy Storage System (ESS) and substation development.

Summary of Cumulative Landscape and Visual Effects

~~5.192~~5.202 A list of the projects that are considered in the CLVIA are set out in **Table 5.11** and shown on **Figure 5.8**. The projects considered are those in planning (i.e. a planning application has been submitted and is being determined), along with those at pre-application and applications stages (on a proportionate basis).

~~5.193~~5.203 Although the Proposed Development of all these projects would inevitably increase the amount of development in the landscape around the Site, the detailed cumulative assessments in **Appendix 5.3: Landscape Assessment Tables** and **Appendix 5.4: Visual Assessment Tables** indicate that the projects would not interact with the Proposed Development to the extent that there would be any additional cumulative effects on landscape character and on visual amenity. There would be **no additional cumulative effects over and above those set out in the LVIA**.

Further Survey Requirements and Monitoring

~~5.194~~5.204 The proposed mitigation measures will be monitored to ensure that they deliver the desired level of mitigation. This will include ensuring that vegetation is planted and managed

appropriately, and that vegetation establishes properly and is replaced if required (as set out in **Appendix 5.6: Outline Landscape and Ecological Management Plan)**.

Summary of Landscape and Visual Effects

Summary of Residual Landscape Effects

~~5.195~~5.205 Landscape effects are summarised in **Table 5.12** below. It is anticipated that the impacts that result from the decommissioning of the Proposed Development will be no greater than those during the construction phase.

Table 5.12: Summary of Landscape Effects

Landscape Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
The Site	Medium	High	**Major (significant) adverse**	High at Year 1, reducing to medium at Year 10	**Major (significant) adverse** at Year 1, reducing to **moderate (significant) adverse** at Year 10	No additional cumulative effects over and above those set out in the LVIA.
Village Estate Farmlands LCT	Medium	High up to 0.5km from the Site.	**Major (significant)**	High at Year 1, reducing to	**Major (significant) adverse** at Year 1,	No additional cumulative effects over and above those

Landscape Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
		Low for the wider LCT.	**adverse** up to 0.5km from the Site. Minor adverse for the wider LCT.	medium at Year 10 for up to 0.5km from the Site. Low at Years 1 and 10 for the wider LCT.	reducing to **moderate (significant) adverse** at Year 10 for up to 0.5km from the Site. Minor adverse at Years 1 and 10 for the wider LCT.	set out in the LVIA.
Coalfield Village Farmlands LCT	Low	Barely perceptible	Negligible	Barely perceptible at Years 1 and 10	Negligible	No additional cumulative effects over and above those set out in the LVIA.
Terrace alluvial lowlands LCT	Low	Barely perceptible	Negligible	Barely perceptible at Years 1 and 10	Negligible	No additional cumulative effects over and above those set out in the LVIA.

Landscape Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
Settled plateau farmlands (Estatelands sub-type)	Medium	Barely perceptible	Negligible	Barely perceptible at Years 1 and 10	Negligible	No additional cumulative effects over and above those set out in the LVIA.

Summary of Residual Visual Effects

~~5.1965~~5.206 Visual effects are summarised in **Table 5.13** below. It is anticipated that the impacts that result from the decommissioning of the Proposed Development will be no greater than those during the construction phase.

Table 5.13: Summary of Visual Effects

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
Local Communities (within 5km)						
Rosliston (Representative VP5a and 5b)	Medium	Medium from the most elevated edge of the settlement (at Coppice View and The Chase)	**Moderate (significant) adverse** from the most elevated edge of the settlement (at Coppice View and The Chase)	Medium at Years 1 and 10 from from the most elevated edge of the settlement (at Coppice View and The Chase)	**Moderate (significant) adverse** at Years 1 and 10 from the most elevated edge of the settlement (at Coppice View and The Chase)	Not applicable as the projects considered for the CLVIA are not visible from this local community.

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
Coton in the Elms (Near to Representative VP8)	Medium	Low	Minor adverse	Low at Year 1, reducing to barely perceptible at Year 10	Minor adverse at Year 1, reducing to negligible at Year 10	Not applicable as the projects considered for the CLVIA are not visible from this local community.
Swadlincote (Representative VP11)	Medium	Barely perceptible	Negligible	Barely perceptible at Years 1 and 10	Negligible at Years 1 and 10	No additional cumulative effects over and above those set out in the LVIA.
Road Users (within 2.5km) - *effects for road users are transient*						
Coton Road/Church Street (between Walton-on-Trent and Coton in the Elms)	Medium	High	**Major (significant) adverse**	High at Year 1, reducing to medium at Year 10	**Major (significant) adverse** at Year 1, reducing to **Moderate (significant) adverse** at Year 10	Not applicable as the projects considered for the CLVIA are not visible from this route.

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
(Representative VPs 1 and 8)						
Rosliston Road (between Walton-on-Trent and Rosliston) (Representative VP 4)	Medium	Medium	**Moderate (significant) adverse**	Medium at Years 1 and 10	**Moderate (significant) adverse** at Years 1 and 10	Not applicable as the projects considered for the CLVIA are not visible from this route.
Catton Lane (between Rosliston and Church Street)	Low	High	**Moderate (significant) adverse**	High at Year 1, reducing to medium at Year 10	**Moderate (significant) adverse** at Years 1 and 10	Not applicable as the projects considered for the CLVIA are not visible from this route.
Unnamed Road (between Walton-	Medium	Medium	**Moderate (significant)**	Medium at Year 1, reducing to	**Moderate (significant)**	Not applicable as the projects considered for the CLVIA are

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
on-Trent and Church Street)			**adverse**	small at Year 10	**adverse** at Year 1, reducing to minor adverse at Year 10	not visible from this route.
Users of Recreational Routes that cross through the Site						
Cross Britain Way / National Forest Way long distance footpath (approximately 2km of its length) (Representative VPs 2, 3 and 10)	High	High	**Major (significant) adverse**	High at Year 1, reducing to medium at Year 10	**Major (significant) adverse** at Year 1, reducing to **Moderate (significant) adverse** at Year 10	Not applicable as the projects considered for the CLVIA are unlikely to be visible from along the section of the route between Walton-on-Trent and Rosliston.
Users of Recreational Routes (within 5km)						
PRoWs to the	Medium	Low	Minor adverse	Low at Years 1	Minor adverse at	No additional cumulative

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
north of the Cross Britain Way / National Forest Way and within 2.5km of the Site (Representative VPs 4, 5b, 7 and 9)				and 10	Years 1 and 10	effects over and above those set out in the LVIA.
PRoWs to the south of the Cross Britain Way / National Forest Way and within 2.5km of	Medium	Medium	**Moderate (significant) adverse**	Medium at Year 1, reducing to low at Year 10	**Moderate (significant) adverse** at Year 1, reducing to Minor adverse at Year 10	No additional cumulative effects over and above those set out in the LVIA.

Visual Receptor	Sensitivity	Magnitude of change (during construction)	Residual Effect (during construction)	Magnitude of change (at operation)	Residual Effect (at operation)	Cumulative Effect
the Site (Representative VPs 6 and 8)						
PRoWs to the north of the Cross Britain Way / National Forest Way and within 2.5-5km of the Site (Representative VP 11)	Medium	Barely perceptible	Negligible	Barely perceptible at Years 1 and 10	Negligible at Years 1 and 10	No additional cumulative effects over and above those set out in the LVIA.

Residential Visual Amenity Assessment

~~5.197~~5.207 A Residential Visual Amenity Assessment (RVAA) is contained in **Appendix 5.5: Residential Visual Amenity Assessment**. The RVAA describes the change in view likely to be experienced by residents at the closest properties to the Proposed Development (**Figure 5.9**). It was undertaken in accordance with the principals contained within the Landscape Institute's *Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3)* and *Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19)*.

~~5.198~~5.208 A total of 14 properties were identified as being adjacent to and within 0.25km of the Site (Oaklands Farm landholding) and having a potential view of the Proposed Development. During operation (at Year 1), one of the properties is assessed to experience a 'high' magnitude of change; six are assessed to experience a 'medium' magnitude of change; and seven are assessed to experience a 'low' magnitude of change.

~~5.199~~5.209 The property assessed as likely to experience a 'high' magnitude of change is Twin Oaks (the Oaklands Farm landowner's property) as the Proposed Development will fill a large extent of the available views from this property when seen from both the dwelling (including its main views) and garden. As a result, Twin Oaks has been assessed in terms of potential effect on 'living conditions' by assessing whether the Proposed Development will breach the Residential Visual Amenity Threshold, in accordance with the Landscape Institute's *Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19)*. In this case the threshold will not be breached at this property i.e. the Proposed Development will not be so overwhelming, unpleasantly encroaching or inescapably dominant from the property so as to render the property an unpleasant place to live. The Proposed Development will not block the only available view from the property or be overwhelming in views in all directions, with PV panels set back by 250m to the north-east and 230m to the south-east. The magnitude of change will reduce to medium at Year 10 when proposed planting (illustrated in **Appendix 5.6: Outline Landscape and Ecological Management Plan**) will have established and is close to reaching maturity.